EXPLORATION OF PORTFOLIO CHARACTERISTICS FOR THE RECOGNITION OF PRIOR LEARNING:

THE IDENTIFICATION, ASSESSMENT AND RECOGNITION OF ACTUAL COMPETENCIES OF HIGHLY-SKILLED IMMIGRANTS

Astrid Scholten

DOCTORAL COMMITTEE

Chairman:	Prof. dr. H.W.A.M. Coonen v University of Twente
Promotors:	Prof. dr. J.W.M. Kessels v University of Twente
	Prof. dr. Tj. Plomp v University of Twente
Members:	Prof. dr. J.J.H. van den Akker $^{\rm v}$ University of Twente
	Prof. dr. M.C. van der Wende v University of Twente
	Prof. dr. A.L.M. van Wieringen v University of Amsterdam
	Dr. H.H. Tillema v University of Leiden
	Dr. R. Klarus v Hogeschool Arnhem & Nijmegen

Scholten, Astrid Marianne.

Exploration of portfolio characteristics for the recognition of prior learning: The identification, assessment and recognition of actual competencies of highly-skilled immigrants

Thesis University of Twente, Enschede – With refs. – With Dutch summary. ISBN 978-90-365-2547-3

Press: Prints & Proms - Rotterdam

© Copyright, 2007, Astrid Marianne Scholten

All rights reserved. No part of this book may be produced in any form: by print, photocopy, microfilm, or any other means without written permission from the author.

EXPLORATION OF PORTFOLIO CHARACTERISTICS FOR THE RECOGNITION OF PRIOR LEARNING:

THE IDENTIFICATION, ASSESSMENT AND RECOGNITION OF ACTUAL COMPETENCIES OF HIGHLY-SKILLED IMMIGRANTS

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Universiteit Twente, op gezag van de rector magnificus, prof. dr. W.H.M. Zijm, volgens besluit van het College voor Promoties in het openbaar te verdedigen op vrijdag 28 september 2007 om 16.45 uur

door

Astrid Marianne Scholten

geboren op 22 mei 1970

te Almelo

Promotors:

Prof. dr. J.W.M. Kessels Prof. dr. T. Plomp Writing this thesis has given me the opportunity to look back on an important part of my work within Nuffic from a theoretical perspective. In the late nineties the strategic issue whether international credential evaluation should be extended with a system for the identification, assessment and recognition of competencies came up. Was the challenge the 21st century was posing not in establishing an international credential evaluation based on assessment of competencies?

In 2000 an inventory study proved the possible value of a portfolio instrument for the identification, assessment and recognition of competencies of highly-skilled immigrants. In the following years (2001 - 2004) I worked on five projects which were all based around a portfolio instrument for highly-skilled immigrants. Nuffic, in co-operation with several other organizations, gained experience in using this type of instrument for this target group. I used the projects I worked on as case studies, which are an important part of this thesis.

I would like to thank my supervisors Joseph Kessels and Tjeerd Plomp. Over these past seven years they supervised my work on this thesis in a pleasant and encouraging way. During every meeting they were masters in pointing out the weak spots in my reasoning or the elaboration of it. These meetings were my motivation to continue to work on the next steps. There must have been times when they wondered whether I would ever finish this thesis, but it never showed. When I had the first meeting with Joseph Kessels, I was seven months pregnant of my eldest son. Another boy and a girl were born after that, but I managed to complete the thesis! Joseph and Tjeerd, thank you very much for your encouraging words, and your understanding for the little progress I sometimes made. I look back on many inspiring conversations.

I would also like to thank Nuffic for offering me the opportunity to widen my view on my work by writing this thesis. In particular I would like to thank Jindra Divis (now ex-colleague) and my colleagues Renate Teuwsen and Anne Marie Christian – Mak, with whom I regularly discussed the subject of this thesis. Also I would like to thank Sander van den Eijnden, Jos Walenkamp, and Lucie de Bruin, for allowing me extra time at the end 2006, and at the beginning of 2007 to finish the manuscript.

Last but not least my thanks go to Frank, for the unconditional support he gave me in this extra task I set myself. At any time when I doubted my ambitions he showed me that anything is possible if you make a realistic planning. This made me finish this task successfully. It also makes me look back on all the work I did with pleasure!

Gouda, 1 July 2007

Table of contents

1.	OVERVIEW OF THE RESEARCH STUDY	1
	 1.1 Background of the study 1.2 Exploration of the context and problem 1.3 Problem definition, aim and research questions 1.3.1 Problem definition 1.3.2 Aim of the study 1.3.3 Research questions 1.4 Nature of the research study 1.5 Relevance of the research study 1.6 Structure of the thesis 	1 3 5 6 6 7 8
2.	THE IDENTIFICATION, ASSESSMENT AND RECOGNITION OF FORMAL, NON-FORMAL AND INFORMAL LEARNING: A DYNAMIC CONTEXT	11
	 2.1 Learning with or without a curriculum 2.1.1 Different forms of learning 2.1.2 The curriculum concept 2.2 Evaluation and recognition of formal learning 2.2.1 The concept of recognition from different perspectives 2.2.2 International measures to foster the recognition of formal learning 2.2.3 The international credential evaluation approach 2.2.4 The national and international context of the evaluation and recognition practice of foreign diplomas 2.3 The identification, assessment and recognition of non-formal and informal learning 2.3.1 International measures to foster the recognition of non-formal and informal learning 2.3.2 The practice of PLAR in three particular countries 2.4 Linking international credential evaluation and the recognition of competencies: A summary 	11 11 13 15 15 17 20 23 24 25 28 33
3.	COMPETENCY-BASED CURRICULA VERSUS CONTENT-BASED CURRICULA: TOWARDS A CONTINUUM OF CURRICULUM CHARACTERISTICS	37
	 3.1 The complex concept of competence 3.2 Competency-based curricula versus content-based curricula 3.2.1 Competency-based learning versus content-based learning 3.2.2 Competency-based assessment versus content-based evaluation 3.2.3 Quality criteria for competency-based assessment versus quality criteria for content-based evaluation 3.2.4 Exploring competency-based curricula from a global perspective 3.3 A theoretical building block of context characteristics 	37 46 47 49 52 59 64

4.	EXPL	ORING THE CHARACTERISTICS OF A THEORETICAL FRAMEWORK FOR	
	PORT	FOLIO USE BY HIGHLY-SKILLED IMMIGRANTS	67
	4.1	Specifying the product characteristics of a portfolio instrument for highly-	
		skilled immigrants	67
		4.1.1 Different types of portfolios	68
		4.1.2 Characteristics of the development portfolio	71
		4.1.3 Characteristics of the assessment portfolio	75
		4.1.4 Theoretical building block of the product characteristics of a portfolio	
		instrument for highly-skilled immigrants	79
	4.2	Specifying characteristics of portfolio development for highly-skilled	
		immigrants	81
		4.2.1 Common steps and strategies for portfolio development	82
		4.2.2 Measures to facilitate portfolio development for highly-skilled	
		immigrants	87
		4.2.3 Theoretical building block for the process of portfolio development by	
		highly-skilled immigrants	90
	4.3	Specifying characteristics of portfolio assessment to enhance the recognition	
		of competencies of highly-skilled immigrants	93
		4.3.1 Key concepts of portfolio assessment	93
		4.3.2 Supportive measures to assure the quality of portfolio assessment	96
		4.3.3 Theoretical building block for portfolio assessment to enhance the	
		recognition of competencies of highly-skilled immigrants	98
	4.4	Specifying characteristics of portfolio design and implementation	100
		4.4.1 Understanding the complexity of portfolio implementation	101
		4.4.2 Guidelines for portfolio design	104
		4.4.3 Theoretical building block of portfolio design and implementation to	4.0-
		enhance the recognition of competencies of highly-skilled immigrants	107
	4.5	Further use of the theoretical building blocks: A reflection	108

5. PORTFOLIO USE: A FRAMEWORK FOR A RECONSTRUCTIVE EXPLORATORY CASE STUDY 113

5.1	The re	esearch approach: Basic characteristics of a reconstructive multiple	
	case s	tudy	113
	5.1.1	Basic principles of development research	113
	5.1.2	Key features of a reconstructive multiple case study	114
5.2	Frame	work for data analysis	118
5.3	Descri	ption of the database for the teachers' case	122
	5.3.1	Context and design of the teachers' pilot project	122
	5.3.2	Linking the database of the teachers' pilot project to the framework for	
		the data analysis	130
5.4	Descri	ption of the database for the medical doctors' case	134
	5.4.1	Context and design of the medical medical doctors' pilot projects	134
	5.4.2	Linking the database of the medical doctors' pilot projects to the	
		framework for the data analysis	144
5.5	Descri	ption of the database for the refugees' case	149
	5.5.1	Context and set-up of the refugees' pilot project	149
	5.5.2	Linking the database of the refugees' pilot project to the framework for	
		the data analysis	155
5.6	Furthe	r use of the available databases	160

6.			(S OF EMPIRICAL FINDINGS FOR PORTFOLIO USE BY HIGHLY-SKILLED THE OUTCOMES OF THREE CASE STUDIES	163
	6.1	Explori 6.1.1 6.1.2	ing the empirical building blocks in the teachers' case Exploring the context characteristics of the teachers' case Exploring the characteristics of the portfolio product in the teachers' case	163 164 169
		6.1.3	Exploring the characteristics of portfolio development in the teachers' case	176
		6.1.4	Exploring the characteristics of portfolio assessment in the teachers' case	180
		6.1.5	Exploring the characteristics of portfolio design and implementation in the teachers' case	184
		6.1.6	A framework of empirical finding of portfolio use by foreign-trained teachers	188
	6.2	Explori	ing the empirical building blocks in the medical doctors' case	192
		6.2.1	Exploring the context characteristics of the medical doctors' case	192
		6.2.2	Exploring the characteristics of the portfolio product in the medical doctors' case	200
		6.2.3	Exploring the characteristics of portfolio development in the medical doctors' case	212
		6.2.4	Exploring the characteristics of portfolio assessment in the medical doctors' case	220
		6.2.5	Exploring the characteristics of portfolio design and implementation in the medical doctors' case	227
	C O	6.2.6	A framework of empirical finding of portfolio use by foreign-trained medical doctors	232
	6.3		ing the empirical building blocks in the refugees' case	236
		6.3.1	Exploring the context characteristics of the refugees' case	236
		6.3.2	Exploring the characteristics of the portfolio product in the refugees' case	242
		6.3.3 6.3.4	Exploring the characteristics of portfolio development in the refugees' case Exploring the characteristics of portfolio assessment in the refugees'	250
		6.3.5	case Exploring the characteristics of portfolio design and implementation in	256
		6.3.6	the refugees' case A framework of empirical finding of portfolio use by refugees	259 265
	6.4		r use of the empirical building blocks and the frameworks of empirical	269
7.			ESIGN BUILDING BLOCKS FOR PORTFOLIO USE BY HIGHLY-SKILLED : A CROSS-CASE ANALYSIS	271
	7.1	Explori studies	ing the congruence between theory and practice across the three case	271
		7.1.1	Cross-case analysis of the context characteristics and portfolio design and implementation	272
		7.1.2	Cross-case analysis of the portfolio characteristics	278

7.2	A framework for portfolio use by highly-skilled immigrants	292
	7.2.1 Comparing the theoretical characteristics of a dossier portfolio and a	
	personal development portfolio with the empirical characteristics	292
	7.2.2 A framework for portfolio use by highly-skilled immigrants	296
7.3	Towards design building blocks for portfolio use by highly-skilled immigrants	303
	7.3.1 The key components of portfolio use by highly-skilled immigrants	303
	7.3.2 Reflection on the the cross case analysis results: Towards two design	
	building blocks	305
7.4	Answering the research questions using the observations from theory and	
	practice	310
8. Sum	MARY, REFLECTION AND RECOMMENDATIONS	315
8.1	Summary of the research study	315
	8.1.1 Context and set up of the research study	316
	8.1.2 Overview of five theoretical building blocks	317
	8.1.3 Overview of the three exploratory case studies	321
	8.1.4 Characteristics of a portfolio instrument for highly-skilled immigrants	323
	8.1.5 Characteristics of portfolio design and implementation	325
8.2	Reflection on the research study	327
	8.2.1 Methodological reflection	327
	8.2.2 Substantive reflection	330
8.3	Recommendations	337
	8.3.1 Recommendations for further research	337
	8.3.2 Recommendations for policy and practice	339
Referen	CES	343
NEDERLA	NDSE SAMENVATTING	351
	K I: OUTLINE PORTFOLIO DEVELOPMENT COURSES	371

List of Figures

2-1	Framework for IEA-studies: three curriculum representations	14
2-2	Linking the criteria for international credential evaluation to the three curriculum representations	22
2-3	The basic PLAR model	32
2-4	Linking the purposes of the recognition of competencies to the purposes of the	02
6 7	recognition of foreign diplomas	35
3-1	Six dimensions to outline the term competence from the inside	38
3-2	Relationship between the edumetric quality criteria and the psychometric criteria	55
3-3	Relationship between the quality criteria for the assessment and recognition of	
	non-formal learning, the edumetric criteria and the psychometric criteria.	59
3-4	Influence of cultural attitudes to knowledge on teaching and learning strategies	61
3-5	Matrix for the analysis of the complexity of portfolio implementation	65
4-1	Four different types of portfolios	69
4-2	Relationship between the purpose of the recognition of competencies, the different	
	types of portfolios, and the purposes of the recognition of foreign diplomas	71
4-3	Model for the assessment of prior experiential learning	83
4-4	Relationship between the 'targeted objective' of the highly-skilled immigrant and	
	the characteristics of the portfolio instrument	111
5-1	A model for the search of understanding in development research	114
5-2	Studying development in practice: a reconstructive study	117
5-3	Main steps in the assessment procedure for the enrolment of primary and	
	secondary school teachers	124
5-4	Overview of number of portfolio candidates in each phase of the process	153
5-5	Overview of the 'targeted objectives' of the highly-skilled immigrants in the	
	different pilot projects	161
6-1	Portfolio archive from which information can be selected for different purposes	208
6-2	Overview of the complexity of portfolio implementation in the three cse studies	270
7-1	Key components of portfolio use visualized in a portfolio spider web.	305
8-1	Ten key components of portfolio use visualized in a portfolio spider web.	326
8-2	The intended, implementedand experienced purpose of the portfolio instrument	
	in the three case studies in terms of the triangle model applied by Overeem et al.	
	(2003), Seegers (undtaed) and Van Tartwijk et al. (2003).	332

List of Tables

2-1	Difference between formal, non-formal and informal learning	12
2-2	Typology of curriculum representations	14
2-3	Article VII of the Lisbon Recognition Convention concerning the recognition of	
	qualifications held by refugees.	18
2-4	An example from the Guide to Educational Credit by Examination	30
2-5	Dutch PLAR model for application in the higher education sector	33
3-1	Overview of the different dimensions of the term competence, the conceptual	
	choices made and the respective concerns for competency assessment	46
3-2	Characteristics of content-based learning versus competency-based learning	48
3-3	Characteristics of the test culture versus the assessment culture	52
3-4	Characteristics of quality control in the test culture versus the assessment	
	culture	57

3-5	Differences between a reproductive educational culture and a competency- based learning environment.	63
3-6	Context characteristics that are likely to have a positive influence on the implementation of the portfolio instrument: a first theoretical building block	66
4-1	Main functions of the development portfolio	72
4-2	Two types of development portfolios	73
4-3	Main functions of the assessment portfolio	76
4-4	Two types of assessment portfolios	77
4-5	Product characteristics of the portfolio instrument for highly-skilled immigrants:	
	a second theoretical building block	81
4-6	Description of three models for the analysis of prior learning	83
4-7	Key players in the portfolio development process	84
4-8	Ten culture profiles	89
4-9	Main characteristics of the process of portfolio development by highly-skilled	
	immigrants: a third theoretical building block	92
4-10	Exemplar assessment sheet based on O'Grady's quantitative approach	94
4-11	Quality standards for the assessment of prior experiential learning	98
4-12	Main characteristics of the process of portfolio assessment: a fourth theoretical	
	building block	100
4-13	Factors that might influence the initiation of change	102
4-14	The communicative design paradigm and the pragmatic design paradigm	
	compared	106
4-15	Main characteristics of portfolio design and implementation: a fifth theoretical	
	building block	108
4-16	Overview of the theoretical building blocks for portfolio development by highly-	
	skilled immigrants	109
5-1	Overview of the three exploratory case studies	116
5-2	Description of the terms intended, implemented and experienced portfolio	118
5-3	Overview of the theoretical building blocks	119
5-4	Framework for the data analysis	121
5-5	Core competencies that have formed the frame of reference in the assessment	
	procedure for primary and secondary school teachers	123
5-6	Overview of the materials used in teachers' pilot project	125
5-7	Overview of the number of portfolio candidates in the teachers' pilot project in	
	each phase of the assessment procedure	128
5-8	Evaluation instruments used in the teachers' pilot project	130
5-9	Available database for the teachers' case	133
5-10	Description of the evaluation instruments in the first medical doctors' pilot	
	project	138
5-11	Description of the evaluation instruments used in the second medical doctors'	
	pilot project	140
5-12	Evaluation instruments used to evaluate the actual use of portfolio during	
	selection / enrolment	143
5-13	Available database for the medical doctors' case	147
5-14	Relationship between questions in the questionnaires and the issues of	
	analysis	149
5-15	Overview of the portfolio assessors per phase and the number of portfolios	
	they have reviewed	153
5-16	Evaluation instruments used in the refugees' pilot project	154
5-17	Available database for the refugees' case	158

5-18 Relationship between questions in questionnaires and issues of analysis in the	
refugees' pilot project	160
5-19 Overview of the Nuffic pilot project, the available databases and the case	
studies	160
6-1 Overview of the empirical building blocks in the teachers' case	164
6-2 Empirical context characteristics in teachers' case (EBB1-1)	168
6-3 The implemented portfolio format in the teachers' case	172
 6-4 Empirical product characteristics in the teachers' case (EBB2-1) 6-5 Empirical characteristics of portfolio development in the teachers' case (EBB3- 	174
1)	179
6-6 Empirical characteristics of portfolio assessment in the teachers' case (EBB4- 1)	183
6-7 Empirical characteristics of portfolio design and implementation in the teachers' case (EBB5-1)	187
6-8 Framework of empirical findings of portfolio use by foreign-trained teachers	190
6-9 Overview of the empirical building blocks in the medical doctors' case	192
6-10 Empirical context characteristics in the medical doctors' case (EBB1-2)	199
6-11 Overview of the implemented characteristics of the structure and content in the	
medical doctors' case	203
6-12 Experienced relevancy of the implemented content characteristics of the	
portfolio by both the faculty members and the FMDs	205
6-13 Experienced relevance of the implemented content characteristics of the	
portfolio by the portfolio assessors (3rd medical doctors' pilot project)	206
6-14 Empirical product characteristics in the medical doctors' case (EBB2-2)6-15 Relationship between the steps in the portfolio development process and the	210
6-15 Relationship between the steps in the portfolio development process and the supporting assignments used in the second medical doctors' pilot project	213
6-16 Description of the portfolio assignments used in the medical doctors' case	213
6-17 Implemented characteristics of the portfolio development courses in the	2
medical doctors' case	215
6-18 The experienced quality of the instructions by the FMDs	216
6-19 Empirical characteristics of portfolio development in the medical doctors' case	
(EBB3-2)	219
6-20 Overview of the additional assessment instruments for the assessment and	
recognition of the actual competencies of FMDs in the opinion of the faculty	
members	223
6-21 Empirical characteristics of portfolio assessment in the medical doctors' case	000
(EBB4-2) 6-22 Status quo of the factors that influenced implementation of change in the	226
medical doctors' case	229
6-23 Empirical characteristics of portfolio design and implementation in the medical	220
doctors' case (EBB5-2)	231
6-24 Framework of empirical findings of portfolio use by foreign-trained medical	
doctors	234
6-25 Overview of the empirical building blocks in the refugees' case	236
6-26 Overview of the intended and implemented number of portfolio candidates in	
the refugees'case	239
6-27 Empirical context characteristics in the refugees' case (EBB1-3)	241
6-28 Overview of the implemented product characteristics addressing the structure	0.40
and content 6-29 Empirical product characteristics for the refugees' case (EBB2-3)	246 248

~ ~ ~		
6-30	Overview of the implemented characteristics of the portfolio development	050
0.04	workshops in the refugees' case	252
6-31	Experienced characteristics of the set-up and content of the portfolio	050
6-32	development workshops in the refugees' case Suggestions for improvements to the portfolio development workshops by the	253
0-32	different groups of portfolio candidates in the refugees' case	253
6-33	Empirical characteristics of portfolio development in the refugees' case (EBB3-	200
0-00	3)	255
6-34	The use of the portfolio instrument as implemented in practice.	257
6-35	Portfolio assessment as experienced by the different groups of counsellors	258
6-36	Empirical characteristics of portfolio assessment in refugees' case (EBB4-3)	259
6-37	Status quo of the factors that influenced the implementation of change in the	
	refugees' case	262
6-38	Empirical characteristics of the design and implementation process in the	
	refugees' case (EBB5-3)	264
6-39	Framework of empirical findings of portfolio use by refugees	267
7-1	Overview of the empirical and theoretical buildings blocks that were used for	
	the cross-case analysis of the context characteristics and portfolio design and	
	implementation	272
7-2	Cross-case analysis of context characteristics and portfolio design and	
	implementation	276
7-3	Overview of the empirical building blocks and theoretical buildings blocks that	
7-3	were used for the cross case analysis of the characteristics of the portfolio	
	were used for the cross case analysis of the characteristics of the portfolio instrument	278
7-3 7-4	were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process	278
7-4	were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses	278 284
7-4 7-5	were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics	278
7-4	were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-	278 284 289
7-4 7-5 7-6	were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly- skilled immigrants and the type of portfolio that should be used	278 284
7-4 7-5	were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly- skilled immigrants and the type of portfolio that should be used Relationship between theoretical portfolio characteristics and the empirical	278 284 289
7-4 7-5 7-6	were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly- skilled immigrants and the type of portfolio that should be used	278 284 289 292
7-4 7-5 7-6 7-7	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio that should be used Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics 	278 284 289 292
7-4 7-5 7-6 7-7	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio characteristics and the empirical portfolio characteristics Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics Dimension extremes for a conceptual framework of portfolio use related to the 	278 284 289 292 293
7-4 7-5 7-6 7-7 7-8	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio characteristics and the empirical portfolio characteristics Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics Dimension extremes for a conceptual framework of portfolio use related to the findings in this research study Conceptual framework of portfolio characteristics for highly-skilled immigrants Explorative questions that should be addressed during portfolio design and 	278 284 289 292 293 299
7-4 7-5 7-6 7-7 7-8 7-9 7-10	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio that should be used Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics Dimension extremes for a conceptual framework of portfolio use related to the findings in this research study Conceptual framework of portfolio characteristics for highly-skilled immigrants Explorative questions that should be addressed during portfolio design and implementation 	278 284 289 292 293 299 301 308
7-4 7-5 7-6 7-7 7-8 7-9 7-10 7-11	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio that should be used Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics Dimension extremes for a conceptual framework of portfolio use related to the findings in this research study Conceptual framework of portfolio characteristics for highly-skilled immigrants Explorative questions that should be addressed during portfolio design and implementation Design building block: content-based environment 	278 284 289 292 293 299 301 308 309
7-4 7-5 7-6 7-7 7-8 7-9 7-10 7-11 7-12	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio characteristics and the empirical portfolio characteristics Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics Dimension extremes for a conceptual framework of portfolio use related to the findings in this research study Conceptual framework of portfolio characteristics for highly-skilled immigrants Explorative questions that should be addressed during portfolio design and implementation Design building block: content-based environment Design building block: competency-based environment 	278 284 289 292 293 299 301 308
7-4 7-5 7-6 7-7 7-8 7-9 7-10 7-11	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio that should be used Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics Dimension extremes for a conceptual framework of portfolio use related to the findings in this research study Conceptual framework of portfolio characteristics for highly-skilled immigrants Explorative questions that should be addressed during portfolio design and implementation Design building block: content-based environment Design building block: competency-based environment Overview of the theoretical and empirical building blocks that address the 	278 284 289 292 293 299 301 308 309 310
7-4 7-5 7-6 7-7 7-8 7-9 7-10 7-11 7-12 7-13	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio characteristics and the empirical portfolio characteristics Dimension extremes for a conceptual framework of portfolio use related to the findings in this research study Conceptual framework of portfolio characteristics for highly-skilled immigrants Explorative questions that should be addressed during portfolio design and implementation Design building block: content-based environment Overview of the theoretical and empirical building blocks that address the portfolio characteristics. 	278 284 289 292 293 299 301 308 309
7-4 7-5 7-6 7-7 7-8 7-9 7-10 7-11 7-12	 were used for the cross case analysis of the characteristics of the portfolio instrument Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cses Cross-case analysis of the portfolio characteristics Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants and the type of portfolio that should be used Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics Dimension extremes for a conceptual framework of portfolio use related to the findings in this research study Conceptual framework of portfolio characteristics for highly-skilled immigrants Explorative questions that should be addressed during portfolio design and implementation Design building block: content-based environment Design building block: competency-based environment Overview of the theoretical and empirical building blocks that address the 	278 284 289 292 293 299 301 308 309 310

х

List of Acronyms

ACE ADDIE-model APCL APEL APL BIG Act CAEL CBGV CIBA Colo	American Council on Education Analysis, Design, Development, Implementation and Evaluation model Accreditation of Prior Certificated Learning Accreditation of Prior Experiential Learning Accreditation of Prior Learning The Individual Health Care Professions Act Council for Adult and Experiential Learning Commissie Buitenlands Gediplomeerden Volksgezondheid (Bureau of Foreign Degree Holders) Commissie Instroom Buitenlandse Artsen (Central committee for the enrolment of foreign-trained medical students) Vereniging Kenniscentra Beroepsonderwijs Bedrijfsleven (Association of Centres of Expertise on Vocational Education, Training and the Labour
	Market)
CWI	Centrum voor Werk en Inkomen (Centre for Work and Income)
ECTS	European Credit Transfer System
EEA	European Economic Area
EBB	Empirical Building Block
ECVET	European Credit system for Vocational Education and Training
ENIC	European National Information Centres
EU	European Union
EVC	Erkennen van Verworven Competencies (Recognition of Acquired
	Competencies)
FM	Faculty Member
FMD	Foreign-trained medical doctor
FT	Foreign-trained Teacher
IBG	Informatie Beheer Groep (Information Management Group)
IDW-structure	Internationale Diplomawaardering-structuur (International Credential
	Evaluation-structure
JCSEE	Joint Committee on Standards for Educational Evaluation
KBBs	Kenniscentrum Bedrijf en Beroep (Vocational Education Business Community Knowledge Centre)
NARIC	National Academic Recognition Information Centre
NBPTS	National Board for Professional Teaching Standards
Nuffic	Netherlands Organization for International Cooperation in Higher Education
NVAO	Nederlands-Vlaams Accreditatie Orgaan (Netherlands-Flemish Accreditation
	Organization)
PDP	Personal Development Plan
PLAR	Prior Learning Assessment and Recognition
ROCs	Regionale Opleidingscentra (regional educational centres)
RPL	Recognition of Prior Learning
ТВВ	Theoretical Building Block
UAF	Stichting Vluchteling-Studenten (The Foundation for Refugee Students)
VAP	Validation des Aquippes Profesionelles (Validation of Professional Learning)

This research study explores the characteristics of the portfolio as an instrument for highly-skilled immigrants to facilitate the identification, assessment and recognition of their actual competencies and defines guidelines for its design, development and implementation. The study was undertaken at the Netherlands Organization for International Cooperation in Higher Education (Nuffic). In the period 2000 to 2004, Nuffic undertook different pilot projects that were aimed at exploring the characteristics of the portfolio instrument as a tool to make the prior learning of highly-skilled immigrants visible. In this manner, the recognition bodies (higher education institutions, ministries and employers) could take the outcomes of all types of learning -formal, non-formal and informal- into account in their recognition decisions. By means of a reconstructive multiple case study the empirical characteristics of portfolio use were compared with a set of five theoretical building blocks that relate to:

- 1. The context characteristics;
- 2. The product characteristics of the portfolio instrument;
- 3. The characteristics of portfolio development by the highly-skilled immigrant (the portfolio candidate);
- 4. The characteristics of portfolio assessment by the recognition body (the portfolio assessor); and
- 5. The characteristics of portfolio design and implementation.

The comparison resulted in a conceptual framework of portfolio use by highly-skilled immigrants, a portfolio 'spider web' that contains ten key components for effective portfolio use by highly skilled immigrants and two design building blocks for portfolio design and implementation.

This chapter provides a brief overview of the research study. Section 1.1 explains the background against which the research study was initiated and briefly sets out its focus and general aim. Section 1.2 explores the context and the problem addressed by the research study in more detail. Section 1.3 defines the central research problem, the aim of the research study and its main research questions. Section 1.4 explains the nature of the research study and provides a general overview of its set-up. Section 1.5 discusses the relevance of the research study from a scientific, practical and socio-political viewpoint. The last section discusses the structure of the thesis.

1.1 Background of the study

This study was initiated at the turn of the century when all societies in Europe were facing the challenge of how to cope with the needs of a knowledge-based society and further globalization. In order to compete with other parts of the world, government leaders set the European Union the objective to become the most competitive and dynamic knowledge-based economy in the world by 2010. As a consequence, Europe had to start implementing a coherent and comprehensive lifelong learning strategy that aims to (European Commission, 2000):

- guarantee universal and continuing access to learning to gain and renew skills needed for sustained participation in the knowledge society;
- ensure easy access to good quality information and advice about learning opportunities throughout Europe and throughout their lives;
- raise levels of investment in human resources;
- develop effective teaching and learning methods and contexts for the continuum of lifelong learning;

- improve the ways in which learning participation and outcomes are understood and appreciated, particularly non-formal and informal learning;
- provide lifelong learning opportunities as close to learners as possible, in their own communities and supported through ICT-based facilities wherever appropriate.

Valuing learning is both an aim and precondition for reaching the other aims of the lifelong learning agenda and making optimal use of human resources. The Commission (2000) has stated that national certification systems and practices should be innovated to meet the economic and social conditions in all Member States. "For an integrated Europe, both an open labour market and citizens' rights to free movement to live, study, train and work in all Member States demand that knowledge, skills and qualifications are both more readily understandable and more practically 'portable' within the Union," (European Commission, 2000, p. 15). This poses real challenges for the evaluation practice of immigrants' competencies, which is the context of this study.

Competencies are developed in different learning settings that may vary in terms of intensity, duration, context and design (Klarus, 1998). For the adequate use of human resources and to enhance international mobility it is important to have instruments that facilitate the identification, assessment and recognition of competencies developed throughout life (in formal, non-formal and informal learning settings). The European Commission (2000) uses the following definitions for these three forms of learning:

- 1. Formal learning, which relates to learning that takes place in education and training institutions and leads to nationally recognized or accredited diplomas, qualifications or certificates;
- Non-formal learning that takes place along mainstream systems of education and training and includes all learning activities that donot typically lead to formalized diplomas, qualifications or certificates. It may take place in a wide variety of training institutions set up to complement formal systems, in the workplace or in civil society organizations; and
- 3. Informal learning, which relates to learning in everyday life. It is not necessarily intentional and therefore people are often unaware that it contributes to their knowledge and skills.

Formal learning has dominated policy thinking and has coloured people's understanding of what counts as learning (European Commission, 2000). To stimulate international mobility of students, researchers and the workforce, numerous measures have been taken at the European and national level to facilitate the transfer, transparency and recognition of formal learning. International credential evaluation is an important practice in this respect (see Chapter 2). Valuable progress has been made with regard to mutual recognition agreements and transparency of foreign qualifications in the higher education sector and for regulated professions. However, innovative forms of evaluation and recognition must be found to include the outcomes of non-formal and informal learning in recognition decisions as well. The Commission (2000) remarks that high-quality systems for the 'Accreditation of Prior Experiential Learning (APEL)' should be developed in close cooperation with those who ultimately validate credentials in practice. APEL systems evaluate individuals' available knowledge, skills and experiences gained over a long period of time and in diverse contexts, to see whether recognition can be granted for a specific purpose. Internationally, a variety of terms is used to refer to evaluation process of prior learning. In this thesis, the term 'Prior Learning Assessment and Recognition (PLAR)' is used to refer to this practice because this term emphasizes that assessment and recognition are two different processes. In the Netherlands, this process is referred to as 'Recognition of Acquired Competencies' (Erkennen van Verworven Competencies (EVC)). In this research study, the abbreviation PLAR will be used when discussing prior learning assessment and recognition procedures also if it refers to the Dutch context.

With respect to the terms 'evaluation' and 'assessment' this study applies the definitions given by the Joint Committee on Standards for Educational Evaluation (JCSEE). 'Evaluation' is the systematic investigation and determination of the worth or merit of an object (JCSEE, 2003). In this research study, when discussing the current dominant practice of evaluation and recognition of immigrants' prior learning experiences, the object of evaluation is mainly the 'international credential, diploma, or qualification' (three synonymous terms in this study). However, this research study explores whether the object of evaluation can be changed to the 'competence level' of the immigrant by using the portfolio instrument. In this respect the term assessment is more appropriate and therefore used. 'Assessment' is defined as the process of collecting information about a person to aid in decision-making about his progress and development (JCSEE, 2003). Hence, the study speaks about the evaluation of international gualifications and the assessment of competencies. Both processes take place to see whether recognition can be granted. With respect to international qualifications, 'recognition' concerns a formal statement by a competent recognition authority about the value of the foreign qualification. The competent authority is an organization that has the legal power to take a certain recognition decision (for example, a ministry or an educational institution). With respect to competencies, it refers to the overall process of granting official status to competencies, either in the form of 'formal recognition' through the award of certificates or the granting of equivalence or credit units, or in the form of 'social recognition', which relates to the acknowledgement of competencies by economic and social stakeholders, for example, employers (cf. European Commission, 2004).

To learn more about the practice of PLAR, in 2000 Nuffic undertook a preliminary inventory to study PLAR procedures in the United States, the United Kingdom and the Netherlands to see how these could complement the practice of international credential evaluation (cf. Scholten & Teuwsen, 2001). The portfolio instrument was identified as a potentially valuable instrument to take account of all forms of learning (formal, non-formal and informal) and widen the recognition spectrum. The portfolio is a common instrument in the first phase of a PLAR procedure to identify and document the outcomes of any learning process (Evans, 2000; Johnson, 2002; Klarus, 1998; Whitaker, 1989). But there is only little experience with the use of portfolio as an instrument to identify, assess and recognize the prior learning of highly-skilled immigrants. It was expected that the inventory would identify a number of experimental PLAR procedures, set up for other target groups than highly-skilled immigrants, to which connections could be made. However, it appeared that at the turn of the century the use of PLAR in higher education in the Netherlands was still in its infancy. The only PLAR procedure to which a connection could be made was the 'assessment of prospective primary and secondary school teachers' (zij-instroom leraren primair en voortgezet onderwijs). Nuffic decided to initiate or take part in a number of pilot projects to explore the characteristics of the portfolio instrument to facilitate the recognition of all forms of learning in close cooperation with the recognition bodies (e.g. the educational institutions, ministries or employers). At a later date, these pilot projects were used to conduct a reconstructive multiple case study to analyse the congruence between theory and practice to see whether this analysis offers evidence for adapting the theoretical building blocks that were previously developed.

1.2 Exploration of the context and problem

The research study was carried out at Nuffic. Nuffic has longstanding experience in the field of international credential evaluation. International credential evaluation was introduced after World War II to foster the international mobility of students and the workforce through the comparison of formal educational qualifications at a system level. Within the context of international credential evaluation, the term 'qualification' refers to any degree, diploma or other certificate issued by a competent authority attesting the successful completion of a higher education programme (Lisbon

Recognition Convention, 1997). It concerns diplomas or certificates awarded by educational providers that are recognized or accredited at national level. The evaluation is carried out by experts and is 'curriculum-based'. This means that the curriculum of the foreign qualification is analysed and compared with the curricula of national study programmes to find the one most suitable. Over the years, numerous instruments have been implemented to increase the transparency of formal qualifications. Furthermore, mutual recognition agreements have been developed to enhance mobility within Europe. These conventions and directives primarily relate to the higher education sector, the regulated professions and technical occupations. Chapter 2 further discusses the context of international credential evaluation, providing an overview of common recognition instruments and explaining the credential evaluation approach. This approach, however, has its limitations.

First of all, it only takes account of the formal learning process, neglecting learning that takes place in non-formal and informal settings. Second, it can be questioned whether the current evaluation methodology can adequately cope with the growing diversification of formal learning, noting that as consequence of the lifelong learning agenda, the demarcation line between formal and non-formal learning will fade. Through the establishment of partnerships, including with educational providers from the formal and non-formal school system (nationally and internationally), new forms of learning are being offered of which the qualifications are difficult to evaluate using the current credential evaluation criteria. Furthermore, the knowledge-based society causes a shift from the acquisition of discipline-based knowledge to the development of competencies. New pedagogical values are being implemented causing serious changes in the curriculum process of some formal study programmes. This makes the question of how to evaluate qualifications from study programmes with a different pedagogical philosophy more evident.

The current evaluation approach focuses on curriculum characteristics at the system level, institutional level and study programme level using information that relates primarily to what is commonly called the intended curriculum (cf. Van den Akker, 2003). The intended curriculum relates to the vision underlying the curriculum and the intentions that are specified in official curriculum documents at the system and institutional level. There are only a few evaluation criteria that relate to the attained curriculum at the learner's level. The attained curriculum relates to how the learner has experienced the curriculum and what he¹ has actually learned from it (Van den Akker, 2003). Hence, international credential evaluation reveals what Ellström (1998) calls the formal competence of an individual. Formal competence is measured in years of completed schooling or by the diplomas or certificates earned by the individual. In opposition, Ellström discusses the term actual competence, which is "the potential capacity of an individual to successfully handle a certain situation or to complete a certain task" (Ellström, 1998, p.41). This capacity refers to perceptual motor skills, cognitive factors, affective factors, personality traits and social skills. There can be a gap between a person's formal competence and his or her actual competence, e.g. as a consequence of measurement errors in the formal school system (Toolsema, 2003), but also because people do acquire competencies in other learning settings than formal learning (Ellström, 1998). To enhance employability, to widen access to education, to develop flexible learning paths and to foster mobility it is important to gain insight into the development of a person's actual competencies throughout life.

In 2000, when the idea for undertaking this research study was born, the evaluation practice of immigrants' competencies in the Netherlands was focused on the 'formal competence' of an individual. International credential evaluation was (and still is) the main method used to gain insight into the prior learning experiences of immigrants. The diploma is important proof of

¹ Throughout this thesis 'he' is used as meaning 'he/she' and 'his' as meaning 'his/hers'.

competence. Immigrants who cannot produce their diplomas and certificates (refugees or people in refugee-like situations) are confronted with a lack of alternative evaluation processes to prove their competence. In addition, there are hardly any instruments that take account of learning that took place outside the formal school system. Many highly skilled immigrants, and especially refugees, face great difficulties obtaining work in the Netherlands in their previous field of expertise (Ministry of Social Affairs and Employment, 2002). Over the years, different studies have been undertaken to explore the problems they encounter in their job-seeking process (Brink, Pasariboe & Hollands, 1996; Klaver & Odé, 2003; Van den Tillaart, Olde Monninkhof, Van den Berg & Warmerdam, 2000; Warmerdam & Van den Tillaart, 2002). These studies show that despite the high-conjuncture in the mid-nineties, the position of refugees on the Dutch labour market has not improved. Klaver and Odé (2003) indicate that about 30% of the 185,000 refugees that are presently in the Netherlands is unemployed, and about 50% works in jobs for which they are over-qualified. They divide the problems that relate to this poor position on the labour market into five categories. One of these categories relates to the assessment and recognition of immigrants' prior learning, which is the focus of this study.

The non-recognition of formal qualification forms a major obstacle for social and economic integration in the Netherlands. The problems are the largest for immigrants from outside the European Union (EU) or European Economic Area (EEA) who wish to work in a regulated profession. Mutual recognition agreements in these fields do not apply to non EU/EEA citizens with non EU/EEA qualifications. Immigrants need to re-qualify for a given profession if a foreign qualification is regarded as being of a lower level than the required national qualification. Tailormade study programmes that focus on the missing parts are not available, nor are the instruments that are needed to determine what these missing parts are, taking the actual competencies of an individual as a starting point. The Dutch government welcomes measures that encourage the recognition of immigrants' actual competencies to improve the labour market perspectives of highly skilled immigrants. The government suggests a combination of international credential evaluation and PLAR (Ministry of Social Affairs and Employment, 2002). This suggestion is in line with European policy (cf. European Commission, 2000). The portfolio instrument has the potential to form a bridge between these two practices (Scholten & Teuwsen, 2001a; 2002). It can enhance the identification, assessment and recognition of immigrants' actual competencies and as such facilitate access to professions in previous fields of expertise.

1.3 Problem definition, aim and research questions

1.3.1 Problem definition

The problem that takes a central position in this research study relates to the focus and nature of the current evaluation and recognition practice of immigrants' competencies. This practice is system-based and limited to the outcomes of the formal school system. The formal diploma is seen as an important proof of competence. It relates to the formal competence of the individual that is measured in years of education (cf. Ellström, 1996). The evaluation statement indicates with which national diploma the foreign diploma can best be compared and excludes all learning that has taken place in non-formal and informal learning settings. As such, the evaluation statement does give insight into the actual competencies of the individual holding the qualification. The actual competencies relate to the current competencies as a result of all the learning experiences the person has been engaged in whether these are labelled as formal, non-formal or informal (cf. Ellström, 1996). The portfolio instrument is commonly used to identify and document the outcomes of all learning processes. It has the potential to change the current focus from a system-based approach limited to formal learning, to an individual-oriented approach that is competency-based.

Such an approach could enhance the labour market chances of immigrants and enable Dutch society to make better use of the human capital of highly-skilled immigrants.

1.3.2 Aim of the study

The research study explores the characteristics of the portfolio instrument that facilitate the identification, assessment and recognition of the actual competencies of highly-skilled immigrants and develops a set of design building blocks for portfolio design and implementation. The portfolio instrument has the potential to change the focus of current evaluation and recognition practice from a system-based approach to a competency-based approach. As such the instrument is likely to have a positive influence on the labour market chances of highly-skilled immigrants in professions that relates to their previous fields of expertise. By means of a multiple exploratory case study the empirical characteristics of portfolio use by highly-skilled immigrants are compared with the theoretical building blocks derived from literature. The analysis results in an adapted conceptual framework for portfolio use by highly-skilled immigrants and a set of three design building blocks for portfolio design and implementation.

1.3.3 Research questions

The following two research questions guided the research process:

- 1. What are the characteristics of the portfolio instrument and its use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?
- 2. What are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice?

1.4 Nature of the research study

The introduction of portfolios into the current evaluation and recognition practice of immigrants' competencies involves a complex innovation. Development research has been chosen as a suitable research approach as it is often applied to support the design and implementation of complex, innovative interventions for which only few validated principles are available (Van den Akker, 1999). Development research helps designers and researchers to cope with uncertainties in complex and dynamic contexts. Van den Akker (1999) describes two main types of development research: 'formative research' and 'reconstructive research'. In formative research studies, research activities are performed throughout the development process in order to optimize the quality of the intervention and to test design principles. In reconstructive studies, research takes place during, but often after the development of an intervention has taken place. The focus is on the specification of more general design principles and not on optimizing the quality of one specific product (Van den Akker, 1999).

In the first instance, it was the intention to undertake formative research. After an inventory study was undertaken in 2000, Nuffic decided to initiate or take part in various pilot projects to explore the characteristics of the portfolio instrument in enhancing the identification, assessment and recognition of immigrants' actual competencies (cf Scholten & Teuwsen, 2001a). Over time it became evident that many of the design and implementation decisions could not be controlled by the development team. The recognition bodies had great influence on the product characteristics and the design of the pilot projects, especially with respect to portfolio assessment. It was also difficult to guarantee the continuity of portfolio use in a given sector, which is a complicating factor for formative research. To illustrate this, the first pilot project in 2000 explored the use of portfolios

for foreign-trained teachers. It resulted in a number of suggestions for improvement but in the following years no project partners were found to test the revised set of design principles. In 2002, a second pilot project was initiated in a different professional sector (the medical sector). The development team of Nuffic kept the conclusions of the first pilot project in mind but the new group of faculty members had significant influence on the pilot project design. This reality caused to change the research approach from formative development research to reconstructive development research. It was decided to use the five pilot projects that had been carried out in the period 2000 to 2004 to conduct a multiple exploratory case study. Yin (1994) defines a case study as "an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p.13). The case study approach is appropriate if one deliberately wants to cover contextual conditions, as it is believed that these are pertinent to the phenomenon of study. In 2004, a conceptual framework was developed that addressed the two main research questions from a theoretical perspective. It encompasses five theoretical building blocks that address:

- 1. The context characteristics;
- 2. The product characteristics of the portfolio instrument;
- 3. The characteristics of portfolio development by the portfolio candidate;
- 4. The characteristics of portfolio assessment by the portfolio assessor; and
- 5. The characteristics of portfolio design and implementation.

These building blocks were used to develop a framework for the data analysis to explore the empirical characteristics of portfolio use, as intended, as implemented and as experienced by the portfolio candidates and the portfolio assessors. The results from the cross-case analysis were used to develop an adapted conceptual framework for portfolio use by highly-skilled immigrants, a portfolio spider web that contains ten key components for effective portfolio use and two portfolio design building blocks. These design building blocks may assist others who wish to design a portfolio instrument that could enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants.

One of the limitations of the research design is that the framework for the data analysis was developed after most of the pilot projects had been carried out. Therefore not all the pilot project data may relate directly to an issue of analysis, and some issues of analysis may not be addressed at all. Chapter 5 will discuss the research approach and its design in more detail. It also offers a description of each pilot project and explains what data was available for the case study analysis. For the sake of clarity, the term 'Nuffic project' is used to refer to the five Nuffic pilot projects that took place in the period from 2000 to 2004. In the Nuffic project, the development team was not in control of all the design and implementation decisions. The term 'research project' is used to refer to the multiple exploratory case study. In this research, the researcher was in control of the research design.

1.5 Relevance of the research study

This research study explores the characteristics of a portfolio instrument that document the prior learning experiences of highly-skilled immigrants in order to facilitate the identification, assessment and recognition of their actual competencies. The relevance of the study can be explored from different perspectives differentiating between the theoretical, practical and social relevance.

From a theoretical viewpoint, this study contributes to a better understanding of how the portfolio instrument could contribute to the identification, assessment and recognition of immigrants' competencies. Klarus (1998) has developed an PLAR procedure of which the portfolio instrument was a part. It was accepted as a formative assessment instrument that could identify the actual

competencies of the candidate. This research study focuses on the portfolio instrument and its design and implementation. It uses literature on competency-based assessment and the portfolio instrument to develop five theoretical building blocks addressing the context characteristics, the portfolio product characteristics, the portfolio development process, the portfolio assessment process and the portfolio design and implementation process. It builds on the work of Smith and Tillema (2003), Tigelaar, Dolmans, Wolfhagen and Van der Vleuten (2004) and Tillema (2001) to develop a conceptual framework for portfolio use for highly-skilled immigrants and a set of two design building blocks.

From a practical viewpoint this study is relevant because it results in a set of three design building blocks for the design and implementation of a portfolio of prior learning for highly-skilled immigrants. These building blocks can be used by others who aim to enhance the identification, assessment and recognition of people's actual competencies instead of formal competencies by using the portfolio instrument. The formal competencies relate to formal learning experiences only. It is acknowledged, both at the European level and the level of the individual Member States, that all forms of learning deserve recognition. This is an important precondition for meeting the objectives of the lifelong learning agenda and fostering the international mobility of students and the workforce. However, the question of how this should be realized in practice is still unanswered. The identification, assessment and recognition of non-formal and informal learning is a rather complex process, not only with respect to the methodological issues, but also with regard to social and political matters (Bjørnåvold, 2000).

This research study contributes to the social and political debate regarding the need for (the implementation of) a tool that makes the identification, assessment and recognition of actual competencies possible. The definition of a set of high-quality criteria for a portfolio of prior learning is relevant for a number of reasons. First, it could enable to immigrants to gain fair recognition of all their learning experiences. Fair recognition will enhance their economic and social integration into Dutch society. Second, it could enable the provision of tailor-made study programmes that focus on the missing parts leading to Dutch qualifications. This could raise motivation to enrol in Dutch study programmes, decrease the required study duration, lower the costs of education and enhance access to professions that relate to previous experience. This again could raise the social and economic integration of a group of immigrants who would otherwise be unemployed or doing less stimulating work for which they are overqualified.

1.6 Structure of the thesis

After this introduction, Chapter 2 starts with a further exploration of the dynamic context of this research study. It addresses the different contexts in learning can take place and provides an overview of the current instruments and approaches available to assess and recognize formal, non-formal and informal learning. Some of these instruments were implemented during the course of this research study.

Chapter 3 explores the characteristics of competency-based learning and assessment and compares these with the more traditional content-based learning paradigm that might be more familiar to highly-skilled immigrants. This chapter starts with a thorough exploration of the terms 'competence', 'competency' and 'competencies' and explains the conceptual choices that were made in this research study. Second, it presents the characteristics of learning, assessment and quality assurance of assessment in the competency-based paradigm and the content-based paradigm as two extremes of a continuum. Third, it discusses the competency-based paradigm in relation to different educational cultures that exist globally. The chapter concludes with a first

theoretical building block that contains the characteristics of an 'ideal' context for the introduction of the portfolio instrument to enhance the identification, assessment and recognition of immigrants' actual competencies.

Chapter 4 presents four additional theoretical building blocks that relate to four topics that should be considered. These are: the product characteristics, the process of portfolio development by the portfolio candidate, the process of portfolio assessment by the portfolio assessors and portfolio design and implementation. Each topic is discussed separately and at the end of each discussion the main characteristics are summarized in a theoretical building block.

Chapter 5 forms a link between the theoretical part of the dissertation and the empirical part. It explains the research approach that was applied as well as the research design for the multiple exploratory case study. It presents the issues of analysis that were derived from the theoretical building blocks to develop a framework for the analysis of data from the Nuffic pilot projects. Chapter 5 presents the pilot project design of each of the five Nuffic pilot project: one teachers' pilot project, three medical doctors' pilot projects and one refugees' pilot project. It explains what data is available for the exploration of the empirical characteristics of the issues of analysis as intended, implemented and experienced by the portfolio candidates as well as the portfolio assessors.

Chapter 6 presents the multiple case study. In total three case studies were conducted: the teachers' case, the medical doctors' case and the refugees' case. In each case, five empirical building blocks are developed addressing the context characteristics, the product characteristics of the portfolio instrument, the portfolio development process by the portfolio candidate, the portfolio assessment process by the portfolio assessor and portfolio design and implementation. At the end of each case, a framework of empirical findings is presented. These frameworks are used in the next chapter for the cross-case analysis.

Chapter 7 answers the research questions based on theory and the empirical findings from the multiple case study. First of all, it discusses the results of the cross-case analysis. Second, it links the empirical portfolio characteristics to the targeted objectives of the highly-skilled immigrants distinguishing between the recognition of competencies for the purposes of: orientation, social recognition and formal recognition (cf. European Commission, 2004). It presents a conceptual framework for portfolio use by highly-skilled immigrants that could assist portfolio design and implementation. Third, it discusses the key components of portfolio use that should be considered during its design and implementation process. To indicate that each component is equally important for successful implementation, but dependent on the rationale of portfolio use, the metaphor of a spider web is used following Van den Akker (2003). Chapter 7 also presents a set of three design building blocks that might be used by future developers who wish to start using the portfolio instrument to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants.

Chapter 8 provides a summary of the research study and reflects on the outcomes and the research process as a whole. It discusses the strengths and weaknesses of this study and how the set-up influenced its outcomes and impact. Furthermore, recommendations for further research are discussed.

Chapter 2 The identification, assessment and recognition of formal, non-formal and informal learning: A dynamic context

The main purpose of this chapter is to further explore the context of the research study and conceptualize the problem at hand. Section 2.1 discusses different forms of learning and explores the meaning of the curriculum concept. Section 2.2 explains how the evaluation and recognition of formal learning is currently dealt with. It sheds light on the international measures that have been taken to foster the international recognition of diplomas and thereby stimulate the international mobility of the workforce and students. It explores the credential evaluation approach and discusses some important international trends in this practical field. Furthermore, it explains how the practice of international credential evaluation is organized in the Netherlands and addresses the position of Nuffic. Section 2.3 addresses the identification, assessment and recognition of nonformal and informal learning. First, the measures taken at the international level to enhance the identification, assessment and recognition of nonformal and informal learning are presented. Second, it addresses the practical field of prior learning assessment and recognition (PLAR) drawing from an inventory study that was carried out by Nuffic in 2000 (cf. Scholten & Teuwsen, 2001a). The final section links the purposes of international credential evaluation to the purposes of the recognition of competencies and provides a summary of the previous discussions.

2.1 Learning with or without a curriculum

The aim of this section is to discuss different forms of learning with or without a curriculum. Section 2.1.1 explores the meaning of formal, non-formal and informal learning and discusses the different discourses surrounding these forms of learning (cf. Colley, Hodkinson & Malcolm, 2002). The European Commission (2000, 2001) sees the presence of a structured plan of learning (a curriculum) as one of the key features that distinguishes formal and non-formal learning from informal learning. The curriculum concept plays an important role in this research study. The current evaluation and recognition practice of immigrants' competencies compares foreign and national curricula to grant recognition of a foreign diploma. Therefore, Section 2.1.2 outlines some basic notions regarding curriculum that help to clarify its meaning. It reviews those curriculum aspects that help to further conceptualize the context of this study and the problem at hand.

2.1.1 Different forms of learning

Learning is a cumulative process in which individuals gradually internalize more and more complex and abstract entities, like concepts, categories, patterns of behaviour or models (Lave, 1997 in Bjørnåvold, 2000) and/or acquire skills and wider competencies (European Commission, 2005). Learning takes place throughout life and in different settings. The European Commission (2000, 2001) differentiates between formal, non-formal and informal learning. In the *Memorandum on Lifelong Learning* (2000), the Commission defines formal learning as learning that "takes place in education and training institutions, leading to recognized diplomas and qualifications" (p.8). The most important distinction compared to non-formal learning seems to be the fact that the certificates or diplomas awarded after successful completion are nationally recognized or accredited. Later, in the European Communication *Making a European Area of Lifelong learning a Reality* (European Commission, 2001), the nature of formal learning is further specified as being an intentional and structured learning experience in terms of learning objectives, learning time and learning support. The Communication also defines non-formal

learning as an intentional and structured experience but it takes place along the mainstream systems of education and training and typically does not lead to recognized diplomas and certificates. Non-formal learning may be provided in a wide variety of training institutions set up to complement formal systems, e.g. in the workplace or in a civil society organization. Informal learning relates to learning in everyday life. It is not necessarily intentional and therefore people are often unaware that it contributes to their knowledge and skills (European Commission, 2000, 2001). Hence, the European Commission sees the presence of a curriculum that provides structure for the learning activity as an important distinction between formal and non-formal learning on the one hand, and informal learning on the other. The fact that this 'plan for learning' leads to a nationally recognized or accredited diploma is the most distinct feature of formal learning. Table 2-1 shows the differences between formal, non-formal and informal learning.

	Presence of a curriculum	Nationally recognized or accredited diploma
Formal learning	Yes	Yes
Non-formal learning	Yes	No
Informal learning	No	No

 Table 2-1
 Difference between formal, non-formal and informal learning

Colley et al. (2002) make clear that formal, non-formal and informal learning have their own history. They present formal and informal learning as two competing paradigms. Informal learning was introduced to challenge the concept of formal learning that was introduced at the time of mass education (Colley et al., 2002). For this matter, the terms informal learning, non-formal learning or experiential learning (cf. Beard & Willson, 2002) could be used as synonyms. Key features of formal education are: a prescribed learning framework, an organized learning event, the presence of a designated teacher, the award of a qualification and external specification of outcomes (Eraut, 2000 in Colley et al., 2002). Oversimplified to enable comparison, Colley et al. (2002) state that:

- in formal learning settings a behaviouristic view of learning prevails while in non-formal learning settings a constructivist view of learning is more common;
- for formal learning the metaphor of 'learning as acquisition' is adopted while for non-formal learning the metaphor of 'learning as participation' is more appropriate;
- the formal learning setting focuses on one single capacity (e.g. cognition), is decontextualized, an end in itself, stimulated by teachers and trainers and a rather individualistic process, while non-formal (or informal) learning settings are in most cases the opposite: the focus is organic or holistic, learning is contextualized, activity or experience-based, it depends on other activities, is activated by the individual learners and is a group process (Becket & Hager, 2002 in Colley et al., 2002)

Whitaker (1989) emphasizes that the distinction between formal and experiential learning is an input rather than an output distinction. He refers to the work of James Coleman, who indicated that the most important differences between traditional learning and experiential learning relate to the source of information and the learning process. Whitaker (1989) states that traditional learning is teacher-directed and the learning process can best be described as 'information assimilation'. The source of information is 'symbolic', which implies listening to lecturers or reading a book. Experiential learning, on the other hand, is self-directed. The source of learning relates to an actual experiences such as 'acting' or 'observing'. Whitaker (1989) concludes that the distinction in sources leads to a vital difference in the learning process, which is very important if one is planning a learning process but not if one is assessing learning outcomes.

Beard and Wilson (2000) and Colley et al. (2002) present formal learning as a static concept that has not changed in function or educational philosophy. This, however, is not the case. Birenbaum (1996) gives an overview of this change, which is summarized below. In the second half of the 19th century, formal education served to prepare the workforce for functioning in an industrial society. At that time, information was assumed to be finite. Mass education emphasized the acquisition of basic skills while higher order thinking was reserved for the elite. In the era following the technological revolution, commonly known as the information age, this function changed. It was acknowledged that information is infinite and dynamic and education needs to prepare the future workforce to acquire knowledge independently and solve new and unforeseen problems (cf. Mansfield & Mitchell, 1996). Consequently, curriculum reforms took place to reestablish the link with the world of work and prepare students better for future professional practice. These reforms were meant "to develop self-motivated and self-regulated learners and intended to make learning a more meaningful experience which is responsive to individual differences among the learners" (Birenbaum & Dochy, 1996, p.xiii). Many of the curriculum reforms are still ongoing, also in the Netherlands. Chapter 3 further discusses the characteristics of the more traditional content-based curricula that put more emphasis on knowledge acquisition and the newer competency-based curricula that emphasize the development of generic and/or subject-specific competencies. The latter opens opportunities for the assessment and recognition of competencies developed outside formal curricula, for example, during employment.

2.1.2 The curriculum concept

As mentioned earlier, the curriculum concept plays an important role in this research study. Van den Akker (2003) summarizes a set of concepts and perspectives that increases the transparency of curriculum discourse and analysis. This section discusses the aspects that are of most relevance for this research study. These are the different levels of the curriculum, the different curriculum representations and the core curriculum components. The latter two will be linked to the criteria used by international credential evaluators to analyse which aspects of the curriculum are addressed in the evaluation process.

Van den Akker (2003) refers to the definition of the term curriculum given by Taba (1962), who defines it as 'a plan for learning'. It is useful to differentiate between various levels of the curriculum when discussing curricular activities like curriculum analysis, which takes place during international credential evaluation, or evaluation in general that focuses on the outcomes of a learning plan. Van den Akker (2003) distinguishes between four levels:

- the macro level referring to the system, society, nation or state;
- the meso level referring to the educational institution;
- the micro level referring to the study programme or classroom; and
- the nano level referring to the individual (the teacher or student).

Curricular activities at the macro level are in the main quite generic in nature, while the activities at the remaining levels are 'site-specific' approaches. In this research study all four levels are relevant. The macro level relates to national and international activities or actors.

Of more importance for this research study are the different curriculum representations. Three common curriculum representations are: the 'intended' curriculum, the 'implemented' curriculum and the 'attained' curriculum (cf. Travers & Westbury, 1989). Van den Akker (2003) presents a further refinement that is given in Table 2-2.

	6, 1	
Intended	ldeal Formal or written	Vision (rationale or basic philosophy underlying a curriculum) Intentions as specified in curriculum documents and/or materials
Implemented	Perceived Operational	Curriculum as interpreted by its users (especially teachers) Actual process of teaching and learning (also: curriculum-in-action)
Attained	Experiential Learned	Learning experiences as perceived by learners Resulting learning outcomes of learners

 Table 2-2
 Typology of curriculum representations

These three broad types of curricula are used to underpin the conceptual framework in the international achievement studies of the International Association for the Evaluation of Educational Achievements (IEA). The IEA conceptual framework will be used in Section 2.2.3 to discus the shortcomings in the practice of international credential evaluation. Travers and Westbury (1989) explain this framework as follows. At the system level there are a set of internations (goals and traditions) for the curriculum. These intended outcomes, together with course outlines, official syllabi, and textbooks form the intended curriculum. The content of this intended curriculum is implemented by a teacher or professor during lectures, skills labs, and so on. Hence, at the institutional level (or classroom level) the implemented curriculum is covered by the teacher or professor during the course taking into account time pressure, personal views of what is important and what is not? At the student level the attained curriculum is addressed, focusing on subject matter knowledge, skills and attitudes actual acquired by the student. Figure 2-1 represents the basic framework used to underpin the IEA studies.

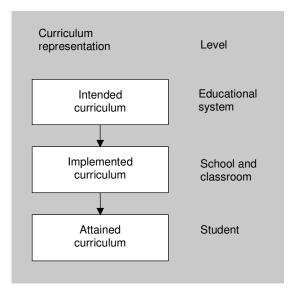


Figure 2-1 Framework for IEA-studies: Three curriculum representations (Travers & Westbury, 1989, p.6)

Finally, attention is given to the curriculum components. Van den Akker (2003) mentions that Walker (1990) included three elements in his curriculum definition: content, purpose and organization of learning. Van den Akker (2003) presents a more elaborate overview of ten components that is based on the work of Eash (1991) and Klein (1991). These components are:

- the rationale; why are they learning?
- the aims and objectives; towards which goals are they learning?
- the content; what are they learning?
- the learning activities; how are they learning?
- the teacher role; how does the teacher facilitate the learning process?

- the materials and resources; with what are they learning?
- the grouping; with whom are they learning?
- the location; where are they learning?
- the time; when are they learning?
- the assessment; how far has learning progressed?

The rationale serves as a major orientation point relating to the central mission of the plan for learning. Ideally, the other nine components are linked to this rationale and consistent with each other. To explain that each component is of equal importance to develop a high-quality curriculum, Van den Akker (2003) uses the metaphor of a spider web. The relevance of the components varies across the different levels of a curriculum that were discussed earlier (macro, meso, micro and nano). Curriculum documents at the macro level generally refer to the first three components addressing the rationale, the aims and objectives and the curricular content. For the successful implementation of the rationale all components need to be coherently addressed at the operational curriculum and at the meso and micro level (Van den Akker, 2003). The metaphor of the 'spider web' will be used in Chapter 7 to explain how much the key components of effective portfolio use are intertwined and related.

2.2 Evaluation and recognition of formal learning

The aim of this section is to explain the dynamic context of the recognition of formal learning. Section 2.2.1 explores the concept of recognition from different perspectives: diplomas, institutions and study programmes. Section 2.2.2 focuses on the international credential evaluation approach and discusses its strengths and weaknesses. Moreover, it sheds light on important recognition instruments that have been developed over time. Section 2.2.3 sheds light on the Bologna process that has an important influence on the recognition practice of higher education qualifications in Europe.

2.2.1 The concept of recognition from different perspectives

Recognition is a rather general term. In English it can refer to the recognition of diplomas, degrees, titles or institutions. The meaning of the term is explored below from two perspectives: diplomas and institutions / study programmes.

Recognition of foreign diplomas

In the context of international credential evaluation, the term recognition is connected to the evaluation of foreign qualifications that are issued after the successful completion of formal learning. Recognition is a specific type of evaluation as it concerns a formal statement by a 'competent recognition authority' about the value of the foreign qualification for which recognition is sought. A competent recognition authority is any body that is officially charged with making formal and binding decisions on the recognition of foreign qualifications, for example a Ministry or a higher education institution. In any case, it has the legal power to make a certain kind of decision or to take a certain kind of action. Apart from a recognition decision, the evaluation can result in:

- a recommendation to the competent recognition body making the recognition decision; or
- a statement addressed to individuals, institutions, potential employers or others.

This depends on the status of the organization that performs the evaluation. This research study was undertaken at Nuffic. Nuffic is an advisory body for the evaluation of foreign qualifications and serves different competent recognition bodies, like the Ministry of Health, Welfare and Sports, higher education institutions or employers.

The Recommendation on Criteria And Procedures for the Assessment of Foreign Qualifications hereafter referred to as the Recommendation (2001)- that was adopted as an annex to the *Lisbon Recognition Convention* (1997) in June 2001, gives a further explanation of the power of a competent authority. It may extend to decisions on all kinds of recognition cases or be limited to recognition for a specific purpose, a specific profession or a specific higher education institution. The Recommendation (2001) urges competent authorities to strive to recognize foreign qualifications as much as possible or otherwise to consider alternative forms of recognition, like:

- Recognition of the foreign qualification as comparable to a qualification of the host country but not to that indicated by the candidate;
- Partial recognition of the foreign qualification;
- Full or partial recognition of the foreign qualification subject to the candidate passing additional examinations or aptitude tests;
- Full or partial recognition of the foreign qualification at the end of a probationary period, possibly subject to specified conditions.

It is important to note that 'partial recognition' or 'recognition subject to the fulfilment of certain specific conditions' does not imply an automatic right to admission to any course designed to help candidates to remedy deficiencies. One of the remaining obstacles to the mobility of students and the workforce is that these kinds 'bridging programmes' are often not easily available.

Recognition statements are always issued for a specific purpose. Two common purposes are 'academic recognition' and 'professional recognition'. Academic recognition concerns admission to or enrolment in a study programme, while professional recognition relates to entrance to the labour market. Within professional recognition, a further distinction is made between 'de jure' recognition and 'de facto' recognition. 'De jure' professional recognition concerns access to the so-called regulated professions. The educational requirements for the practice of these professions are specified by law. Foreign professionals need an official recognition statement from the competent recognition authority specifying that the foreign qualification is recognized as being of a sufficient level in comparison to the required national diploma. 'De facto' professional recognition means that there are no legal demands with regard to the education requirements for practice. No official recognition statement is required for entrance. However, foreign professionals can be faced with the problem that employers are unfamiliar with the foreign qualifications and do not know for certain that the person is suitable for the job. A common distinction with respect to academic recognition concerns recognition for access on the basis of a previous gualification and the recognition of study periods. Furthermore, someone might request recognition in order to use an academic title. This relates to academic recognition with a civil effect.

Recognition of educational institutions / study programmes

Of great importance for the recognition of foreign diplomas is the recognition or accreditation of the educational institution that issued the diploma. Depending on the country, an institution that is 'recognized' might also be said to be 'accredited', whereas a recognized study programme is said to be either 'accredited' or 'validated'. Generally, 'recognition' is a legal matter regulated by the national government, whereas 'accreditation' and 'validation' are in the hands of an independent organization or association (Nuffic Glossary, 2005). In the Netherlands, higher education institutions that are recognized by the government fall into two categories: the 'government-funded institutions' and the 'approved' institutions. The first category is fully funded by the government. The second category is not funded by government but the institutions may issue officially recognized diplomas and titles. There are numerous private education institutions among the 'approved' educational institutions. For both categories of institutions, the 'Higher Education and Research Act' serves as the legal framework within which they are required to operate.

The European Commission (2005) reserves the term 'accreditation' for educational institutions and study programmes. They define it as a process that shows that a relevant legislative and professional authority has approved an educational institution or study programme by having met predetermined standards. Accreditation was introduced in the Netherlands in 2002, focusing on study programmes. Degree programmes that meet a set of standard criteria are accredited by the Netherlands-Flemish Accreditation Organization (NVAO). Accreditation makes the programmes eligible for government funding.

2.2.2 International measures to foster the recognition of formal learning

At the macro level, the European Commission as well as the Council of Europe and UNESCO have taken important measures to support the recognition of formal learning. The nature of the instruments differs; some are legal and binding, while others are more voluntary in nature. Furthermore, a distinction can be made between instruments that were developed to facilitate academic recognition and instruments that serve the improvement of professional recognition. It is important to note that the overview given below is limited to the major actions taken to enhance the recognition of diplomas in the higher education sector.

NARIC and ENIC network

First, there are two networks of information centres that form an important forum for the development of European recognition policies and practice as well as for cooperation between individual information centres.

- The network of National Academic Recognition and Information Centres (NARIC) was established in 1984 by the European Union as part of the Erasmus mobility programme. The main objective of the network is to promote the mobility of students, staff and researchers by providing advice about the recognition of credentials and study programmes. The NARIC network encompasses the countries of the European Union, the European Economic Area and the Associated Countries.
- The network of European National Information Centres (ENIC) was formed in 1994 as a result of a merger between two earlier networks, one of the Council of Europe and one of the European higher education department of UNESCO. It encompasses all NARIC countries as well as all parties to the European Cultural Convention (Council of Europe), members of the UNESCO Europe Region, parties to the Lisbon Recognition Convention (see below) and/or parties of the UNESCO Regional Convention for Europe. This means that the ENIC network covers all countries in Europe as well as Australia, Canada, Israel and the US.

In the Netherlands, Nuffic has been designated by the Dutch Ministry of Education to serve as the Dutch NARIC and ENIC. The NARIC and ENIC networks work closely together to overcome recognition barriers. They closely follow developments in higher education that have consequences for the recognition of credentials. The main area of activity is academic recognition but there are numerous NARICs that also serve as contacts for the EU Directives on professional recognition that are discussed further below.

Lisbon Recognition Convention

The most important legal instrument for academic recognition is the Lisbon Recognition Convention (1997) that replaced 6 earlier conventions that had been drawn up by the Council of Europe or UNESCO. The convention entered into force on 1 February 1999. The convention concerns the provision of fair assessment for all applications for the recognition of studies, qualifications, certificates, diplomas or degrees undertaken or earned in another country that has signed the

convention. The concept of fairness relates to the assessment procedure and criteria applied, and does not imply a right to recognition. To enhance the transparency of the assessment approach, the Lisbon Recognition Convention Committee adopted the *Recommendation on Criteria And Procedures for the Assessment of Foreign Qualifications* during its second meeting in Riga in 2001; hereafter referred to as the Recommendations (2001). The Lisbon Recognition Convention is based on the principle that a qualification will be recognized, as long as there is no evidence of 'substantial differences' in terms of: a) learning outcomes, b) access to further activities, c) key elements of the study programme, or d) quality. The responsibility for finding proof of substantial differences lies with the recognition institution in the receiving country. To be able to apply the convention, the member countries are required to provide transparent information about their own education systems and the recognition procedures and methodology they use. With respect to the first, the Diploma Supplement and the European Credit Transfer System (ECTS) are two important transparency instruments that are briefly described below. With respect to the second item, the Recommendation (2001) provides clear guidelines on how to provide transparent information to candidates.

With a view to the subject of this study, it is important to note that the Lisbon Recognition Convention explicitly addresses the recognition of qualifications held by refugees, displaced persons and persons in refugee-like situations. Article VII of the convention commits the countries that have signed the convention to show flexibility in the recognition of the qualifications of refugees (see Table 2-3). Many of them might not be able to produce documentary evidence of their qualifications for various good reasons, such as: they had to leave their personal belongings behind, they are unable to communicate with the institution(s) where they earned their qualifications, for example, because the relevant archives and files were destroyed or because relevant information is withheld for political reasons.

 Table 2-3
 Article VII of the Lisbon Recognition Convention concerning the recognition of qualifications held by refugees

Section VII. Recognition of qualifications held by refugees, displace Article VII	persons and persons in refugee-like situations.
Each Party shall take all feasible and reasonable steps v conformity with its constitutional, legal, and regulatory pu fairly and expeditiously whether refugees, displaced personal	ovisions to develop procedures designed to assess
relevant requirements for access to higher education, to fu activities, even in cases in which the qualification obtain documentary evidence.	rther higher education programmes or to employment
(Lisbon Recognition Convention, 1997)	

In the explanatory report of the conventions, various concrete possibilities are mentioned with

- regard to a more flexible approach. It might for example be possible to:
 Grant provisional recognition of the qualification claimed on the basis of a sworn statement by
- Grant provisional recognition of the qualification claimed on the basis of a sworn statement by the refugee; or
- Grant recognition for access to a study programme under the proviso that the study place may be revoked if the candidate has provided false information; or
- Offer a special examination to allow refugees to prove that they have acquired the qualification they claim.

The Recommendation (2001) encourages credential evaluators to create and use a Background Paper if refugees cannot for good reasons document the qualification they claim to have. The Background gives an overview of the qualifications or periods of study claimed with all available documents and supporting evidence. It is not an evaluation, but rather an authoritative description

or reconstruction of academic achievement. It may enhance future assessment by other evaluating bodies like higher education institutions or employers.

Diploma supplement

The second important tool for academic recognition is the diploma supplement. This is a product of the cooperation between the European Community, the Council of Europe and UNESCO. It is a model for providing factual information about an educational programme and must be submitted, together with the diploma, by the educational institution. The institution at which the diploma was obtained can only issue a diploma supplement. It must be free of any value judgement, declarations of equivalence or recognition suggestions. It has become a common transparency instrument for universities, employers organizations and recognition centres. The information included in a diploma supplement is:

- Information about the identity of the holder of the diploma;
- Information about the type of diploma;
- Information about the level of the diploma;
- Information about content and the results achieved;
- Information about the function of the diploma;
- Additional information;
- Authenticity of the diploma supplement;
- Information about the national higher educational system.

With reference to the three curriculum representations discussed earlier, it can be noted that the Diploma Supplement primarily provides information about the intended curriculum at the system and study programme level. An exception in this respect is the 'transcript of record'.

ECTS

The third academic recognition instrument is the European Credit Transfer System (ECTS). ECTS was developed with the objective of guaranteeing the recognition of credits and grades in student exchange programmes. However, it is now used as a Credit Transfer and Accumulation System. ECTS credits are a numerical value allocated to course units to describe the student workload required to complete the course. They reflect the quantity of work each course unit requires in relation to the total volume of work necessary to complete a full year of academic study. Institutions applying ECTS should translate their own credit point system to ECTS credits. One academic year represents 60 ECTS credits. Discussing the workload of a course on the basis of this common definition makes it easier to understand what is involved.

European directives for professional recognition

There are two important sets of European directives that need to be addressed from the perspective of professional recognition:

- the Sectoral Directives which were constructed independently for seven professions: doctor, dentist, pharmacist, midwife, nurse (responsible for general care), veterinary surgeon and architect; and
- the General System for Mutual Recognition of Professional Qualifications.

People's qualifications for professions covered by the Sectoral Directives are recognized without further investigation in EU/EEA Member States because basic training preparing for these professions has been harmonized in these countries. The process for constructing these directives, however, proved to be unacceptably complex and slow and therefore the Commission decided to introduce a more general system of directives for the other regulated professions.

The General Directives are founded on the premise that an individual qualified in one Member State to practice a given profession or occupation should be treated in principle as qualified to exercise that same profession or occupation in another Member State, without having to re-qualify from the beginning. The system requires mutual trust in the validity of professional or vocational training anywhere in the EU or EEA. In the event that there are 'substantial differences' between the education and training to which the qualification attests and that required in the host Member State, the immigrant may be asked to compensate for these differences, for example through an internship, a period of supervised work placement or by passing an aptitude test. The burden of proof for showing a substantial difference between studies lies with the national body that is responsible for the profession in question. Furthermore, the General Directives offer the possibility to compensate differences in the duration of studies of one year or more with professional experience that is twice as long as the shortfall in the study programme. This demand may not be made if the person has already asked to take an aptitude test or undergo an adaptation period.

As a consequence of the accession of new countries into the EU, both the Sectoral Directives and the General Directives will be replaced by a new set of directives in October 2007. This avoids the complicated processes of harmonizing the curricula for the seven professions covered by the Sectoral Directive. The premise of this new set of directives is equivalent to that of the General Directives.

2.2.3 The international credential evaluation approach

International credential evaluation is the main instrument used to assess and recognize the competencies of immigrants. This section explains what international credential evaluation entails, addressing: the evaluation approach, the evaluation criteria, and the change in attitude in applying these criteria. As part of the discussion of the evaluation criteria, the applied criteria are linked to the three common representations of a curriculum to see if all three are covered.

The evaluation approach used within the field of international credential evaluation can best be classified as an 'expert-judgement evaluation' (cf. Krathwohl, 1997). An expert makes a judgement on the value or worth of a non-national qualification. Common charges against this method are bias and unequal standards applied to different people or by different 'judges'. The outcome of the evaluation depends on the wisdom, fairness, integrity, professional knowledge and judgement of the 'expert' (Krathwohl, 1997). Over the years, various actions have been taken to make judgements less subject to criticism. The Recommendation (2001) that was adopted as an annex to the Lisbon Recognition Convention is an example of this.

Among the credential evaluators represented in the NARIC and ENIC networks there is common agreement on the criteria applied when evaluating foreign qualifications. De Bruin (1994) distinguishes between formal, functional and material criteria. The formal criteria relate to laws, directives and agreements that have been established to facilitate the mutual recognition of certain qualifications. The Lisbon Recognition Convention or the European Directives for professional recognitions are two examples of formal binding regulations. Other examples are:

- national laws and regulations on qualifications concerning higher education (e.g. the Higher Education and Research Act in the Netherlands);
- national laws and regulations concerning the performance of gainful employment, including laws and regulations on regulated professions (e.g. the Individual Health Care Professions Act (BIG Act) that relates to regulated professions in the health sector in the Netherlands);
- bilateral or multilateral agreements between States; or
- bilateral or multilateral agreements between higher education institutions.

Not all of the texts mentioned have the same legal value. Therefore, the relative legal status must be taken into account.

The functional criteria relate to both the purpose of the study programme and the formal rights associated with the qualification or degree. Examples of such rights are the right to enter a profession or to continue to a Master's or PhD programme. The Recommendation indicates that if there are any formal rights attached to a qualification, the qualification should be evaluated with the idea of giving the holder of the qualification comparable rights in the host country.

Material criteria form the last group and relate to the variables studied when assessing a foreign qualification. These are (listed in no particular order of importance):

- general characteristics of the educational system;
- the selectivity of the educational school system;
- the requirements for admission into higher education;
- the nominal length of the study programme leading to the final qualification and the academic workload for completing this programme;
- the structure of the educational study programme, including the requirements for specialization and graduation, thesis requirements, teaching and examination methods;
- the content of the study programme;
- the courses taken by the student and the grades earned (transcript of record);
- teaching and examination methodology;
- facilities, like laboratories, libraries, computer rooms and so on;
- the status and quality of the institution awarding the qualification;
- the national system for quality assurance.

To gather information on these criteria, credential evaluators primarily consult written sources, like international handbooks on universities and educational systems, university catalogues, descriptions of educational systems published by the country itself as well as those written by independent sources, official documents and legislation and recognition decisions taken previously by the credential evaluator himself or by colleagues from other credential evaluation offices. New communication technologies make access to information easier. They also enhance communication with colleagues abroad who might have more experience with certain diplomas or study programmes from specific institutions. The number of sources and their reliability vary from country to country. In some cases, there is a need for more, and more objective information to improve the basis for the evaluation of foreign diplomas within the national setting.

Referring back to the three curriculum representations that were discussed in Section 2.1.2, it is interesting to link the applied criteria to the three types of curricula. Figure 2-2 shows the outcome of that exercise.

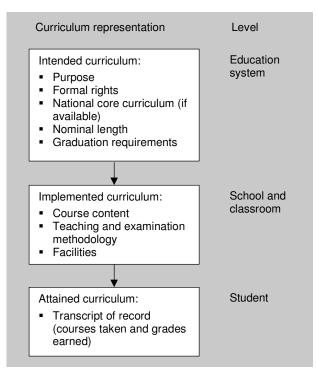


Figure 2-2 Linking the criteria for international credential evaluation to the three curriculum representations

Even though there is common agreement on important criteria that should be considered, there might be a difference between countries on how these criteria should be applied and weighted. Each country uses its own national qualification structure as a frame of reference. In addition, the practice of credential evaluation is not value-free. The evaluation experts are guided by the norms and values present in their national education system and what is regarded important may vary among the countries. However, it is important to note that the attitude towards granting recognition has changed over time. Kouwenaar (1994) sheds a light on the history. In the early years, just after World War II, foreign programmes needed to be almost identical to Dutch study programmes in order to be recognized. In practice, this meant that the curriculum of the foreign study programme was analysed in detail reviewing each content component including the amount of time spent on each subject. This era lasted until the seventies and is commonly known as the era of 'equivalence' (Kouwenaar, 1994). At that time, only a small group of mainly university students was mobile. Later, when the mobility of students and the workforce became a priority in international, national and institutional policies, the equivalence approach became impractical. The purpose of the evaluation was brought to the forefront (e.g. entrance to a doctoral study programme, permission to use an academic title in the host country, or permission to work as a teacher). Consequently, the evaluation process concentrated more on the level, the general purpose (or function), and legal rights of the qualification. As emphasized in the Recommendation (2001), small differences in study programme content should be recognized as long as the level, the function, and the civil or academic rights justify the purpose for which recognition is sought. As a consequence, these three variables form important items in transparency tools like the Diploma Supplement or ECTS. Both in the European Directives and in the Lisbon Recognition Convention the notion of substantial difference plays an important role. Substantial difference may relate to the learning outcomes (general purpose and function), access to further study (formal rights), key elements of the study (function and structure) and guality (level).

2.2.4 The national and international context of the evaluation and recognition practice of foreign diplomas

Finally, attention is given to the national and international context of the evaluation and recognition practice of foreign diplomas. First, it is explained how international credential evaluation is organized in the Netherlands. Second, attention is given to the Bologna process; an important international development that influences the field of international credential evaluation.

International credential evaluation in the Netherlands

In the Netherlands, there are different organizations involved in the assessment and recognition of foreign qualifications. First, there are two expertise centres that provide advice to other recognition bodies. These are: Nuffic for qualifications from the higher education sector as well as those from general preparatory education, and the Association of Centres of Expertise on Vocational Education, Training and the Labour Market (*Vereniging Kenniscentra Beroepsonderwijs bedrijfsleven*), Colo, for (preparatory) secondary vocational education and adult education. At Nuffic, the credential evaluation requests come from different recognition bodies – the competent authorities for regulated professions, higher education institutions, and employers— but also from organizations that provide guidance or counselling to foreign qualified professionals to find work in their previous profession, or from individual degree holders themselves.

In the Netherlands, the competent authority for a regulated profession is in most cases the relevant ministry. Hence, foreign professionals who wish to work in the Dutch health sector need to submit their evaluation request to the Ministry of Health, Welfare and Sports. The Ministry may also designate another organization to deal with recognition requests. An example of this can be found in the education sector. The Information Management Group (*IBG*) was appointed by the Ministry of Education to deal with the recognition requests of foreign trained teachers. The competent authorities, higher education institutions and employers use Nuffic's evaluation advice in their own admission, recognition and/or selection procedure.

Since January 2003, Nuffic has taken part in the national structure for international credential evaluation, known as the International Credential Evaluation Structure (*Internationale Diplomawaardering-structuur*), *IDW* structure. This structure is based on cooperation between Nuffic, Colo and the local Centres for Work and Income (*Centra voor Werk en Inkomen*), *CWIs*, which are located throughout the Netherlands. These centres play a major role in helping jobseekers to find paid employment. Jobseekers with foreign diplomas can ask for a credential evaluation at the front office of the *IDW* structure which is hosted by Colo. From there, they are sent to one of the two expertise centres for international credential evaluation.

Bologna process: towards a European Higher Education Area

European recognition policies are influenced by the developments in (higher) education in general. In this respect, it is important to address the Bologna process. In June 1999, one year after the Sorbonne Declaration, Ministers responsible for higher education from 29 countries signed the Bologna Declaration. The core of this declaration concerns the development of a European Higher Education Area (EHEA) by 2010. More specifically it contains six action lines:

- Adoption of a system of easily readable and comparable degrees;
- Adoption of a system essentially based on two main cycles;
- Establishment of a system of credits;
- Promotion of mobility;
- Promotion of European cooperation in quality assurance;
- Promotion of the European dimensions in higher education.

The NARIC and ENIC network closely follow the Bologna Process. A *Working Party on Recognition Issues in the Bologna Process* was formed to define the agenda for international recognition and suggest action points to be taken by various stakeholders in the field of education and employment in Europe (ENIC/NARIC network, 2001). The Working Party emphasizes fair recognition and effective procedures to realize an open European Higher Education Area. The NARIC and ENIC network should contribute to achieving this goal and therefore numerous items were put on the agenda, including: the recognition of non-traditional learning and the need for a shift in evaluation emphasis away from the 'process of learning' to the 'outcomes of learning'.

During the first follow-up meeting in Prague (2001), the European ministers reaffirmed their commitment to establish a European Higher Education Area. Two years later in Berlin, the recognition of degrees and periods of study gained a more central place in the Bologna process. The 40 ministers present committed themselves to the following three intermediate priorities: to make a start with quality assurance at the institutional, national and European level, to implement a two-cycle system and to improve the recognition of degrees and periods of study. In relation to the latter, the ministers:

- Underline the importance of the Lisbon Recognition Convention and call on the ENIC and NARC network, as well as, on the national competent authorities to implement the convention;
- Set the objective that every student graduating in 2005 should receive a diploma supplement free of charge and appealed to institutions and employers to make use of this document and take advantage of the increased transparency;
- Emphasised the importance of the mobility of students and staff for the realisation of the European Higher Education Area, and reaffirmed their intention to make an effort to remove all obstacles to mobility within the European Higher Education Area;
- Stressed the need for the establishment of a credit system at the European level. The
 ministers noted that ECTS is increasingly becoming a generalised basis for national credit
 systems. They encouraged further progress towards the goal that ECTS becomes not only a
 transfer system but also an accumulation system (Berlin communiqué, 2003).

Furthermore, the ministers announced a mid-term stocktaking in relation to the three intermediate priorities as preparation for the next Ministerial Conference in Bergen (May 2005). At this Conference it was concluded that substantial progress had been made. However, for the context of this research study it is important to note that the European ministers have further committed themselves to elaborate national qualifications frameworks. These frameworks should be compatible with the overarching gualifications framework in the European Higher Education Area, and the proposed broader qualifications framework for lifelong learning currently being developed by the European Commission and that will be discussed in Section 2.3. The ministers stated that the development of national and European qualifications frameworks provides opportunities for the further embedding of lifelong learning in higher education. They committed themselves to improving the recognition of prior learning together with higher education institutions as well as other parties concerned. In preparation for the next Ministerial Conference in London in 2007, the ministers charged the Follow-Up Group with continuing and widening the stocktaking process. The creation of flexible learning paths in higher education, including procedures for the recognition of prior learning is a specific item where progress can be made. These international developments provide top-down incentives for national developments that had a positive influence on the relevance and course of this research study.

2.3 The identification, assessment and recognition of non-formal and informal learning

Since the mid-nineties, there has been growing attention for the assessment and recognition of non-formal and informal learning. Section 2.3.1 discusses some important European policy documents and sheds light on the international measures that have been taken to support the

recognition of non-formal and informal learning. Where necessary, the concepts that are important for this research study are defined. Section 2.3.2 focuses on the practice of prior learning assessment and recognition (PLAR) in three specific countries: the United States, the United Kingdom and the Netherlands.

2.3.1 International measures to foster the recognition of non-formal and informal learning

At the macro level, the European Commission and the Council of Europe have taken measure to support the recognition of non-formal and informal learning. Some important European policy documents are discussed below together with several practical instruments that were developed in response to these developments. Many of these instruments were developed and implemented simultaneously with the conducting of the pilot projects that form the case studies in this research study.

In 1995, with the adoption of the white paper 'Teaching and learning: towards the learning society', the European Commission first emphasized the importance of making competencies acquired outside the formal school system visible. The introduction of a 'Personal Skills Card' was mentioned to make this more concrete. This idea has never been implemented in practice, instead European initiatives were sought that could serve as an example of good practice to make non-formal learning visible. In the period 1997-1999, the European Centre for the Development of Vocational Training (Cedefop) undertook an extensive review of national and European initiatives in the area of the identification, assessment and recognition of non-formal learning (cf. Bjørnåvold, 2000). This review showed that almost all Member States emphasize the importance of learning outside of and in addition to the formal school system.

At the Lisbon European Council in 2000, the heads of state and government set the European Union a 10-year mission to become the most competitive and dynamic knowledge-based economy in the world, capable of sustained economic growth with more and better jobs and greater social cohesion. To achieve this, lifelong learning had to become a clearly defined priority at the European level, and a guiding principle for the development of education and training policy. To respond to the challenge, in 2000 the European Commission launched a Europeanwide debate on a comprehensive strategy for the implementation of lifelong learning involving individuals and institutions in all spheres of public and private life. In November 2001, the European Commission reported on the outcomes of this process in the European Communication Making a European Area of Lifelong Learning a Reality. The communication stresses the importance of cooperation and coordination at the European level because lifelong learning runs through a number of European initiatives. The objectives of a European Area of lifelong learning should on the one hand empower citizens to meet the challenges of a knowledge-based society, move freely between learning settings, jobs, regions and countries, and on the other hand, support the goals and ambition of the European Union and the candidate countries to be prosperous, inclusive, democratic and tolerant (European Commission, 2001).

The Communication of 2001 presents six building blocks for a coherent and comprehensive strategy for lifelong learning. The message is that "traditional systems must be transformed to become more open and flexible, so that learners can have individual learning pathways, suitable to their needs and interest, ..." (European Commission, 2001, p.4). One of the building blocks is 'valuing learning'. The Commission commented that in order to build a learning culture that enables citizens to build on previous learning that took place in school, universities, training centres, work, and leisure or family activities, it is essential to develop a new approach to valuing this learning. Not only should this new approach help citizens to present their qualifications and competencies in a transparent manner anywhere in Europe, it should also contribute to building bridges between different learning contexts and forms, and facilitate access to individual learning paths. Learning

providers, employers and social partners should all be involved in this development process. More concretely, the Commission suggests to develop and promote the use of a number of transparency instruments, like ECTS or the Diploma Supplement in the area of formal learning, and the European Curriculum Vitae to make the outcomes of non-formal learning more visible. In addition, the Commission announced the development of a European portfolio system. Time has shown that such a system has not yet been developed. Instead, the Commission worked on the establishment of a European Framework for the Transparency of Qualifications and Competencies (Europass), European principles for the identification and validation of non-formal and informal learning, a European Credit system for Vocational Education and Training (ECVET) and a European Qualification Framework (EQF).

Europass

In December 2004, the European Parliament decided on a single Community Framework for the Transparency of Qualifications and Competences called Europass. Europass consists of five documents:

- Europass CV, which is the backbone of Europass. It is the improved version of the European CV that was implemented in 2002. It is a common format to assist people to describe their work experience, education and training and personal skills and competencies. A distinction is made between: language skills, social skills and competencies, organizational skills and competencies, technical skills and competencies, computer skills and competencies and artistic skills and competencies;
- Europass Mobility, which reports in a common format experiences of transnational mobility for learning purposes, so that the achievements of such experiences are easier to communicate. This document replaces Europass Training which had been in operation for five years in the secondary vocational education and training sector;
- *Europass Diploma Supplement,* which provides background information about a person's higher education qualification. The same educational institution that issues the qualification also issues the Diploma Supplement;
- *Europass Certificate Supplement*, which is a supplement to a vocational education and training certificate;
- Europass Language Portfolio, which records an individual's linguistic skills and cultural expertise.

The Europass documents are available at the Europass Portal² where citizens can complete documents like the Europass CV or the Europass Language Portfolio online. Europass is implemented and promoted at the Member State level. There is a National Europass Centre in each country to promote the instruments and coordinate all related activities³.

European principles for the identification and validation of non-formal and informal learning

In Copenhagen (2002), 31 European Ministers of Education and Training, the European social partners and the European Commission stated that there was a need in Europe "to develop a set of common principles for the validation of non-formal and informal learning with the aim of ensuring greater comparability between approaches in different countries at different levels". With this statement, the European Commission appointed a working party that has developed a set of such principles. The European principles should be used as a common reference point for the development and implementation of systems and procedures for the validation of competencies regardless of where these were developed. The final proposal addresses six important themes (European Commission, 2004):

² <u>http://europass.cedefop.eu.int</u>

³ <u>http://www.europass.nl</u>

- First, the purpose of validation; the European principles distinguish between the 'formative function' of validation (supporting an ongoing learning process through the identification of learning outcomes) and the 'summative function' of validation (aimed at certification). The distinction between formative and summative assessment is further applied in this research study. Immigrants who are still in the orientation phase need a formative assessment in order to determine their future plan. Those who know that they wish to enter a study programme (academic recognition) or gain access to a regulated profession ('de jure' professional recognition) need to participate in assessment and recognition processes with a summative purpose;
- Second, the European principles emphasize that the validation process must first and foremost serve the needs of individual citizens. This implies that individual entitlements like privacy, ownership of the validation results and the right to appeal must be clearly stated in the procedures;
- Third, the European principles stress the responsibility of those who initiate validation systems and procedures with regard to guidance and support, information and transparency of the validation outcomes. When possible the transparency instruments that fall under the Europass framework should be used;
- Fourth, the European principles highlight the importance of confidence and trust. Everybody
 involved in the process must be able to make their own informed judgements of the validation
 system. This requires transparent information about the purpose of the validation process, the
 validation procedure and the instruments applied, the assessment standards used, and the
 conditions for validation like time, costs, support and counselling;
- Fifth, there is the issue of impartiality which relates to the roles and responsibilities of the
 assessors involved in the validation process. It is important especially for the validation
 processes with a summative purpose that the assessors operate according to a code of conduct
 and do not combine incompatible roles in a way that compromises confidentiality and impartiality.
 Assessors must be professionally competent and have access to initial and continuing training;
- The sixth and last theme discussed in the European principles is credibility and legitimacy. Both issues are based on the inclusion of the relevant stakeholders during the development, implementation and financing of validation mechanisms.

European Credit system for Vocational Education and Training (ECVET)

The development of a European system for the transfer of learning credits for vocational education and training was one of the priorities in the joint interim report of the Education Council and the Commission on the implementation of the 'Education and Training 2010' programme. As a response, a technical working group was established that started exploring possible options for the design, development and implementation of a credit system. In their draft report the working group presented the main characteristics of the proposed system called ECVET as well as the technical provisions (Credit Transfer Technical Working Group, 2005). Some of the main issues relevant to this research study are discussed below.

The proposed ECVET system serves two functions: an accumulation and capitalisation function and a transfer function. It promotes and facilitates the development of a credit system at the national level and at the same time provides added value for the national credit systems that are already in place. For the providers of vocational education and training (VET), ECVET helps in communicating about their training supply, in cooperating at the international level, in managing and planning student mobility and in providing the necessary guidance for this student group. ECVET shares many of the characteristics of ECTS although this credit system was primarily developed for transfer purposes. With regard to the technical details, ECVET is based on the division of qualifications into units. These units are carefully described by the competent learning authority in terms of learning outcomes specifying knowledge, skills and competencies (KCS). In addition, the EQF level of reference is indicated. Generally, the level of a unit will equal the level of the qualification of which this unit is a part, but this is not always the case. The unit description should contain information on:

- The generic title of the unit;
- The EQF level of reference;
- The list of knowledge, skills and competencies concerned;
- The criteria for evaluation; and
- The relative weight of the unit in comparison to the full qualification.

The specification of the criteria for evaluation is an important added value. These criteria will form the basis for a validation process of prior learning. However, the learning philosophy applied in the unit will have an influence on this validation process. If the units were part of a content-based curriculum it would be much more difficult to match prior experiential learning with the course requirements than if the units are based on a competency-based learning philosophy (see Section 3.2).

European Qualification Framework (EQF)

In March 2005, the European Union heads of government requested the creation of a European Qualification Framework (EQF). In July 2005, a working paper was published, entitled *Towards a European Qualification Framework for Lifelong Learning* on the basis of which a wide-ranging consultation process took place in the period from July to December 2005. This working paper indicated that the main purpose of an EQF would be to increase the transparency of national systems, support mutual trust between systems and facilitate the transfer and recognition of qualifications of individual citizens. The core elements of an EQF would be:

- 1. A set of common reference points that relate to learning outcomes that are located in a structure of 8 levels;
- 2. A range of tools and instruments that address the needs of individual citizens, like ECVET, the Europass instrument and the Ploteus database on learning opportunities; and
- 3. A set of common principles and procedures that provide guidelines for cooperation between stakeholders at different levels focusing on themes like quality assurance, validation, guidance and key competence.

In fact, EQF was intended to serve as a meta-framework that would enable national and sectoral frameworks of qualifications to relate and communicate with one another. It would enable the transfer, transparency and recognition of qualifications, which are understood as learning outcomes that have been assessed and certified by a competent authority at the national or sectoral level.

2.3.2 The practice of PLAR in three particular countries

The aim of this section is to give a general impression of how the practice of prior learning assessment and recognition (PLAR) is organized in three countries: the United States, the United Kingdom and the Netherlands. These countries were the subject of an inventory study that was undertaken in the period 1999-2000 to learn more about the common principles of PLAR and the instruments generally applied to assess and recognize prior learning (cf. Scholten and Teuwsen, 2001a).

The United States

The United States has a longstanding tradition when it comes to PLAR. Research on PLAR within higher education started in the 1970s with studies that investigated the use of prior learning as a means of gaining access to higher education (Mulholland and Leith, 1998). At that time, colleges

and universities were confronted with a) an increasing number of requests to assess the learning of adult students gained outside an academic setting; b) an indication that the number of 18-yearold students would decrease dramatically in the coming years; and c) ideas that adult students would form an interesting clientele to replace the traditional student population (CAEL, 1998). Two important organizations working in this field are the American Council on Education (ACE) and the Council for Adult and Experiential Learning (CAEL). ACE speaks about the 'recognition of extra-institutional learning' and defines this as learning that is attained outside the sponsorship of legally authorized and appropriately accredited post-secondary education institutions (ACE, n.d.). CAEL (n.d.) defines 'prior learning assessment' (PLA) as the process of defining, documenting, measuring, evaluating and granting credit for learning acquired through experience. They prefer to speak about the 'recognition of experiential learning'. There are eight major types of experiential learning that gualify for recognition: work, homemaking, volunteer work, non-credit learning in formal settings, travel, recreational activities and hobbies, reading, viewing and listening (self-study), and discussions with experts. Of these, work, non-credit learning in formal settings, and self-study are the experiences most commonly considered for possible academic credit (Warren, 1999).

Not all higher education institutions in the United States accept prior experiential learning as being worthy of academic credit. The ones that do have developed a policy that describes the principles and procedures followed. Warren (1999) found some data about widely accepted methods for the assessment and recognition of prior experiential learning:

- a. First, there is the use of standardized examinations (95%). In the United States, there are two 'standardized examinations' that are widely used for the award of advanced placement credit and credit for prior learning: the American College Testing Program (ACT-PEP) and the College Level Examination Program (CLEP).
- b. Second, there is the use of institutional course challenge examinations (80%). The 'course challenge examination' is offered at the institutional level and is the equivalent of the final examination of a specific course. In most cases, the learner must be admitted to the educational institution before he can take this exam.
- c. Third, there is the evaluation of military programmes by ACE (73%). This is an example of one of the services offered by ACE for adult learners. The ACE Military Programs Department translates military courses and occupations into academic credit. The results of the evaluation decisions are published in the Guide to the Evaluation of Educational Experiences in the Armed Services. This service was extended in the mid-seventies to civilian organizations. As a result the College Credit Recommendation Service (CREDIT) was initiated to help people obtain academic credit for learning acquired outside the sponsorship of colleges and universities. The evaluation results are published in the National Guide to Educational Credit for Training Programs, which is distributed annually to college registrars and admissions officers throughout the United States. CREDIT is one of the Corporate Programs. Another Corporate Program is the Credit by Examination Program. This programme evaluates nationally standardized tests and the exams used for granting professional licenses and certificates to see whether their results reflect the same level of achievement as traditional college class work. If so, credit may be awarded for passing them. The results of these evaluations are published in the Guide to Educational Credit by Examination, which is also distributed to college and university officials on a regular basis. To give an example, a credit recommendation from the above mentioned guide is presented in Table 2-4 on the next page.
- d. Finally, there is portfolio assessment (46%). A portfolio is a formal written communication on the basis of which the student claims credit for prior learning. The specific requirements of a portfolio may vary from institution to institution, but generally it contains the following elements (CAEL, n.d.):

- clear identification and definition of the prior learning for which college credit is being requested. This can take the form of competency statements in specific knowledge areas;
- a written explanation of how the prior learning relates to the study programme in which the student wishes to enrol, how the learning took place, and how it fits into the student's overall education and career plan;
- documentation that the student has actually acquired the learning; and
- a credit request specifying an exact number of credits for each subject or area.

 Table 2-4
 An example from the Guide to Educational Credit by Examination (Swinerton & Robinson, 1997, p.5)

Social problems and their impact on the workplace (Soc402)		
Location	Various locations throughout the United States	
Length	20 hours (5 weeks)	
Dates	September 1986 – present	
Objective	To gain insight into and broaden the student's perception of social problems affecting the workplace and to increase awareness of how the workplace can respond positively to them	
Learning Outcome	Upon successful completion of this course, the student will be able to identify and analyze the causes, conditions, and consequences, and propose strategies to alleviate social problems in five specific areas: poverty, racism, sexism, drug/alcohol abuse, and illiteracy	
Instruction	Major topics covered in the course are a sociological and systematic approach to problem analysis and solutions via a seven-stage task force, experiential process. The course identifies six critical social problems that challenge the Workforce 2000 model and introduces six perspectives on social problems. Methods of instruction include discussion, classroom exercises, lecture, learner presentations, reports, observations, papers, homework assignments, and summary reports	
Credit Recommendation	In the upper division baccalaureate degree category, 3 semester hours in Sociology or Business Administration	

Portfolio assessment is often part of a procedure for the assessment and recognition of prior experiential learning. Whitaker (1989) discusses the main steps in such a procedure: identification, articulation, documentation, measurement, evaluation and transcription. The procedure is discussed in more detail in Section 4.2.

The United Kingdom

In the United Kingdom, the concept of the 'accreditation of prior learning' was introduced in the early 1980s in secondary vocational education and around the early 1990s in higher education. A distinction is made between prior learning that took place in formal learning settings and is already certified and prior learning that took place in non-formal learning settings. In the first instance, one is referring to the 'accreditation of prior certificated learning' (APCL), in the latter to the 'accreditation of prior experiential learning' (APEL). APCL refers to the assessment and accreditation of learning that has been formally assessed by a recognized or accredited educational institution. The assessment and recognition of foreign qualification is part of APCL in the United Kingdom. Credit is given for prior learning that has been certified by a recognized or accreditation of learning (e.g. through self-study, workshops, course attendance) that either has not been assessed or has been assessed by an educational institution that is not formally recognized or accredited. This includes learning acquired on the job as well as learning acquired through workshops or courses offered by non-accredited private institutions or providers of on-line distance education (Anglia Polytechnic University, 1999).

The assessment of competencies independent of any learning path, forms the corner stone of the National Vocational Qualifications (NVQs) and the Scottish Vocational Qualifications (SVQs). The former Council for National Academic Awards (CNAA) also introduced this concept in higher education as part of the Credit Accumulation and Transfer System (CATS). CATS made it possible for students to accumulate credits towards a degree. For a bachelor's degree, a total of 360 credits is required (120 at level 1, 120 at level 2 and 120 at level 3). CNAA (1990) stated that prior learning should be accredited as long as the learning could be assessed. The main steps in the process for submitting an APEL claim are:

- identification of a potential programme or award;
- portfolio development;
- portfolio assessment by subject specialist; and
- final decision (CNAA, 1990).

These steps will be briefly explained in Section 4.2.

The Netherlands

In the Netherlands, thoughts on PLAR were first expressed in a report of the Ministry of Education entitled 'Blijven leren' (Continue Learning), published in 1993. An advisory committee was set up to investigate whether the introduction of a scheme for the assessment and recognition of prior learning was desirable and feasible, the Commissie Erkennen Verworven Kwalificaties (EVK Committee). This committee reported favourably to the Minister in March 1994. The EVK Committee stated that individuals can develop competencies outside formal study programmes, and they emphasized that these competencies needed to be compared with standards developed or legitimized by branch organizations or other social partners. If the standards are met, the competencies should be recognized. To guarantee the civil effect of the outcome of an PLAR process, the committee advised to embed the procedure in a regional infrastructure and use the national qualification structure as a frame of reference⁴. Qualifications awarded after a successfully completed PLAR procedure should be regarded as being equivalent to diplomas or certificates awarded after the successful completion of a regular study programme (EVK Committee, 1994). Figure 2-3 on the next page gives a representation of the basic PLAR model that was introduced in the Netherlands. It contains five phases (Klarus, 1998; Klarus & Blokhuis, 1997; de Roij van Zuijdewijn, 2003): identification, assessment, recognition and advice about the follow-up programme.

The PLAR models used in the United Kingdom inspired the developers of PLAR procedures in the Netherlands. Hence, the portfolio instrument also plays a major role in the identification process. In the mid-nineties, Klarus (1998) tested this basic PLAR model mainly in the sector for vocational education and training, focusing on qualification levels 2 to 4. The portfolio instrument was used for formative assessment only. It was expected that the instrument was not suitable for summative assessment purposes, which is the case in the United Kingdom. At the same time, it was meant to avoid disappointments on the part of the candidate. The identification phase was used to get a good overview of available competencies and how these relate to national qualification standards. Only if there is sufficient convincing evidence that the assessment standards have been achieved is the candidate advised to continue to the third phase of the PLAR procedure (assessment). In the assessment phase, the identified competencies are assessed using more direct assessment instrument than portfolio. Depending on the nature of the

⁴ The Dutch qualification structure contains five levels, four of which relate to secondary vocational education (level 1 to 4). The fifth level relates to higher education.

competencies, these instruments can vary from criterion-referenced interviews to observations of process and product, simulation and more traditional examinations. In the fourth phase (recognition), the final recognition decision is taken. It is decided by the assessors whether a full or partial certificate can be awarded. The procedure concludes with advice concerning a follow-up programme that focuses on the development of additional, missing competencies.

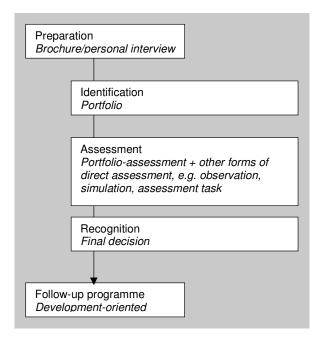


Figure 2-3 The basic PLAR model

The basic PLAR model that was tested by Klarus (1998) had great impact on how higher education institutions deal with the assessment and recognition of prior learning. Thomas, Van Broekhoven and Frietman (2000) present a general model for PLAR procedures in higher education. This model contains six steps which are visualized in Table 2-5 on the next page. Apart from the five steps discussed above, there is one step that focuses specifically on the selection of the appropriate set of assessment standards, which depends on the purpose of the assessment. Thomas et al. (2000) present three different purposes PLAR:

- to demonstrate the candidate's general aptitude for following a higher education programme;
- to show the candidate's aptitude for working in a specific sector or professional domain; or
- to determine the candidate's competencies in order to define an individual study programme.

Table 2-5	Dutch PLAR model for application in the higher education sector
	Duch i LAIT model for application in the higher education sector

1.	Provide information on	There are three main activities that need to be carried out in this phase of the
	PLAR procedure and personal interview	 PLAR procedure: Inform candidates on the possibilities of PLAR, its purpose, procedures and how the results are used. Submit an PLAR application form for PLAR assessment. This form gives an overview of the candidate's prior learning experiences so that the PLAR advisor can judge whether an PLAR procedure is worth undertaking. Personal interview to provide further information on PLAR assessment. The advisor also uses the interview to gather more information on the motives and background of the candidate.
2.	Selection of assessment standards	 The standards used for PLAR assessment depend on the aim of the PLAR procedure: To demonstrate the candidate's general aptitude for taking part in a higher education study programme. To demonstrate the candidate's aptitude for working in a specific professional domain (e.g. health care). To determine the candidate's competencies relevant for the study programme in order to design a tailor-made programme.
3.	Portfolio development and assessment	The portfolio should give insight into the competencies developed by the candidate and contain evidence that these competencies have indeed been developed.
4.	Further assessment	 Whether this step takes place depends on the outcome of the portfolio assessment. If the portfolio contains sufficient evidence it is not necessary that the candidate is further assessed. But if there is any doubt, the candidate will be asked to undertake further assessment, like: Test of competence; Assessment or development centre; Simulation; Essay; Interview.
5.	Recognition and certification	In this phase, the assessors need to decide whether there is sufficient evidence to support the PLAR claim. If the decision is favourable, the candidate receives credit in the form of exemptions for certain parts of the study programme. The higher education institution needs to decide on how this credit will be recorded on the transcript of record. In some cases the candidate might receive a diploma. However, in the United States and the United Kingdom most institutions have specified a maximum amount of credit that may be awarded for prior learning.
6.	Personal development plan	The personal development plan will indicate how the candidate will earn a degree if he is admitted to a study programme.

2.4 Linking international credential evaluation and the recognition of competencies: A summary

This section links the purposes of international credential evaluation to the purposes of the recognition of competencies and provides a summary of the previous discussions. Learning takes place in different settings: formal, non-formal and informal. In this research study, formal learning relates to structured, intentional learning that leads to diplomas or certificates that are recognized or accredited at the national level. To ensure the international mobility of students and the workforce, numerous measures have been taken at the macro and meso level to facilitate the evaluation and recognition of foreign diplomas (or qualifications). These measures vary from international conventions and directives, to recommendations on how credential evaluations should be conducted, to a whole range of transparency instruments that provide further information on the purpose, structure and content of study programmes. The practical field that is involved in the evaluation and recognition of foreign qualifications is international credential evaluation. Generally, foreign diplomas are recognized for either an academic purpose or a professional purpose. In the

latter case, a further distinction is made between 'de facto' professional recognition for the nonregulated professions and 'de jure' professional recognition for the regulated professions. It can also be the case that a credential evaluation is made for orientation purposes.

The credential evaluation approach was developed to make comparisons between study programmes, diplomas and degrees cross-nationally. With the help of a common set of evaluation criteria, judgement is passed on the level of a foreign qualification and a functional comparison is made with a national diploma. The information that is used to make this comparison relates mainly to the intended curriculum at the system and study programme level. Information on the attained curriculum at the learner's level is under-represented in the whole process. There can be a large gap between the intended curriculum at the system level and the attained curriculum at the learner's level due to variations between school systems, institutions, classrooms and learners. However, to foster the international mobility of students and the workforce, one chooses not to look at these variances. It is the general policy to recognize foreign diplomas unless there are substantial differences with regard to the learning outcomes, access to further study, key elements in the study programme, or the quality level. Hence, the current evaluation and recognition practice is system-based and focuses on the results of formal learning. It sheds light on the formal competencies of the individual that are measured in years of education.

Lifelong learning policies have made everyone well aware of the fact that learning is a continuous process that does not stop after initial education. Since all learning deserves recognition, new measures need to be taken to make the learning that takes place in non-formal and informal settings transparent. However, it will be difficult for individuals to specify which learning outcomes are the result of what learning experiences; what did I learn in formal education and what did I learn during voluntary work? Lifelong learning requires a more individual assessment approach that is preferably competency-based. Competencies can be developed everywhere in formal, non-formal and informal learning settings (Klarus, 1998). To increase the employability of citizens in general and the labour market chances of highly-skilled immigrant in particular, the Dutch government suggested a combination of assessment and the recognition of foreign diplomas and prior learning assessment to make the actual competence level visible (Ministry of Social Affairs and Employment, 2002). This suggestion is in line with European policy. The European Commission (2000, 2001) advises to examine PLAR systems to include the outcomes on nonformal learning in recognition decisions. The commission defines the validation of learning as the assessment and recognition of achievements in formal, non-formal and informal learning settings. It may be focused on gaining formal recognition in the form of a certificate or course credit (awarded by a nationally recognized or accredited institution) or on gaining social recognition.

Figure 2-4 links the purposes of the recognition of competencies to the common purposes of the evaluation of foreign diplomas.

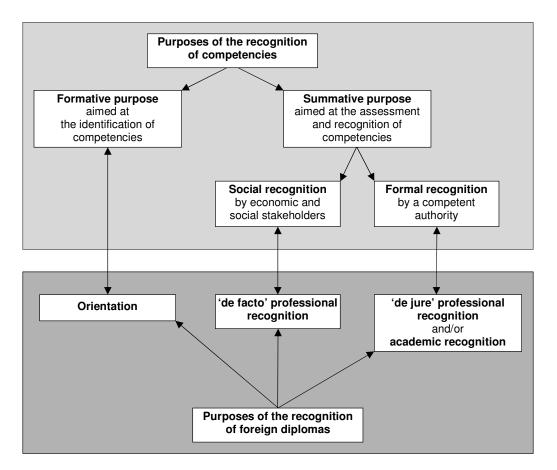


Figure 2-4 Linking the purposes of the recognition of competencies to the purposes of the recognition of foreign diplomas

The use of national recognized standards is recommended to increase the civil effect of PLARprocedures. The nature of these standards, whether these are content-based or competencybased, influences the complexity of taking non-formal learning experience into account in the assessment process. Whitaker (1989) makes a distinction between course credit models, block credit models and competency models for the analysis of prior learning. The latter two options are very important because non-formal learning and informal learning can hardly every be matched to the content of a specific module or course. Many of the instruments that are used to identify, assess and recognize the outcomes of prior learning fall under the umbrella of competencybased assessment, e.g. portfolio, observation, simulation and so on. In addition, in formal education competency-based learning is gaining ground and gradually replacing the more traditional learning approach, which is content-based education or discipline-based. The learning philosophy implemented at the national or institutional level influences the outcome of PLAR procedures. Competency-based study programmes offer more opportunities to recognize learning that took place outside the formal school system. Therefore, the next chapter makes a further analysis of the characteristics of both types of learning to see how these might influence the attitude towards the assessment and recognition of actual competencies obtained elsewhere as well as the opportunities to do this.

Chapter 3 Competency-based curricula versus content-based curricula: Towards a continuum of curriculum characteristics

This chapter explores the characteristics of competency-based learning and assessment and compares these characteristics with those of other learning philosophies that might be more familiar to highly-skilled immigrants. Section 3.1 starts with an exploration of the term 'competence'. It also discusses how the concept is used in this research study and highlights the practical problems that may arise from these choices when it comes to the implementation of competency-based assessment. Section 3.2 presents the characteristics of competency-based curricula and compares these with the characteristics of more traditional, content-based curricula. The exploration addresses three aspects, namely learning and instruction, assessment, and the quality assurance of assessment. In practice, these aspects should be closely intertwined, but for the sake of clarity they are discussed separately. The section concludes with an exploration of competency-based learning from a global perspective because learning and teaching strategies are greatly influenced by cultural attitudes towards knowledge. It presents some factors that are likely to cause misunderstanding if competency-based assessment is introduced to people who have been educated in a different educational culture. Section 3.3 reflects on the previous discussions and discusses the consequences for this research study. It presents a first theoretical building block that contains elements of an 'ideal' context for the introduction of a portfolio to enhance the identification, assessment and recognition of actual competencies. This building block can be used for the analysis of the complexity of the innovation.

3.1 The complex concept of competence

In the literature, the concepts 'competence', 'competency' and 'competencies' are often poorly defined (Ellström, 1998). They are used simultaneously with terms like 'gualifications' and 'skills' (Buskermolen & De la Parra, 1999), or 'capacity', 'attribute' and 'ability' (Weinert, 1999). Everyone has a general idea about what 'competence' or 'competent behaviour' is, but it is rather difficult to specify what exactly it entails. The concepts are used in varying contexts and with different underlying meanings. A generally accepted definition is lacking (Buskermolen & De la Parra, 1999; Kessels, 1999). Different authors have tried to categorize the existing definitions of competence(e.g. Bos, 1998; Kouwenhoven, 2003, Stoof, Martens & Van Merriënboer, 2000; Weinert, 1999). Stoof et al. (2000) present the boundary approach of competence to map the variety of definitions that are present in the literature. This approach is a visual representation aid that helps to identify what does and does not belong to the concept of competence. The boundary of the term is approached from the inside and from the outside. The 'inside-out approach' identifies six dimensions of competence with two opposing extremes (see Figure 3-1 on the next page). The 'outside-in approach' focuses on the difference between competence and some other related terms like 'qualification'. The different views on competence are further discussed below using the six dimensions of the inside-out approach. Finally, the relationship between the term 'competence' and 'qualification' is explored.

Personal versus task characteristics

The first dimension discussed by Stoof et al. (2000) concerns to the question of whether competence relates to personal characteristics (inputs) or to characteristics of the job or task that the individual needs to perform (outputs). Kouwenhoven (2003) remarks that the input approach is favoured in the United States. They use the term 'competency' or its plural form 'competencies' to refer to personal capabilities. Excellent performance is often taken as a frame of reference for the development of competency-based assessment (cf. Spencer & Spencer, 1993). In the United Kingdom, the output-approach is favoured together with the term 'competences' and sometimes its plural form 'competences'. The term 'competence' refers to the capacity to perform up to standard. The job requirements or tasks characteristics form the starting point for the definition of 'competence' standards. Thus, to some extent, the preference for either the term 'competence' or 'competency' seems to depend on the preference for either the input approach (competency as an individual attribute) or the output approach (competence as a job attribute). However, not all authors make a conscious choice between one of the two approaches when choosing between the terms 'competency' and 'competence'. It also seems to be a matter of linguistic preference.

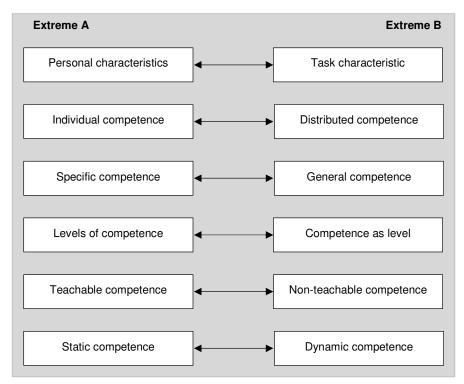


Figure 3-1 Six dimensions to outline the term competence from the inside (cf. Stoof et al., 2000)

This study applies the US linguistic usage and follows Kouwenhoven (2003) with regard to its definition. He uses the term 'competence' in a generic sense referring to the quality of being able to perform the key professional tasks of a profession up to standard. To explain what this entails he uses the metaphor of a toolbox. In order to perform up to standard, professionals need certain attributes (knowledge, skills and attitudes) that are their tools. Furthermore, they need to know when to use which tools and how. To this end, professionals need meta-cognitive skills. Kouwenhoven (2003) reserves the term 'competencies' to refer to the whole set of attributes (all the tools in the toolbox as well as the ability to know how and when to use what). A 'competency' is "the capability to choose and use (apply) an integrated combination of knowledge, skills and attitudes with the intention to realize a task" (Kouwenhoven, 2003, p.43).

Ellström (1998) makes a further distinction within the input and output approach that is relevant for this research study. With respect to the input approach, he differentiates between 'formal competence' and 'actual competence'. Formal competence is measured in years of completed schooling or by the diplomas and/or certificates earned by the individual, while the actual competence relates to "the potential capacity of an individual to successfully handle a certain situation or to complete a certain task" (Ellström, 1998, p.41). This capacity refers to perceptual motor skills, cognitive factors, affective factors, personality traits and social skills. Ellström (1998) points out that the human capital theory has traditionally been focused on formal competence and uses the amount of time spent in educational activities as a measure of actual competence. Critics of the human capital approach argue, among other things, that this limited view ignores the qualitative difference in schooling (Rumberger, 1994 in Ellström). There can be a gap between a person's formal competence and a person's actual competence as a consequence of measurement errors in the formal school system (Toolsema, 2003). People also develop competencies outside the formal school system which may increase the gap between a person's formal competence and actual competence. This research study aims to make the actual competencies of foreign qualified immigrants visible by means of a portfolio, whereas the traditional practice of evaluation and recognition of immigrant's competencies focuses on formal competencies using international credential evaluation as the main mode of evaluation.

Ellström (1998) makes a more or less similar distinction for competence viewed as a job requirement (the output approach). He differentiates between 'officially demanded competence' and 'actually required competence'. The officially demanded competence is defined in terms of prescribed job requirements that are taken as a basis for recruitment and/or the setting of wages, while the actually required competence relate to the job level (what is required to perform the key tasks up to standard). Ideally, there should be a correspondence between the two. However, there are different factors that can disturb this balance, like the demand and supply of gualified people, forces that try to raise or lower the status of a given profession, or the fact that actual job requirements are simply unknown because a job analysis has not been carried out (Ellström, 1998). This distinction is of great importance for this research study. Which of the two requirements should guide the identification process of immigrants' competencies? The official requirements will in many cases relate to a national diploma, like a diploma of a bachelor's programme or a master's programme. However, the actual requirements might not be so transparent and will depend on the labour market conjuncture (Ellström, 1998). The variance between the two sets of requirements will form an important complicating factor during the discussion of the assessment standards that should guide the identification, assessment and recognition process of an immigrant's actual competencies. The official entrance requirement for enrolment in a study programme or job will often be defined in terms of national diplomas that need to be earned. However, during the selection interview the actual requirements in the minds of the assessors might be less transparent. To avoid confusion, Ellström (1998) prefers to use the term 'gualification' to relate to this second view of competence. The relationship between competence and gualification is discussed further on in this section.

Individual versus distributed competence

The second dimension relates to the question of whether competence is the property of an individual or if it goes beyond the individual and refers to something more. To explain the meaning of 'distributed' competences Stoof et al. (2000) refer to Salomon (1993) and discuss the theory of distributed cognition (Salomon, 1993). Distributed cognition refers to the social aspects of education and work. Stoof et al, (2000) also points at two opposing movements in the psychology: cognitivism and social constructivism. Simons (1999) discusses these two movements in more detail and indicates how these have influenced the meaning of the

competence concept. He explains that cognitivism is focused on individuals. It tries to map internal processes, while social constructivism is directed towards subjective and interactive aspects of learning and work. Individuals create their own meanings in interaction with other people. Important other people determine the conception of reality of an individual (Simons, 1999). This implies that competence is connected to the context and norms and values of the interacting people (Stoof et al., 2000). Simons (1999) indicates that the cognitivist view on competence applies a top-down approach when defining competency standards (without the involvement of the environment). It focuses on desired observable behaviour. The more subjective aspects of competence like motivation, values and attitudes are regarded as being less important or it is thought that these aspects can be measured in the same way as the 'harder' aspects of competence (knowledge and skills).

The constructive approach to competence applies an interactive approach. Competency standards are defined in consultation with clients, users and stakeholders. The constructivist approach to competence focuses more on values and attitudes and acknowledges the difficulty of measuring these aspects. The subjectivity of these aspects is taken as a starting point and this influences the attitude towards competency-based assessment. From a constructivist perspective it is important to gather information on the intentions of people's actions and how they reflect on their own behaviour, e.g. by means of self-assessment.

Hodkinson too (1992) discusses the term 'competence' from the socio-constructive viewpoint. He presents an 'interactive model of competence' and states that reality is the product of interaction within and between people as social beings. From an interactive point of view it is not possible to define elements of competence in an objective way. Instead, work roles are defined by the perception of different people, who in turn are the product of their culture, history and interactions with others (Hodkinson, 1992; Mansfield & Mitchell, 1996). He emphasizes that competence is context and culture specific and therefore a statement of competence should never be isolated from its context. "Not only does the context determine how the element of competence is performed, it also determines what the competence is constantly evolving in a dialectical relationship between performers, actions and culture" (Hodkinson, 1992, p.33).

This research study applies the interactive or distributed concept of competence. The discussion above already shows that the identification, assessment and recognition of the actual competencies of highly-skilled immigrants is a complex activity. The interactive approach (based on a socioconstructivist view) emphasizes that a group, like a professional community (that is formed by its own sub-culture) influences the value of certain competency standards. In addition, Dutch competency definitions might have a totally different meaning for foreign-qualified professionals. Mansfield and Michell (1996) point at the different meaning of what Simons (1999) calls the 'softer' aspects of competence, e.g. initiative, common sense, responsibility, problem solving, decision making, communication The meaning will depend on the settings in which the terms are used (branches, sectors or countries). "Being personal effective in some environments will mean following the rules, concentrating only on your own work and doing what you are told; in others it will mean making decisions, taking responsibility, generating ideas and co-operating with others" (Mansfield & Mitchell, 1996, p.62). Furthermore, Mansfield and Mitchell (1996) emphasize that context and culture also influence the nature of work relations. Foreign professionals need to learn about the conceptions of work roles in the Netherlands before they can relate to them and reflect on how these are different from the ones at home. Reflecting on work role perceptions is a rather complicated process and how this proceeds will also depend on certain personal characteristics of the immigrant, like cultural sensitivity, cultural adaptability, Dutch language skills and so on.

Specific versus general competence

The third dimension discussed by Stoof et al. (2000) addresses another important issue often addressed in the literature. It relates to the level at which competence is defined. The definition of competence can be very specific, specifying in detail what a person in a given profession should be able to do or it can be very broad. Ideas about how competence should be defined have also changed over time. Hager (1993) and Gonzci (1994) discuss three different approaches used over time to define competence: the behaviouristic approach, the general attribute approach and the integrated approach. The three approaches differ on the dimensions specific versus general. The first approach can be placed on the left-hand side (specific), the second on the right-hand side (general) and the third in the middle. The approaches also differ on the dimension old versus new, and even more importantly address different learning goals (Elshout-Mohr, Oostdam, Snoek & Dietze, 2000).

The 'behaviouristic' or 'task-based' approach was introduced in the United States during the early 70s when the concept of competency-based (or performance-based) teacher education was implemented (Hager, 1993; Straetmans & Sanders, 2001). Job performance was viewed as a composition of skills, knowledge and understanding. Through careful analysis of occupational roles, important tasks were identified and described. The list of specific competencies required to perform up to standard grew longer if the complexity of the job increased. If students could demonstrate that they had mastered these individual tasks, it was assumed that they were competent professionals. The task equalled the competence. Professional competence was directly inferred from behaviour. If students could show the right performance, it was assumed that they had also mastered the required knowledge, skills and understanding (Houston, 1974 in Gonczi, 1994). The behaviouristic approach has received a lot of criticism over the years (cf. Ashworth and Saxton, 1990; Hodkinson, 1992; Hyland, 1994). It did not address the relationship between tasks, the influence of the context on the performance of tasks and the possibility that the combination of tasks could lead to the transformation of a task (Gonczi, 1994). This narrow approach ignores context and it lacks explicitness about underlying assumptions (Uhlenbeck, 2002). Moreover, one assumes that "role competence can be objectively discovered, defined and measured" (Hodkinson, 1992, p.31). Some outcomes can be the result of diverse individual processes (Ashworth and Saxton, 1990).

The second approach discussed by Gonczi (1994) is the 'general attribute' approach. This approach concentrates on general attributes that are crucial for competent behaviour. Examples of such general attributes are: critical thinking capacity, communication skills, and diplomacy. Weinert (1999) uses the term 'key competencies' to relate to these general attributes. Hager (1993) calls this approach the 'attribute' or 'generic skills' approach. He indicates that this approach uses a small list of general attributes as predictor of future performance. As such, it encourages excellence that is remote from professional practice. According to Hager, educational specialists in the field of higher education preferred this general attribute approach over the narrow behaviouristic approach. However, it is not without problems either. Critiques on the general skills approach relate to its abstraction from the context in which the attributes need to be applied, the vague relationship that exists between the general attribute and the actual job performance, and the lack of evidence that general attributes do exist (Hager, 1993). In addition, Gonczi (1994) remarks that evidence from the novice/expert research suggests that expertise is domain specific. It appears that individuals demonstrate little capacity to transfer expertise from one domain to another. Apart from that, Gonczi comments that this model offers little help for educational specialists involved in curriculum development to prepare students for future jobs. It assumes that all students should be involved in the same educational activities in order to learn to think critically, to communicate effectively, and to analyze properly, as a preparation for their professional tasks. Toolsema (2003) mentions that a competence definition should be both context-specific and generic in nature, although it is not easy to find the proper balance between the two. For learning and assessment of competence it is important that both the context and the required performance are precisely defined. However, for the purpose of flexibility, competence should have a more generic value.

The third approach discussed by Gonzci (1994) might offer a solution. It links the general attribute model to the context in which these attributes need to be used. This model is called the 'integrated' or 'holistic approach' to competence (Gonzzi, Hager & Oliver, 1990 in Gonzzi, 1994). The model focuses on the complex combinations of knowledge, skills, attitudes and values in relation to a particular situation in which a professional needs to function. It incorporates the idea of professional judgement (Gonzzi, 1994). Competence is conceptualised in terms of knowledge, abilities, skills and attitudes displayed in the context of a carefully chosen set of realistic professional tasks of an appropriate level of generality. These tasks are preferably defined in terms of key intentional actions (about 30 to 40 per profession). This avoids the development of lengthy lists of detailed specific competencies. In a next step, the main attributes required for competent performance of these key-intentional actions are identified (Hager, 1994). The integrated or holistic model of competence has gradually replaced the narrow, behaviouristic approach. It overcomes all the objections of the implementation of competency-based education in higher education (Hyland, 1994).

This research study welcomes the implementation of a holistic approach to competence.

Toolsema (2003) remarks that holistic approach is often combined with more analytical approaches when it comes to teaching and learning. Bos (1998) states that authors who write from an educational perspective have the tendency to look into the internal organization of the concept and break it up into different areas. As a consequence, there are many different labels in the literature, like 'general', 'generic', 'professional', 'subject-related', 'domain-specific' or 'academic competencies' (cf. Buskermolen & De la Parra, 1999). Kouwenhoven (2003), for example, favours the integrated, holistic view of competence. He indicates that competent professionals need to be able to carry out the key professional tasks of a profession up to standard (20-30 in total). To realize these tasks both 'domain-specific' and 'generic competencies' need to be developed. Kouwenhoven (2003) follows Everwijn (1996) and defines domain specific competencies as clusters of knowledge, skills and attitudes in one specific content domain related to the profession. Generic competencies, on the other hand, are needed in all content domains of the profession and can be used in new professional areas as well. The transfer value of the generic competencies is high. Therefore the term 'life skills' can be used as a synonym to indicate that these competencies are the basic set of capabilities for current life within and outside the profession (Kouwenhoven, 2003). Te Lintelo (1999) also differentiates between 'domain-specific' and 'generic' competencies but emphasizes that this distinction is only made for transparency purposes. When it comes to learning and assessment, both types of competencies should be dealt with in combination.

Levels of competence versus competence as a level

The fourth dimension discussed by Stoof et al. (2000) relates to the question of whether there are different levels of competence or if competence is a level in itself. Some authors view competence as a continuum or developmental process (e.g. Hager & Gillis, 1995 in Straetmans & Sanders, 2001). This implies that one does not lack or posses a competence, but commands it to a specific degree (González & Wagenaar, 2003). It is criterion-bound (e.g. Spencer & Spencer, 1993) which means that it relates to a specific standard. The standard can relate to either

superior performance (above average) or effective performance (average) (Spencer & Spencer, 1993). Bruijns, Eringa, Rietveld & Zwaal (1999) and also Klenowski (2002) stress that competency-based standards need to be defined in relation to a development scale, e.g. from novice to expert. These authors are in favour of 'development assessment' or 'assessment for learning' implying that assessment also serves a development purpose instead of indicating whether someone has passed or failed (see Section 3.2). Other authors see competence as a specific stage in the development from novice to expert (e.g. Dreyfus & Dreyfus, 1986 or Eraut, 1994 in Stoof et al., 2000). In this research study competence is viewed as a continuum and not as a specific level of expertise.

Teachable versus non-teachable competence

The fifth dimension is to a certain extent related to the fourth. Competence is considered to be teachable, if one views competence as a continuum that promotes professional growth. Many competence definitions, however, relate to other constructs like knowledge, skills, attitudes, motives and sometimes personal characteristics. It is fair to question whether all these aspects of competence are teachable. The iceberg model of Spencer & Spencer (1993) is well known in this respect. Spencer & Spencer indicate that three of the five components of a competency are hidden under the surface: the motive, trait and self-concept of an individual. These aspects form a person's core personality. They form the drive or push for the observed behaviour. The top of the iceberg is formed by two other components of competence (knowledge and skills). Spencer & Spencer (1993) advise employers to select their employees on the hidden components (the core motive and trait component) rather than on the components that are on the surface (knowledge and skills), which is often the case. The transfer of the hidden components is high but these components are difficult to assess, develop or change (Klarus, 2000).

Parry (1996 in Stoof et al., 2000) distinguishes between hard and soft competence. Hard competence refers to job-related knowledge and skills, while soft competence refers to personality traits, values and styles. He remarks that soft competence is not developed through training, and therefore he limits the competence definition to hard competence. However, he admits that soft competence does have an influence on performance. Other authors view competence as an integrated attribute (e.g. Buskermolen & De la Parra, 1999; Klarus, 1998) and come up with more 'holistic' definitions of competence. However this integrated concept might be difficult to implement when it comes to learning and assessment. This issue of how motivation relates to competent behaviour makes competency-based assessment even more complex (cf. Luken, 2004). A lack of (intrinsic) motivation instead of incompetence can be the reason for mediocre performance. Moreover, Luken (2004) comments that education is a different context than work. Even if one tries to make competency-based assessment as authentic as possible, the objectives in an educational context are different than in real work and therefore the motivation is different. It is very difficult to determine how these issues influence the observed performance. In this respect. Messick (1994) warns of 'construct-irrelevant variance' as an important threat to construct validity. It relates to variables other than the ability or competency tested that influence the performance during assessment. Apart from motivation, there are other variables that can cause a bias in the assessment results. Previous research has shown that variables like gender, age, level of education, ambition, cultural background, ability to learn the Dutch language and culture all have an influence on the labour market chances of immigrants (cf. Klaver & Odé, 2003). How these variables influence the process of the identification, assessment and recognition of competencies is not clear, but it is important to keep them in mind in explorative case studies. This study views competence as a teachable concept, although it is realized that some aspects of competence are very difficult to change because of their intimate relationship with culture. Kouwenhoven (2003) chooses to exclude personal characteristics like motivation, self-confidence and ambition from the competence definition and makes them part of the context. This is also done in this research study.

Static versus dynamic competence

The last dimension discussed by Stoof et al. (2000) relates to the guestion of whether competence is static or dynamic. If competence has a static nature, competence definitions can focus on past and present tasks. Ellström (1998) points out that many definitions of occupational competence assume a 'functionalist, adaptation perspective'. From this perspective, occupational competence is defined and evaluated in terms of the successful performance of certain predetermined tasks. The individual is not allowed, and not expected, to change these tasks. Over the years, this view has been highly criticised because it fails to recognize the active modification and subjective redefinition of work tasks by the individual worker, for example, to cope with contingencies (cf. Mansfield & Mitchell, 1996). Ellström, therefore, prefers a 'developmental perspective' of occupational competence. This perspective emphasizes the capacity for self-management and reflection of an individual, and the fact that current work allows him, and expects him, to practise this capacity. Mansfield and Mitchell (1996) also point out the dynamic nature of competence. They choose to define competence in term of 'work roles' with the help of their Job Competence Model. Work roles are defined by social expectations which are influenced by social, cultural and political systems. People working in these roles do not have an immediate influence on changing these expectations, although they could influence the work roles through indirect channels like professional organizations or social pressure groups. The political system influences the work role expectations of, for example, teachers, through national policies concerning the use of IT, class sizes, remedial tasks that belong to the responsibility of the school, and so forth. Work roles are also influenced by the culture of the society at large. They are not static but change over time. In this research study competence is viewed as a dynamic concept.

Competence versus qualification

As indicated previously, Ellström (1998) uses the term 'competence' to relate to individual attributes (input approach). He reserves the term 'qualification' to relate to the requirements at the system level needed to perform a task or job up to standard. Klarus (1998) uses both terms in a similar manner. He explains that the terms 'competence' and 'qualification' are different but complementary. If a person can demonstrate that he has mastered the required ability, the respective qualification can be awarded. The main purpose of the Prior Learning Assessment and Recognition (PLAR) procedure is to see whether individual competencies meet national system requirements in order to grant formal recognition in the form of national recognized certificates or diplomas or by granting exemptions in a formal study programme. Through PLAR, individual competencies, regardless of how or where they have been developed, can gain the status of a national recognized qualification. This is important because a qualification gives rise to a number of rights and privileges which determine the position of the holder of the qualification within the hierarchy of a professional context (Bjørnåvold, 2000). Hence, competencies and qualifications are linked to each other through a set of standards. Preferably, these standards are derived from the national qualification structure (Klarus, 1998), but they can also be of a different nature.

Depending on the purpose of the assessment and recognition process the following standards can be distinguished:

- education and training programme standards in cases where the candidate want to be admitted to a study programme ('academic recognition');
- occupational and/or professional certification standards in cases where the candidates want to take up a regulated profession ('de jure' professional recognition);
- job requirements in cases where the candidates want to apply for a (non-regulated) job ('de facto' professional recognition or 'social recognition of competencies'; or
- standards applied by a company or organization with a view to human resource capacity building (personal or professional development).

The standards offer a benchmark against which individual learning can be assessed and planned (Mansfield & Mitchell, 1996). Mansfield and Mitchell (1996) describe the standards as a quality framework from which not only the curriculum but also the assessment system is derived. They emphasize that the standards, the curriculum and the assessment system must be three separate elements to assure curriculum-independent assessment. They define a qualification as a specific set of standards that has been assessed. A qualification can be awarded if the assessment shows that the standards for this qualification have been met.

Table 3-1 on the next page provides an overview of the main issues that were discussed above. This research study aims to explore the characteristics of portfolio to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants. It aims to facilitate the link between immigrants' actual competencies and the official, demanded requirements at the job level. Using Kouwenhoven's metaphor of the toolbox, one could say that this study aims to make the tools in the toolbox of the foreign professional visible to see whether these match the required tools in the Netherlands. However there a numerous complicating matters:

- First of all, there are different models applied in practice to define competency standards (behaviouristic, generic, holistic or integrated, interactive). All of them have there own problems, pitfalls and challenges;
- Second, competence is a dynamic and interactive concept. This implies that it is impossible to
 define competency standards in an objective manner. How competency standards are
 understood is influenced by the social, cultural and political system in which one is raised. As
 a consequence, foreign professionals need to come to understand the meaning of
 competence in the Dutch context.
- Third, competence is teachable but some aspects of competence are so intertwined with culture that they are difficult to unlearn. The 'softer' aspects of competence (mainly related to attitudes) are more difficult to develop and assess than the 'harder' aspects of competence that relate to knowledge and skills. In addition, competence is closely related to personal characteristics like motivation, ambition, intercultural adaptability and language skills.
- Fourth, there may be a gap between official requirements defined at the meso and/or micro level (related to national qualifications) and the actual requirements applied at the nano level by the assessors (related to the softer aspects of competence).

Dimension	Conceptual choice	Issue
Personal attributes versus task characteristics	The term competence is used to refer to personal attributes.	There might be a gap between an individual's formal competence (referring to years of completed education) and his actual competence referring to his potential capacity to act successfully in a given situation. There might be a gap between the official
	refer to the task characteristics defined at the system level.	qualification requirements defined at the system level and the actual requirements at the job level
Individual versus distributed competence	Competence is defined from a socio- constructivist viewpoint (distributed or interactive concept of competence).	Competence is context and culture specific. Elements of competence cannot be defined in an objective manner.
Specific versus generic competence	Competence should be defined using an integrated holistic approach. Competent professionals are able to perform key professional tasks (30 to 40) up to standard.	The holistic approach is often combined with a more analytical approach differentiating between domain-specific and generic competencies (especially by scholars who study competence from an educational perspective). Both type of competencies need to be assessed in combination.
Levels of compe- tence versus competence as a level	Competence is a continuum representing varying levels.	Competency standards need to be defined in relation to a development scale, e.g. from novice to expert.
Teachable versus non-teachable competence	Competence is an integrated cluster of knowledge, skills and attitudes that is teachable.	Competence is culture specific. Some aspects of competence (mainly related to attitudes) are difficult to develop and change. Personal characteristics like motivation, self-confidence or ambition are excluded from the competence definition and form part of the background characteristics.
Static versus dynamic competence	Competence is a dynamic concept. It should be defined from a developmental perspective.	Competence relates to social expectations which are influenced by social, cultural and political systems.

 Table 3-1
 Overview of the different dimensions of the term competence, the conceptual choices made and the respective concerns for competency assessment

3.2 Competency-based curricula versus content-based curricula

The aim of this section is to discuss the characteristics of competency-based curricula in relation to the more traditional content-based or disciplinary-based curricula. The term curriculum is used instead of education to emphasize that the characteristics relate to both formal and informal learning settings. The structure of this section is as follows. Section 3.2.1 addresses the differences between both types of curricula focusing on three key elements of the curriculum definition: the purpose, the content and the organization of learning including the role of the teacher (cf. Walker, 1990 in Van den Akker, 2003). Section 3.2.2 focuses on the evaluation or assessment of learning. Following Baartman, Bastiaens and Kirschner (2004) the differences between evaluation in content-based learning environments and assessment in competencybased learning environments is discussed along five basic design questions: what is assessed, how to assess, when to assess, why to assess and who assesses? Section 3.2.3 discusses the guality criteria that are commonly applied in the test culture (evaluation) and those relevant for the assessment culture. Section 3.2.4 explores the competency-based learning paradigm from a global perspective. It builds on the work of Ballard and Clanchy (1992) to explore the factors that are likely to cause confusion when competency-based assessment is introduced to people who are educated in educational cultures that value an opposing attitude towards knowledge.

3.2.1 Competency-based learning versus content-based learning

Tillema, Kessels and Meijers (2000) discuss the transition of subject-matter based curricula to competency-based curricula in vocational education. With reference to Becker and Steel (1995) and Drucker (1993) they point out that the shift in the importance of the content of a curriculum is based on a fundamental redefinition of knowledge at school. The classic aim of education was to convey knowledge as a precious, objective product from one generation to another. However, over time, the attitude to knowledge has changed from a conserving attitude to an extending attitude (cf. Ballard & Clanchy, 1992). In a knowledge-based society it is acknowledged that information is infinite and dynamic and that education needs to prepare students for the future world of work where they will have to solve problems that are not yet known today (cf. Birenbaum, 1996; Mansfield & Michell, 1996). Tillema et al. (2000) describe knowledge as a 'subjective skill' that cannot be conveyed but has to be acquired by each individual. Kessels (2001) defines knowledge as a personal competency. From this notion, the curriculum is a vehicle to develop competencies. The content and structure is not the primary concern but the assessment of competencies is (Tillema et al., 2000).

Most curricula in higher education are still primarily derived from the knowledge domains of the disciplines that are important to a given profession (Jochems & Schlusmans, 1999). The main purpose of learning is the mastery of disciplinary knowledge, skills and attitudes. Lowyck and Terwel (2003) highlight four organizing principles for content-based curricula: a linear structure, a spiral-based structure, an elaborative structure and a thematic structure. An important learning principle often applied in content-based curricula is 'theory before practice' (Buskermolen & Slotman, 1999). Principles are taught before they are applied, which means deduction rather than induction. This implies that students first learn in an educational context before they are initiated into the professional practice. The curriculum is a predetermined, uniform plan of learning. It is followed by most of the students regardless of what their starting level is. Learning is teacher-directed (Jochems & Schlusmans, 1999).

Competency-based learning, on the other hand, is oriented to future professional performance (Kouwenhoven, 2003). The aims and objectives of learning are derived from the elaboration of (professional) profiles and the identification of the competencies required to perform the key tasks of the profession up to standard (Kouwenhoven, 2003) The discussion of what the relevant competencies are is very lively (Tillema et al., 2000). 'Learning in practice' is one of the key principles applied in competency-based curricula. Professional orientation takes a central position in learning (Buskermolen & Slotman, 1999). Learning is always linked to future professional practice (Te Lintelo, 1999). Realistic (or authentic) learning tasks take a central position in learning (Dochy & Janssens, 1999; Te Lintelo, 1999). These tasks confront students with problems or assignments that are realistic for future professional practice (Ritzen & Kösters, 2002). They motivate students to acquire knowledge, skills and attitudes that are needed to cope with the situation presented by the learning task. In competency-based education disciplinary knowledge is linked to effective performance in a specific situation (Kouwenhoven, 2003). Competency-based learning is 'learner-oriented' (Kouwenhoven, 2003) or 'demand-oriented' (Ritzen & Kösters, 2002), which implies that it focuses on the learning needs of the student. Important related characteristics are (Buskermolen & Slotman, 1999; Kouwenhoven, 2003; Ritzen & Kösters, 2002):

- Students are addressed as beginning professionals;
- Students are responsible for their own learning process. They manage their own study programme, learn to monitor their own learning and define their own learning demands;
- Students are self-regulated learners;
- Students compose their own curriculum depending on their own needs;

- Self-assessment and reflection are two important processes; and
- Learning by doing and learning to learn are two important aspects in the learning process.

This active learning attitude is new for many students. Therefore, the learning tasks must be designed in such a way that students gradually gain more responsibilities in monitoring and steering their own learning process (Te Lintelo, 1999). Te Lintelo points out that the learning task can be an individual assignment or a group assignment because students also need to learn to work in cooperation with others. Learner-oriented education requires individualized materials, flexible learning time and continuous feedback to the learner (Fiels & Drysdale, 1991 in Kouwenhoven, 2003). Educational institutions need to differentiate their courses towards specific target groups (Tillema et al., 2000).

The above mentioned characteristics have consequences for the role of the teacher as well. In content-based study programmes the teacher is an important 'source of information'. He is an expert in a given course or discipline and transfers knowledge and skills to the students (Buskermolen & Slotman, 1999). In competency-based learning environment, on the other hand, the teacher fulfils the role of a 'cognitive guide' (Kouwenhoven, 2003). This means that he makes students gradually responsible for their own learning. He supports students in finding information and building their own knowledge and skills base (Dochy & Janssen, 2003). Bolhuis and Kluivers (1998 in Kouwenhoven, 2003) describe this form of teaching as 'process-oriented teaching'. They indicate that the emotional side of learning gains in importance. Teachers should guide students in the building of self-confidence and motivation. For many teachers this role is new. Teachers themselves become learning professionals in a learning organization when competency-based education is introduced (Van der Sanden, Streumer, Doornekamp & Teurlings, 2001 in Kouwenhoven, 2003). They need support from colleagues and management. Table 3-2 summarizes the main characteristics that were discussed above.

	Learning and instruction	
	Content-based curriculum	Competency-based curriculum
Main purpose	The focus is on the mastery of disciplinary knowledge and skills.	The focus is on future professional performance.
Learning aims & objectives	Are derived from the body of disciplinary knowledge regarded as important for a profession.	Are derived from the elaboration of (professional) profiles and the identification of competencies. Disciplinary knowledge is linked to effective performance in a specific situation.
	The objectives are externally determined and the same for every student.	Students determine their own learning objectives focusing on the aspects they have not yet mastered.
Content and organization of learning	Subject-matter based (focused on the acquisition of disciplinary knowledge). Theory before practice. The teacher is in control. Learning is planned and structured, the programme is fixed.	Competency-based (oriented to future professional practice). Learning in practice. The learner is in control. This requires: individualized materials; flexible learning time, and continuous feedback.
Teacher role	Teacher is a 'source of information'. Teacher is an expert in the course or discipline of study.	Teacher is a 'cognitive guide', he supports the learning process and gradually gives students more responsibilities (process-oriented teaching)

 Table 3-2
 Characteristics of content-based learning versus competency-based learning

3.2.2 Competency-based assessment versus content-based evaluation

Competency-based education puts specific demands on the evaluation of learning outcomes. Evaluation is "the systematic investigation and determination of the worth or merit of an object" (JCSEE, 2003, p.5), in this case the student. Dochy and Janssens (2003) indicate that evaluation traditionally takes place at the end of the learning process. However, there is a general tendency to integrate evaluation as a continuous part of the learning process. This tendency is generally referred to as assessment (Dochy & Janssens, 2003). Birenbaum (1996) speaks about a shift from a 'test culture' to an 'assessment culture'. Assessment can be defined as "the process of collecting information about a student to aid in decision making about the progress and development of the student" (JCSEE, 2003, p 5.). Competency-based assessment as the process where assessors make judgments about whether someone has reached the criteria that are specified in the competency standards of a profession. These judgments are primarily based on performances. In the literature, different terms are used to capture the new forms of assessment. Marby (1999) lists the following:

- 'alternative assessment', to distinguish from standardized testing;
- 'authentic assessment', to emphasize that the assessment problems resemble the kinds of tasks undertaken by professionals;
- 'direct assessment', to show that the assessment instrument directly assesses whether a person has mastered a certain skill; or
- 'performance assessment' to stress that performance is required. The learner is asked to demonstrate the relevant skill.

Assessment differs from traditional evaluation in many ways. Below, inspired by Baartman et al. (2004) the differences are further explored using the five basic design questions to structure the discussion: what is assessed, how to assess, when to assess, why to assess and who assesses?

What is assessed?

It is a generally accepted principle that instruction, learning and evaluation should be aligned. Biggs (1996) calls this 'constructive alignment'. Traditional (content-based) learning focuses on the acquisition of disciplinary knowledge and skills. Consequently, traditional evaluation focuses on the testing of disciplinary knowledge (Buskermolen & Slotman, 1999; Jochems & Schlusmans, 1999). Evaluation focuses on the outcome (product) of the learning process (Dochy & Janssens, 2003). The acquisition of disciplinary and generic skills is also subject to evaluation but this is mainly done in isolation (Buskermolen & Slotman, 1999). Traditional evaluation generally addresses the lower cognitive skills at the expense of the higher order skills (Birenbaum, 1996; Dochy & Janssens, 2003). The lower cognitive skills can easily be tested by means of standardized paper-and-pencil exams. In these exams students tick the right answer instead of constructing their own. As a consequence there is a big gap between what is tested during education and what is required of the graduates in the work place (Dochy & Janssens, 2003). The assessment culture reacts to this practice and aims to assess higher order knowledge and skills in real life or authentic situations. Competency-based assessment is focused on the competencies that need to be developed as part of the study programme. Baartman et al. (2004) specify the following requirements: assessment needs to address both product and process, theory and practice and the whole of the competencies instead of dividing them into smaller parts that are assessed separately. Klarus (1998) points out that assessment should be aligned with the professional practice. It should relate to all the phases that exist in job performance: planning, completion, evaluation and improvement.

How to assess?

In traditional evaluation, the use of standardized (paper-and-pencil) tests is particularly popular. Standardized tests are designed to be administered, scored and interpreted in the same way, regardless of when or where they are administered (JCSEE, 2003). They are based on the psychometric quantitative approach and are norm-referenced. This means that students are compared with each other. Norm-referenced measures are dependent on a relative standard (Glaser, 1969 in Klenowski, 2002). Multiple-choice tests are particularly popular. The main advantages of these tests are the large number of questions that can be asked (domain coverage) and the fast and easy manner of correcting the answers and scoring the outcome. The results are quantified in a single score (Birenbaum, 1996).

In competency-based assessment, the emphasis is on the evaluation of competencies in real life contexts. Examples of competency-based assessment formats are: portfolios, simulations, (interdisciplinary) projects, exhibitions, observations, interviews, oral presentations, self-assessment, peer assessment, journals, hands-on tasks and performance tasks (Berk, 1999; Birenbaum, 1996; Dochy & Janssens, 1999; Marby, 1999). Baartman et al. (2004) emphasize that the use of one single model is not sufficient to determine the competency level of a students. They argue for the use of a competency assessment programme (CAP) that consists of a combination of different methods of assessment; some of these methods can be knowledge-based and others performance-based. Different forms of assessment are used in combination to get a clear picture of the competence level of the individual being assessed (Gonzci, 1994). The underlying approach is contextual and qualitative in nature. Assessment is 'multimodal' and addresses 'real world problems' (Baartman et al., 2004). Birenbaum (1996) remarks that the tasks included should be meaningful, interesting, challenging and authentic. The assessment results in a profile that portrays the student. It contains a collection of ratings, descriptions, and summary judgements by teachers and sometimes students or others, to give a broad impression of student achievement (Marby, 1999).

In the assessment culture it is common to compare the outcomes of the assessment with a predetermined criterion or standard ('criterion-referenced assessment'). Criterion-referenced assessment indicates the degree of competence achieved by the individual independent of the achievement of others (Glaser, 1963 in Klenowski, 2002). This requires that competency standards are defined in relation to a development scale (see for example Bruijns et al., 1999). In an even more personalized assessment the reference can relate to the previous performance of the student or the student's individual learning goals. Assessment is then used for intra-individual comparison (Marby, 1999). Dochy and Janssens (2003) call this 'self-referenced' assessment.

When to assess?

Traditional evaluation generally takes place at the end of the learning cycle (Buskermolen & Slotman, 1999). The emphasis is on summative evaluation initiated by the teacher (Buskermolen and Slotman, 1999; Dochy & Janssens, 2003). Formative evaluation is used in between a series of lessons to direct the instruction process, while summative evaluation takes place at the end of a series of lessons to draw conclusion about the merit or worth of students' performances (JCSEE, 2003). In the assessment culture, assessment is an integral part of instruction (Dochy & Janssens, 2003). Ideally, competency-based education starts with assessment to determine the entrance level of the student (Jochems & Schlusmans, 1999). Baartman et al. (2004) remark that competency-based assessment should be individually mediated and occur on multiple occasions. Students determine when they want to be assessed so that they can use the feedback to direct their learning process. The demarcation line between formative and summative assessment is likely to get blurred in competency-based environments (Birenbaum, 1996).

Why to assess?

Evaluation serves different functions: enrolment, selection, diagnosis and monitoring (Dochy & Janssens, 2003). These decisions relate to the formative and summative function of evaluation or assessment. In traditional study programmes there is a strict division between formative evaluation (with a diagnostic purpose) and summative evaluation (with a selective purpose). The quality standards for the first type of evaluation are less strict than for the latter. Examinations with a summative purpose are used by schools at the end of a semester, year or study programme to find out whether students pass or fail. Birenbaum (1996) remarks that the development of these types of evaluation is the responsibility of measurement experts. The assessment culture is based on a totally different concept. Gipps and Stobart (2003) talk about 'assessment for learning' instead of 'assessment of learning. Tillema (2001a) speaks about 'assessment for development', while Klenowski (2002) uses the term 'developmental assessment'. Klenowski cites Masters (1997, p.1) who defines developmental assessment as "the process of monitoring students' progress through an area of learning so that decisions can be made about the best way to facilitate further learning". The formative function of assessment is much more emphasized. The purpose of development assessment is to judge a learner's attainment along a developmental continuum or a progress map (Klenowski, 2002). In competency-based assessment it is essential that a student learns to what degree he has mastered a certain competency (Te Lintelo, 1999). As indicated earlier, this means that competency standards need to relate to different developmental phases and that subsequent assessment criteria need to be defined to judge the learner's level of achievement. Subsequently, assessment assignments need to be developed to judge the performance (Bruijns et al., 1999). These tasks need to be interesting, meaningful, authentic and challenging (Birenbaum & Dochy, 1996). They should provide students and teachers with information that helps to direct the learning process (Jochems & Schlusmans, 1999). Competency-based assessment serves both a diagnostic and selective purpose. Information is gathered on the extent to which a student has developed a given competency and the progress made over time (Te Lintelo, 1999). Additionally, it serves a predictive purpose (at the time of enrolment to determine the entrance level and the individual study programme).

Who assesses?

In traditional study programmes, evaluation is the sole responsibility of the teacher (teacherdirected) (Buskermolen & Slotman, 1999; Jochems & Schlusmans, 1999). Students are passive and powerless subjects, who are often mystified by the process (Birenbaum & Dochy, 1996). They are not familiar with the evaluation plan, the item writing and the evaluation criteria. They only need to answer the questions (Birenbaum, 1996). In the assessment culture, however, the learner plays an active role, for example through self-assessment or peer assessment. This requires a transparent evaluation process that provides clear insight into the assessment criteria used. Students might also be involved in the development of criteria and standards for evaluating student performance. "When learners know what the criteria are, what is important and what is expected of them, they can more easily identify gaps in their understanding after taking an assessment and direct their learning process accordingly" (Baartman et al., 2004, p.12-13). Te Lintelo (1999) remarks that the assessment requires multiple assessors from multiple disciplines. Table 3-3 summarizes the main characteristics discussed above. It forms the second part of the framework of curriculum characteristics.

	Assessment		
	Content-based curriculum Test culture	Competency-based curriculum Assessment culture	
What?	Examination focuses on the acquisition of disciplinary knowledge. Emphasis on lower cognitive skills. Disciplinary and generic skills are examined in isolation. Emphasis on outcome of learning (product).	Assessment focuses on the development of (professional) competencies (an integrated cluster of knowledge, skills, and attitudes) which are assessed in an integrated manner. Emphasis on both product and process.	
How?	Standardized forms of examination, e.g. multiple-choice exams.	Assessment of competencies in real life contexts, e.g. simulations, projects, portfolio, self-assessment. Assessment is multimodal.	
	Psychometric, quantitative approach. Norm-referenced.	Contextual, qualitative approach Criterion-referenced or self-referenced which requires competency-based standards that relate to a development scale.	
	Evaluation results in a single score.	Evaluation results in a profile.	
When?	Examination is separated from instruction. Examination is teacher-directed.	Assessment is an integral part of instruction (continuous feedback). Student determines when assessment takes place in order to direct learning process. Assessment should be individually mediated and take place on multiple occasions.	
Why?	Assessment of learning.	Assessment for learning.	
Who?	By teacher or external examination.	By the teacher, external assessors, the student or peers.	
	Student is passive.	Student is active.	

 Table 3-3
 Characteristics of the test culture versus the assessment culture

3.2.3 Quality criteria for competency-based assessment versus quality criteria for contentbased evaluation

Any form of evaluation, including assessment, needs to comply with certain quality criteria. The test culture is based on the psychometric quantitative approach, while the assessment culture embodies a contextual qualitative approach (Birenbaum, 1996). Both approaches have their own quality criteria to warrant the quality of the evaluation or assessment outcome. These are discussed below and compared with each other.

Psychometric quality criteria

Two important well-known psychometric quality criteria are 'reliability' and 'validity'. Reliability is defined as "the degree in which test scores are free from errors of measurement" (AERA et al., 1985, p.19). There are four common sources of error (Dochy & Janssens, 2003): the test itself, the test occasion, the evaluation procedure and the learner. The reliability of an assessment is commonly operationalized by examining its consistency. Moss (1994) makes a distinction between 'reliability across tasks' and 'reliability across assessors'. The first relates to the question of whether similar results can be produced in a similar, yet other, assessment. The second involves the question of whether similar results can be produced using different assessors. Birenbaum (1996) speaks about 'response consistency and stability' and 'inter-rater reliability' or 'reproducibility' in this respect. Considered from the traditional, psychometric perspective, both aspects are of crucial importance and determine the quality of an assessment. Dochy and Janssens (2003) point out that the value of reliability should not be overestimated, after all perfect reliability is not feasible, and second, its importance should be measured against the concept of validity. A low score on reliability makes an assessment automatically invalid, but a high score does not imply that the assessment is valid.

'Validity' is a rather complicated concept. Killen (2003) gives an extensive overview of how its meaning has evolved over time. Traditionally, validity was a characteristic of a test, test item or assessment task but its meaning changed and became a measure for the appropriateness of inferences from test scores or other types of assessment. In other words, the focus changed from the question 'Am I measuring what I want to measure?' to 'Am I making justifiable inferences and decisions on the basis of the evaluation outcomes (or assessment results)?' (Killen, 2003). Historically, the term validity was further operationalized through three interrelated concepts: content validity, criterion validity and construct validity. Construct validity has become the most important aspect of the evaluation of any assessment-based interpretation (cf. Dierick, Dochy & Van de Watering, 2001; Killen, 2003; Messick, 1994).

Messick (1994) presents a psychometric framework of validity that covers the whole breadth of quality control issues for testing and assessment. He distinguishes six aspects of construct validity:

- The 'content aspect' that concerns the content of the assessment and prescribes that an assessment task relates to the concerned construct;
- The 'substantive aspect' that relates to the similarity between the thinking process required to perform an assessment task and the one used by experts working in the construct area;
- The 'structural aspect' that relates to the fidelity of the scoring structure and how this relates to what is known about the structure of the construct domain. The scoring should reflect the importance of the different elements in a structure domain;
- The 'consequential aspect' that concerns the positive and negative, intended and unintended consequences of the assessment;
- The 'generalizability aspect' that relates to the correlation between assessment scores taken across time, at different occasions and using different assessors; and last
- The 'external aspect' of construct validity which focuses on the relationship between the results of an assessment score and the results of another assessment that aims to measure the same construct or parts of it.

Killen (2003) emphasizes that in outcome-based assessment the validity concept should be focused on the judgments of the assessors and the inferences drawn from the evidence generated by the assessment. He suggests the following course of action:

This process should start with a consideration of the appropriateness of the learning outcomes and be followed by a consideration of the extent to which the learning opportunities made it possible for students to achieve these outcomes to high levels of proficiency. Next, the assessment tasks should be evaluated in terms of their outcome relevance and coverage and their potential to provide useful evidence about the construct that they are designed to measure. Finally, the evidence produced from these tasks should be interpreted in a defensible ways (Killen, 2003, p.19).

Hermeneutic approach

Moss (1994) takes another approach and suggests abandoning the psychometric approach to quality control. She questions whether the generalization of inferences "from observable parts to an unobservable whole" are best made "by limiting human judgement to single performances[...] or by expanding the role of human judgement to develop integrative interpretations based on all the relevant evidence" (Moss, 1994, p.8). From a psychometric viewpoint, the first option is favoured. This implies that the scoring formats and the scoring process need to be further objectified to assure that the results are not influenced by the assessor who does the scoring (Berk, 1996). Inter-rater reliability increases when detailed rubrics for judging performance and a smaller number of points on the scale score are used (Birenbaum, 1996). Moss (1994), however,

chooses the second option and welcomes a hermeneutic approach to warrant validity in assessment interpretations. She remarks that "consistency or consensus supports the validity of the interpretation in both psychometric and hermeneutic approaches; the difference rests in how it is addressed" (Moss, 1994, p.8). Applying a hermeneutic approach, variance in student performance across tasks does not automatically invalidate the assessment:

Rather, it becomes an empirical puzzle to be solved by searching for a more comprehensible or elaborated interpretation that explains the inconsistency or articulates the need for additional evidence. A well-documented report describes the evidence available to others assessors so that they may judge its adequacy for themselves in supporting the desired generalization. (Moss, 1994, p.8)

Additionally, the inter-rater reliability would be warranted through critical dialogue among different assessors:

Initial disagreement among readers would not invalidate the assessment; rather, it would provide an impetus for dialogue, debate, and enriched understanding informed by multiple perspectives as interpretations are refined and as decisions or actions justified. And again, if well documented, it would allow users of the assessment information, including students, parents, and others affected by the results, to become part of the dialogue by evaluating (and challenging) the conclusions themselves. (Moss, 1994, p.9).

Following the hermeneutic approach suggested by Moss, the interpretations in assessment are warranted by criteria as:

- the assessor's extensive knowledge of the learning context;
- multiple and varied sources of evidence;
- a disciplined and collaborative inquiry that encourages challenges and revisions of initial interpretation; and
- the transparency of the trail of evidence leading to the interpretation, which allows others to evaluate the conclusions for themselves.

To remind the opponents who welcome further standardization, a decrease of variance and an improvement of comparability of common non-standardized process in higher education, Moss (1994), points at the scoring of a degree project or the hiring of academic staff. In the hermeneutic approach different quality criteria are used that relate directly to qualitative assessment approach. A number of these criteria are discussed below.

Edumetric quality criteria

The assessment culture (including competency-based assessment) has brought with it the use of other quality criteria than reliability and validity alone. Linn, Baker and Dunbar (1991) present eight criteria: consequences, transfer and generalizability, fairness, cognitive complexity, meaningfulness, content quality, content coverage, cost and efficiency. Birenbaum (1996) emphasizes content or domain coverage, and equity and consequential validity. Baartman et al. (2004) come up with a list of ten 'edumetric' quality criteria for competency assessment after an extensive literature review. The term 'edumetric' refers to measuring growth within an individual without reference to other individuals, while the term 'psychometric' refers to maximizing differences between individuals (Cziko, 1981 in Baartman et al., 2004). The ten 'edumetric' criteria are: authenticity, cognitive complexity, meaningfulness, fairness, transparency, educational consequences, directness, cost and efficiency, reproducibility of decisions and comparability. They compare these criteria with the psychometric framework of Messick (1994) to show that the quality assumptions behind the criteria are very much related. Figure 3-2 visualizes the relationship between the two sets of criteria.

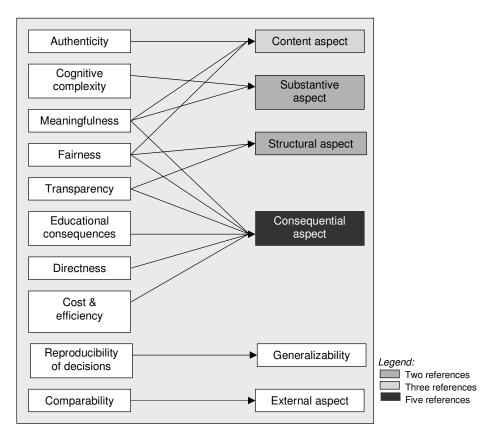


Figure 3-2 Relationship between the edumetric quality criteria and the psychometric criteria (cf. Baartman et al., 2004)

Next, the ten edumetric criteria and how they relate to construct-validity are briefly described.

- 'Authenticity' relates to the degree of resemblance between the assessment tasks and the key professional tasks in the construct area. The content of the assessment should reflect the job situation as accurately as possible addressing all aspects of the work. It relates to the content aspect of validity in Messick's framework.
- 'Cognitive complexity' is closely related to authenticity. It refers to the processes required to perform future professional tasks. The content of the assessment should be in line with current thinking in the professional domain (Birenbaum, 1996). It relates to the substantive aspect of validity.
- 3. 'Meaningfulness' concerns the value of the assessment tasks for the learner, the teacher (Hambleton, 1996 in Baartman et al., 2004) and the employer (Baartman et al., 2004). They should recognize the assessment task and the thinking processes required to perform the task as meaningful. Linn et al. (1991) advise the use of subject specialists to approve the tasks as being contextualized, meaningful and worthy of the time investment. This criterion relates to three aspects of Messick's framework: the content aspect, the substantive aspect and the consequential aspect.
- 4. 'Fairness' implies that the assessment should not cause a bias towards any group of learners (Linn et al, 1991). Birenbaum (1996) speaks about equity in this respect. Equity relates to the content of the assessment and the scoring. The content of the assessment should cover the whole construct domain excluding construct irrelevant variance. The scoring procedure should be transparent and equally fair to each group of learners. Fairness can be linked to the content aspect, the substantive aspect and the consequential aspect of Messick's framework (Baartman et al., 2004).

- 5. 'Transparency' implies that everyone understands the assessment and its purpose. Those who are being assessed should be informed about the methods used, the assessment criteria applied and the assessors involved (Straetmans & Sanders, 2001). Transparency increases the meaning of the assessment and its acceptability (Klarus, n.d.). If learners know which methods are used and how scoring takes place the assessment enhances learning. As such it relates to consequential validity (Dochy & Janssens, 2003). Transparency also contributes to fairness. The scoring criteria should be consistent with what is important and what is less important in the construct domain and everyone assessed should know this (Messick, 1994). Hence, transparency is also linked to the structural aspect of validity and the consequential aspect of validity (Baartman et al., 2004).
- 6. 'Educational consequence' is often mentioned as an important quality criterion for competencybased assessment. It relates to the whole concept behind alternative assessment that is called 'assessment *for* learning' (Gipps & Stobard, 2003), 'developmental assessment' (Klenowski, 2002) or 'assessment for development' (Tillema, 2001a). Instruction, learning and assessment should be aligned and integrated (Birenbaum & Dochy, 1996). It is very important to keep eye out for unintended consequences of competency-based assessment. Evidence is required that performance is not the result of memorization but indicative of complex cognitive processes necessary to solve the problem in the assessment task. Suggested sources of information are: information on the duration of students' engagement with the task, the amount of help provided, and documentation on the process of solving the task and self-reflection (Birenbaum, 1996). This criterion relates to the consequential aspect of validity in Messick's framework.
- 7. 'Directness' concerns the degree to which assessors can immediately interpret the assessment results without interpretation or translation from theory into practice (Dierick, 2001 in Baartman et al., 2004). The following example makes this more concrete. The results of a written examination do not immediately show whether the person is competent in a given job situation. An assessment task produces more direct evidence in this respect. Directness relates to the consequential aspect of validity. The manner of assessment (direct or indirect) will influence the teaching and learning process (Baartman et al., 2004). A link with the content and substantive aspect of validity can therefore be added. The assessment should assess the construct domain as directly as possible, keeping eye on the cognitive processes required to perform the key professional tasks.
- 8. 'Cost and efficiency' relates to the time and the resources needed to perform the assessment compared to the benefits (Baartman et al., 2004). The assessment must be practical and feasible (Straetmans & Sanders, 2001). Latham and Pearlman (1999), who discuss quality criteria for professional licensure assessment, state that the assessment must be 'administratively feasible' and 'economically affordable'. Cost and efficiency cannot be directly linked to Messick's framework (Baartman et al., 2004).
- 9. 'Reproducibility of decisions' concerns the accuracy of the decisions made and their consistency over time and across assessors. It relates to the generalizability aspect of construct validity. Can the assessment result be reliably generalized to other situations?
- 10. 'Comparability' is a prerequisite for reproducibility (Baartman et al., 2004). It concerns the fact that the assessment should be conducted in a consistent and responsible manner. Uhlenbeck (2002) remarks that the assessment and the conditions under which the assessment is carried should be the same for all candidates, in as far as possible. In addition, the scoring procedure should be consistent and the same criteria should be applied to all candidates. This criterion relates to the external aspect of Messick's framework.

Table 3-4 provides a summary of the quality approaches and related quality criteria that are dominant in the test culture and the assessment culture. This research study concerns the use of the portfolio instrument to identify, assess and possibly recognize the actual competencies of

highly-skilled immigrants. Therefore, the remaining part of this sub-section discusses some important quality criteria for the assessment and recognition of non-formal and informal learning addressed by Bjørnåvold (2000). It also analyses how these relate to the edumetric criteria that were presented above. Bjørnåvold (2000) points out some important quality criteria for the assessment of prior, non-formal learning. First of all, he draws the attention to the issue of 'social acceptance'. He remarks that:

..., reliable and valid methodologies are not sufficient to make individuals, enterprises and/or educational institutions trust and accept assessment. This is particularly the case if assessments are given a summative role. (Bjørnåvold, 2000, p.46).

It is therefore important that there is a legal basis for the assessment through political decisions. Nevertheless, acceptance is not only a matter of 'legal status'; of equal importance is the 'legitimate status' (Bjørnåvold, 2000). Through assessment, non-formal learning is given a kind of general value. Bjørnåvold explains this as follows:

The competences in question must be accepted as potentially valid/useful outside their narrow context of origin. Only actual use can prove whether such a generalised value will be attributed to assessments of non-formal learning. Nobody can guarantee that the relative value of formal versus non-formal learning can be changed through the introduction of methodologies and systems for the assessment of non-formal learning. (Bjørnåvold, 2000, p.47).

	Quality criteria for assessm	nent
	Content-based curriculum	Competency-based curriculum
Quality approach	Psychometric approach	Hermeneutic approach or edumetric approach
Quality criteria	 Reliability: Across tasks – response consistency and stability; Across assessors – inter-rater reliability or reproducibility; Validity: as a characteristic of a test or test item; as a unified concept / central position for construct validity: Content aspect; Substantive aspect; Structural aspect; Generalizability aspect; External aspect. as value judgement about inferences and actions made on the basis of the assessment evidence. 	 Authenticity Cognitive complexity Meaningfulness or usefulness Fairness / equity Transparency Educational consequences Directness Cost and efficiency Reproducibility of decisions Comparability

Table 3-4	Characteristics of a	wality control in the t	oct culturo vorcus the	assessment culture
Table 3-4	Characteristics of q	μαπιχ συπτοι πι την τ	est culture versus the	assessment culture

The actual use of non-formal assessment will determine the acceptance of non-formal assessment (its legitimacy and value). Acceptance becomes evident when individuals enter the labour market or try to gain access to a study programmes on the basis of the assessment results. Political and legal actions can positively influence the question of legitimacy and acceptance, just as the quest for valid and reliable assessment methodologies does (Bjørnåvold, 2000). Bjørnåvold remarks that the purpose of assessment (formative or summative) will influence views on the legitimacy and acceptability of assessment results. Latham and Pearlman (1999) also emphasize criteria like acceptability, legality and legitimacy, although they refer to them differently. They state that the assessment must be 'professionally acceptable', 'publicly credible' and 'legally defensible'. All three criteria are important in the context of this research study. Therefore, an analysis was made of how these relate to the ten criteria presented by Baartman et al. (2004).

The quality criteria 'acceptability', 'legitimacy' and 'legality' are of a different abstraction level than the criteria discussed by Baartman et al (2004). To measure these constructs they need further operationalization for which the edumetric criteria provide a solution. First of all, professional organizations, branches, higher education institutions, and so on, will have more faith in an assessment that contains assessment tasks that reflect the cognitive complexity of the work field (authenticity, meaningfulness and directness). Furthermore, they would like to understand how the assessment takes place and which assessment criteria apply (transparency) Acceptance will further grow if the assessment is shown to have a positive influence on the further development process of the candidate (educational consequence) and does not cost too much time, money and energy to conduct (cost and efficiency). Finally, there must be no doubts about the competence of an candidate outside the context of the assessment (reproducibility). Hence, 'acceptability' can be operationalized using concepts like authenticity, cognitive complexity, meaningfulness, educational consequence, directness, transparency, cost & efficiency and the reproducibility of decisions.

Second, 'legitimacy' primarily concerns reproducibility (cf. Bjørnåvold 2000). However, it is justified to assume that legitimacy further increases when the assessment is meaningful, fair to the candidate, and does not have negative consequences for further development. Again, it is important that people understand what the assessment entails (transparency) and does not cost too much time, money and energy. In short, legitimacy can be further operationalized by reproducibility, meaningfulness, fairness, transparency, educational consequences and cost and efficiency.

Finally, the issue of 'legality' mainly relates to the structural aspects of validity. To remain standing, it is important that the assessment is fair, that it is conducted in compliance with the set procedures that are known to the candidate (transparency) and that these procedures are conducted in a consistent and responsible manner (comparability). Thus, legality primarily concerns fairness, transparency and comparability. Figure 3-3 on the next page visualizes the discussion above.

This research study examines the introduction of a new assessment instrument (portfolio) in the current evaluation and recognition practice regarding immigrants' competencies. It is assumed that the use of a portfolio instrument will enhance the labour market chances of the target users (highly-skilled immigrants) because it makes their actual competencies visible. Current evaluation and recognition practice focuses on the results of formal learning only by comparing the foreign diploma with a national diploma in the host country. It is very important that the introduction of portfolios does not have any negative consequences for the target group. It is intended to facilitate and improve the labour market chances, not to hamper and impede it. Therefore, the consequential aspect of construct validity is viewed as very important, as are the related edumetric quality criteria of meaningfulness, fairness, transparency, educational consequences, directness and cost and efficiency.

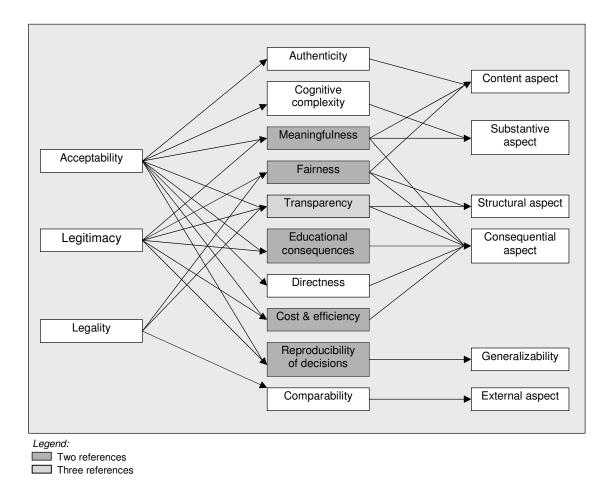


Figure 3-3 Relationship between the quality criteria for the assessment and recognition of non-formal learning, the edumetric criteria and the psychometric criteria

3.2.4 Exploring competency-based curricula from a global perspective

It is often claimed that higher education institutions are per definition international institutions with common goals and structures, but in practice this claim is deceptive (Ballard & Clanchy, 1992). "A country's educational system is an expression of a national cultural code; it reinforces and enhances cultural notions learned outside formal learning settings" (Teekens, 2002, p.41). However, to stimulate and enhance the international mobility of students, researchers and workers, differences in (educational) cultures are not considered to be of a substantial nature and should not hamper international recognition of diplomas. These differences need to be accepted. Schröder (2002) points out that in an international classroom, the cultural differences between students can form an important source for cross-cultural learning, but at the same time they can cause misunderstanding and distress. When it comes to the assessment of learning, differences in educational cultures might even invalidate the assessment outcomes.

Hofstede (1991, p. 16) defines culture as a "the collective mental programming that distinguishes members from one group or category of people from another". Culture must be distinguished from human nature, on the one hand, and an individual's personality on the other. Culture is learned. This learning process starts at home, continues at school, on the street, in jobs and in other social settings in which individuals encounter one another. In the literature, different types of classification can be found that help us to understand the differences between national cultures. Pinto (1993) classifies cultures according to the structure of their behavioural rules. He distinguishes between cultures that are characterized by a 'loosely knit' behavioural structure and cultures that have a 'tightly knit' behavioural structure. In a loosely knit structure, individuals have a lot of freedom in determining how to behave in a given situation, while a tightly knit structure has detailed, prescribed protocols on how to behave in many situations. Examples of loosely knit cultures can be found in Anglo-Saxon and North-western European countries, while tightly-knit cultures mainly exist in Africa and Asia (Pinto, 1993).

Pinto's distinction relates to one of the five dimensions used by Hofstede (1980, 1991) to classify national cultures. These dimensions relate to issues that are present in each society: identity, hierarchy, gender, truth, and virtue (Hofstede, 1980, 1991; Hofstede, Pedersen & Hofstede, 2002). For each dimension Hofstede presents two extremes resulting in ten "synthetic cultural profiles" (Hofstede et al, 2002). These profiles can help to explain the behaviour and attitudes of highly-skilled immigrants who come from different cultures, but these do not give insight into the different educational cultures that exist globally. For this purpose the work of Ballard and Clanchy (1992) is very relevant. They explore the cultures of learning and focus on how cultural and intellectual traditions shape and inform education. They present a simplified model of the relationships between teaching and learning strategies and the cultural attitudes to knowledge which inform them (see 3-4 on the next page). This model is based on two assumptions:

- 1. There are attitudes to knowledge that either emphasize conservation or extension;
- 2. There are dominant tendencies in each national culture for which the attitude to knowledge is most appropriate (Ballard & Clanchy, 1992).

Ballard and Clanchy (1992) describe how learning and teaching strategies within the Australian school system change from a conserving approach in primary school to a more analytical and critical approach in late secondary and early tertiary education, while the speculative approach is implemented in the research degrees of universities. They indicate that this shift characterizes many of the Western cultures of education. In many Asian cultures, as well as in the Islamic traditions, the emphasis on the conserving attitude to knowledge is much more dominant, also at the university level (Ballard & Clanchy, 1992). Figure 3-4 shows how the attitude towards knowledge influences the dominant learning and teaching strategies, the role of the lecturer, and the nature and function of assessment.

Attitudes to knowledge	Conse	rving	E	xtending
Learning		Reproductive	Analytical	Speculative
approaches		•		•
Teaching approaches	Role of teacher	 Almost exclusive source of: Knowledge Direction / guidance Assessment 	 Co-ordinator of learning resources Questioner, critical guide, patron Principle source of assessment 	 More experienced colleague and collaborator Critic and adviser Patron
	Characteristic activities	 Transmission of information and demonstration of skills Overt moral and social training 	 Analysis of information and ideas within interpretive frameworks Modelling of/demand for a critical approach to knowledge and conventions 	 Discussion/advice on ideas and methods on an individual basis Modelling of hypothetical and creative thinking Collaborative search for new ideas
	Assessment	 Tests of memory recall and practical demonstration of skills Emphasis on replication Geared to ranking 	 Assignments/exams requiring critical analysis and problem-solving Emphasis on: Originality Quality of interpretation 	 Independent research – thesis and papers of publishable quality 'Contribution to the field of knowledge'
	Aim	 Simple ('unreconstructured') transfer of knowledge and skills 	 Independent and critical styles of thinking Development of capacity for theory and abstraction 	 Development of speculative, critical intelligence Expansion of knowledge base (theory, data, techniques)
	L	↓↑	↓↑	
Learning strategies	Туре	 Memorisation and imitation 	 Analytical and critical thinking 	 Speculating, hypotesizing
	Activities	 Summarising, describing, identifying, and applying formulae and information 	 Questioning, judging, and recombining ideas and information into an argument 	 Research design, implementation and reporting Deliberate search for new ideas, data, explanations
	Characteristic questions	What?	Why? How? How valid? How important?	What if?
	Aim	'Correctness'	 'Simple'originality, reshaping material into a different pattern 	 'Creative'originality, totally new approach/ new knowledge

Figure 3-4 Influence of cultural attitudes to knowledge on teaching and learning strategies (Ballard & Clanchy, 1992, p.13).

As a consequence of these differences, there can be a mismatch of expectations about the proper behaviour of students and lecturers when students from one educational culture enter another. To become aware of the factors that may cause misunderstanding when a competency-based assessment instrument is introduced to a group of people who were educated in a society that highly values the conserving attitude to knowledge, the expectations of these people are compared with the features of competency-based learning.

As Figure 3-4 shows, the main task of the lecturer in the more conserving educational cultures is transmitting information and demonstrating skills to students. The lecturer is almost the exclusive source of information. If the society puts emphasis on respect for the past and for the authority of

the teacher, the classroom is not regarded as a place to question what is taught or to raise objections. The lecturer is highly respected. He is regarded as being responsible for the training of his students and for their moral and spiritual development. This means that a good lecturer is very clear about what he expects from his students; he must not leave uncertainties unresolved. With respect to the teaching strategy, this means that the lecturer provides lecture summaries, revision notes, model answers to typical exam questions, and so on. There is little call for independent, further reading or the development of alternative interpretations. It is the lecturer's duty to resolve conflicts of evidence for students because he should lead them to the correct viewpoint. The student, on the other hand, should carefully memorize all things taught by the lecturer. The learning approach can be summarized as 'reproductive'. This approach is rather different to the one implemented in the analytical and speculative traditions. Ballard and Clanchy (1992) remark that a lecturer might speak to a group of students, but the lecture is regarded to be the starting point for the development of the student. Lecturing is only one source of information alongside independent study, written assignments, laboratory work, and so on. Students are encouraged to argue, raise objections and challenge what is taught. Students play an active role in their learning process. The lecturer is a critical guide or patron (see Figure 3-4).

As discussed in Section 3.2.1, many of these aspects relate to the competency-based learning paradigm (see Table 3-2 on page 48). Competency-based learning relates to 'socio-constructivism'. The lecturer is a 'cognitive guide'; he supports the learning process. Competency-based learning is learner-centred or demand-oriented. The learning objectives are determined by the student depending on their competency-level, ambitions and interest. Students learn how to steer their own learning process. This is a very different concept than the one implemented in a 'conserving educational culture'. Table 3-5 on page 63 summarizes some important aspects that should not be overlooked if a student with a conserving attitude to knowledge enters a competency-based learning environment. But first the issue of evaluation or assessment is discussed.

Figure 3-4 shows very clearly that the nature and function of assessment in a reproductive approach to learning is different to those in an analytical or speculative approach. In a reproductive environment, students carefully memorize what is taught by the lecturer and evaluation takes place to see if the student can recall this information; "the more accurate the recall, the higher the achievement" (Ballard & Clanchy, 1992, p.21). Typical exam questions start with 'What'? Students prepare for exams by carefully studying the lecture notes, study books and model answers to exam questions. Students are very anxious to find out what the lecturer wants in the exam and they would like to assure the lecturer that they are willing to do what is required. It is the task of the lecturer to teach students and inform them about what they need to know for the exam and the student studies carefully with great discipline. If everyone does his job properly, no one fails the exam.

In more analytical environments, students are rewarded for the application of knowledge and skills to new problems, while the speculative approach rewards students for contributing to the advancement of knowledge (Ballard & Clanchy, 1992). Typical exam questions start with 'Why'?, 'How'? or 'What if'? (see Figure 3-4). In competency-based learning environments students need to solve authentic problems that are meaningful for the future world of work. They need to construct their own answers, sometimes together with other students. The assessment has both a summative and a formative function. It takes place to find out if the student has mastered the required competencies, but at the same time it is used to inform the learner and the lecturer on the learning process and to steer it. Students are asked to reflect on their own performance (and that of others) in order to set new learning objectives. Hence, competency-based assessment is very different from evaluation in reproductive educational cultures.

Ballard and Clanchy (1992) point out two other issues that may affect the performance of students who were educated in a different educational culture, namely: time pressure and the skill of guessing or estimating. Both issues relate to the cultural antipathy to produce thoughtful answers quickly. "Quickness of response may be considered impolite, or even to show immodesty" (Ballard & Clanchy, 1992, p. 23). Related to this, if one does not know an answer, one should not pretend such knowledge by guessing. For students with this cultural heritage it can be very awkward to take a multiple choice test for which only limited time is available. These issues should be considered when foreign students take part in multiple choice exams in the Netherlands. The effect of these issues in competency-based environments is likely to be less, however, in these cases the whole assessment philosophy is new. Students are not used to analyzing their strengths and weaknesses (self-assessment) or to judging others (peer assessment).

Table 3-5 gives an overview of important differences between a reproductive educational culture and a competency-based learning environment. It shows that there are many issues that can make the participation of foreign students from a conserving educational culture in a competency-based learning environment problematic. Ballard & Clanchy (1992) list a number of measures that may assist in the adaptation process that needs to take place:

- Recognize the cultural roots of what in the first instance might seem to be inadequate learning habits
- Explain overtly to students rooted in another education culture what the appropriate learning strategies are that are valued in this educational culture
- Model appropriate behaviour
- Build examples of suitable styles of thinking into daily teaching practice
- Point to effective study habits in an encouraging manner

These measures will be further discussed in Chapter 4. In this chapter an analysis will be made of what the differences in cultural educational backgrounds mean for the process of portfolio development and portfolio assessment (respectively Section 4.2 and 4.3).

D : .	– – – – – – – – – – – – – – – – – – –	
Dimension	Reproductive environment	Competency-based environment
Learning and	 Reproductive 	 Socio-constructive
teaching strategy		
Role of lecturer	 Transmission of information and demonstration of skills Responsible for the education of students, their moral and spiritual development Provides lecture summaries, revision notes, model answers to typical exam questions 	 Cognitive guide Supports the learning process of students and helps them to become self-regulated learners Process-oriented teaching
Role of student	 Has deep respect for the lecturer as he is the source of wisdom Memorizes the information provided by the lecturer with great care Imitates the skills demonstrated by the lecturer 	 Sees lecturer as coach Takes an active part in learning tasks to practice future professional competencies Defines his learning objectives and steers his learning process
Function and nature of assessment	 Summative Focused on the recall of information and demonstration of skills Students have a passive role Aim is 'correctness' Typical question is 'what? 	 Formative and summative Focused assessment of future professional competencies Students have an active role (self-assessment, peer assessment) Aim is to determine the level of competence and steer the learning process Typical questions are 'how'? 'why', 'what if'?

 Table 3-5
 Differences between a reproductive educational culture and a competency-based learning environment

3.3 A theoretical building block of context characteristics

The aim of this section is to reflect on the issues that were discussed earlier and indicate what this means for this research study. The outcome of this reflection is a first theoretical building block (TBB1) that is presented in Table 3-6 on page 66. It presents the characteristics of the context that would have a positive influence on the introduction of a portfolio instrument to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants. TBB1 will be used in the remaining parts of this thesis to analyze the complexity of the innovation.

The aim of this research study is to explore the characteristics of the portfolio instrument to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants as well as its design, development and implementation process. Section 3.1 explored the different meanings of the term competencies. The conceptual choices that were made in this research study were summarized in Table 3-1 on page 46 together with the respective concerns for competency-based assessment. The following issues should be kept in mind:

- There may be a gap between a person's formal competencies (measured in years of formal learning) and his actual competencies. The portfolio instrument aims to provide insight into the actual competencies of highly-skilled immigrants;
- There may be a gap between the official requirements (for enrolment in a study programme or a job) and the actual requirements. It is important to make sure that the official assessment standards comply with the frame of reference of the assessors who conduct the portfolio assessment. Transparency of how the assessment or recognition decision is taken is very important in the respect. This issue will be further discussed in Section 4.3 that deals with portfolio assessment;
- The competence definition should relate to the key professional tasks of the profession (a holistic approach);
- Competence is culture specific which implies that highly-skilled immigrants might not immediately
 relate to the standards. However, if they wish to work in their profession in the Netherlands it is
 very important that they come to understand these standards and comply with them.

Section 3.2 focused on the characteristics of the competency-based learning paradigm and compared these characteristics with the more traditional content-based learning paradigm. Moreover, it analyzed how competency-based learning relates to different educational cultures that exist as a consequence of the cultural attitude towards knowledge. Based on these explorations it can be stated that the complexity of the innovation (the introduction of the portfolio instrument to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants) is influenced by two important factors:

- 1. The extent to which the environment in which the portfolio instrument is introduced complies with the content-based learning paradigm or the competency-based learning paradigm;
- 2. The extent to which the highly-skilled immigrant was educated in an educational system that complies with the conserving attitude to knowledge or the extending attitude to knowledge.

The more the Dutch environment complies with competency-based learning and the more the educational culture in which the highly-skilled immigrant was educated favours the extending attitude towards knowledge (instead of the conserving attitude), the less complex the innovation for the people involved (the developer, the portfolio candidate and the portfolio assessor).

Figure 3-5 presents a complexity matrix for the introduction of the portfolio instrument. If the analysis of the context characteristics shows that the project is situated in cell 4 (content-based environment and a dominant conserving attitude towards knowledge), the innovation is very

complex, while cell 1 relates to less complex context situations. To facilitate the analysis of the complexity Table 3-6 on page 66 summarizes some important characteristics of the context that would make the implementation of portfolio easier. These characteristics were derived from the discussion in Section 3.2 and are briefly discussed below:

- The competency-based learning environment is based on the future professional practice of the learner. This implies that the learning objectives are derived from professional profiles and the identification of competencies that relate to key professional tasks (Kouwenhoven, 2003). This does not mean that disciplinary knowledge is not addressed but rather that it is linked to effective professional performance.
- Learning in practice is very important in competency-based environments. This requires
 assessment instruments that are able to assess the developed competencies in an integrated
 manner, where possible in a real life context, using more than one instrument (multimodal).
 Common instruments are: portfolios, exhibitions, observations, interviews, self-assessment, peer
 assessment and performance tasks (Birenbaum, 1996; Marby, 1999; Dochy & Janssens, 1999).

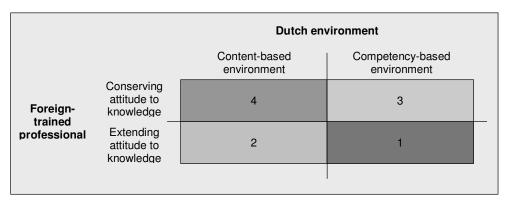


Figure 3-5 Matrix for the analysis of the complexity of portfolio implementation

- Competency-based assessment is criterion-referenced, which requires competency-based standards that relate to a development scale.
- Competency-based assessment is based on the principle of 'assessment for learning', emphasizing that assessment should be a valuable learning experience that enhances the learning process of the learner. Hence, the consequential aspect of validity is very important in competency-based assessment.
- Competency-based assessment is based on a contextual, qualitative approach to the quality assurance of assessment outcomes. Often a hermeneutic approach is applied to warrant the quality of assessment decisions. Important quality criteria in this approach are: the assessor's expertise in the field, multiple and variable sources of evidence, a disciplined and collaborative inquiry that encourages challenges and revisions of initial interpretation, and transparency of the trail of evidence leading to the assessment outcome.
- Baartman et al. (2004) have defined a set of ten edumetric quality criteria, which are: authenticity, cognitive complexity, meaningfulness, fairness, transparency, educational consequences, directness, cost and efficiency, reproducibility of decisions and comparability. These criteria are not very different from the psychometric quality criteria. However, it seems that more emphasis is put on the consequential aspect of assessment (see Figure 3-2 on page 55).
- Bjørnåvold (2000) points out the importance of 'acceptability', 'legitimacy' and 'legality' when it comes to the assessment and recognition of non-formal learning. Further analysis of these criteria have shown that they relate to the following edumetric quality criteria: meaningfulness, fairness, transparency, educational consequences, directness and cost and efficiency (see Figure 3-3 on page 59).

Table 3-6 gives an overview of the context characteristics that have a positive influence on the introduction of the portfolio instrument. It represents the first theoretical building block for portfolio-use by highly-skilled immigrants. In Chapter 4, four additional blocks will be added.

Table 3-6Context characteristics that are likely to have a positive influence on the implementation of the
portfolio instrument: a first theoretical building block

Issues	Description of the characteristics
Competency- based learning	 The learning environment is based on the future professional practice of the learner. The learning environment is based on the elaboration of professional profiles and the identification of competencies required for the performance of key professional tasks. Learning is oriented towards future professional practice which implies that much of the learning takes place in practice.
Competency- based assessment	 Assessment of learning is an integral part of the learning process Assessment focuses on competencies in an integrated manner, in a real-life context using different instruments (multi-modal). Assessment is criterion-referenced and requires competency-based assessment standards that relate to a development scale. Assessment is development-oriented, which implies that it is a useful learning experience for the learner facilitating the future learning.
Quality approach	 Assessment is based on a contextual, qualitative approach to warrant the quality of the assessment decisions (e.g. the hermeneutic approach). The quality criteria relate to the following edumetric criteria: meaningfulness, fairness, transparency, educational consequences, directness and cost and efficiency that all relate to consequential validity.

Chapter 4

Exploring the characteristics of a theoretical framework for portfolio use by highly-skilled immigrants

This chapter addresses the two research questions that were presented in Section 1.3 from a theoretical perspective:

- 1. What are the characteristics of the portfolio instrument and its use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?
- 2. What are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice?

To answer the first research question, this chapter develops three theoretical building blocks that address three main topics:

- a. The portfolio product characteristics focusing on the function and impact of the portfolio instrument, as well as, its structure and content (TBB2)⁵;
- b. The portfolio development process by the highly-skilled immigrant (TBB3)
- c. The portfolio assessment process by the recognizing body (portfolio assessor) (TBB4).

These theoretical building blocks are developed in Section 4.1 to 4.3. Each section discusses the findings from the literature that relate to one of the main topics. Section 4.1 discusses the product characteristics, Section 4.2 addresses portfolio development by the highly-skilled immigrant, and Section 4.3 discusses portfolio assessments. Each section concludes with an overview of characteristics that are important for this research study (the theoretical building blocks).

To answer the second research question, Section 4.4 explores the characteristics of portfolio design, development and implementation. The complexity of change is influenced by the context characteristics that were addressed in Chapter 3. TBB1 contains an overview of the context characteristics that are likely to have a positive influence on the implementation of change (see Table 3-6 on page 66). Section 4.5 reflects on the five theoretical building blocks that will be used in Chapter 5 to distil reference points for the case study analysis. Moreover, the theoretical building blocks will be used for the theoretical replication of the findings from the three case studies in Chapter 7.

4.1 Specifying the product characteristics of a portfolio instrument for highly-skilled immigrants

This section discusses some important characteristics of different types of portfolio instruments that might be relevant for the purpose of this research study. Therefore, the general purposes of the recognition of competencies that were discussed in Section 2.3 are briefly reviewed. It was explained that competencies can be recognized for:

- a. Formative purposes aimed at the identification of competencies; this is relevant for highlyskilled immigrants who wish to orient themselves on the Dutch labour market and explore their possibilities; or
- b. Summative purposes aimed at the assessment and recognition of competencies. In this respect, a further distinction is made between:

⁵ The first theoretical building block (TBB1) was developed in Chapter 3. It contains the features of the context that are likely to have a positive influence on the introduction of portfolios to enhance the recognition of prior learning (see Table on page 66).

- Social recognition, which concerns the acknowledgement of competencies by economic and social stakeholders. This is relevant for highly-skilled immigrants who are looking for a job in a profession that is not regulated ('de facto' professional recognition); and
- Formal recognition, which relates to official recognition by a competent authority, e.g. a ministry or a higher education institution. This is relevant for highly-skilled immigrants seeking recognition in order to take up a regulated profession ('de jure' professional recognition), for example, medical doctors or teachers, or for those who wish to enrol in a Dutch study programme (academic recognition).

Section 4.1.1 gives a short introduction into the variety of products that are labelled as portfolio in the literature. It makes a corroborated choice for two types of portfolios that seem most relevant for this research study taking the above mentioned purposes in mind. The first is a development portfolio that relates to the formative purpose of recognition of competencies. The characteristics of this type of portfolio are further discussed in Section 4.1.2. The second type of portfolio is an assessment portfolio that refers to the summative purpose of the recognition of competencies. Section 4.1.3 presents the main features of this type of portfolio. Section 4.1.4 reflects on the previous discussions and presents the main product characteristics of a portfolio instrument for highly-skilled immigrants in a single overview; the second theoretical building block (TBB2), see Table 4-5 on page 81.

4.1.1 Different types of portfolios

The large variety of products that is labelled a portfolio makes it difficult to give one uniform definition. Marby (1999) defines it as a collection of information by and about the learner to give a broad view of the learner's achievements. Berk (1999) describes a portfolio as a work sample that contains a representative sample of a person's work collected over time in a given domain. A definition that is often cited comes from Arter and Spandal (1992, p.36) who describe portfolio as:

... a purposeful collection of student work that tells the story of the student's efforts, progress, or achievement in (a) given area(s). This collection must include student participation in selection of portfolio content; the guidelines for selection; the criteria for judging merit; and evidence of student self-reflection.

This definition emphasizes the developmental nature of portfolio assessment in an educational context. It contains some important characteristics of the assessment culture that were discussed earlier in Section 3.2.2: the learner's active role in assessment, reference to an external set of criteria, and emphasis on self-reflection. However, portfolios are used for other purposes and in other contexts as well.

Tillema (1998) distinguishes between evaluation (summative assessment) and development (formative assessment). As a formative assessment instrument the portfolio provides feedback to the student and the instructor on the learning process. As a summative assessment tool the portfolio contains proof of accomplished learning (Black, 1998 in Bjørnåvold, 2000). Birenbaum (1996) speaks about 'inquiry reading' versus 'grading'. He points out that the distinction between formative and summative assessment might become blurred if the portfolio is used in an educational study programmes. Klenowski (2002) discusses the use of portfolios for the whole scale of assessment to support teaching and learning or professional development. However, he also emphasizes that each assessment purpose requires its own process for the collection and selection of evidence. As a consequence the literature makes note of different types of portfolios. Ritzen & Kösters (2002), for example, follow Wolf, Lichtenstein & Stevenson (1997) and distinguish between three types of portfolios: a 'development portfolio', an 'assessment portfolio', an 'assessment to assessment portfolio'. Wolf in Tillema (2000) makes note of a 'learning portfolio', an 'assessment

portfolio' and an 'employment portfolio'. Although the terminology is slightly different, the main purposes of the three types of portfolios seem to correspond with the previous classification.

- The 'development portfolio' or 'learning portfolio' aims to monitor development and professional growth. Tillema (1998) emphasizes that assessment does take place in a development portfolio, e.g. self-assessment and/or peer assessment. A development portfolio can be used for the purpose of formative assessment providing information to the portfolio owner about the gap between the actual performance and the targeted performance (Tillema, 1998).
- The assessment portfolio, on the other hand, mainly serves the evaluation purpose of portfolio. It is used for the purpose of certification or selection (summative assessment). Tillema (2001b) remarks that the assessment portfolio also has a developmental purpose.
- A 'showcase portfolio' or 'employment portfolio' shows a person's best performances, for example, for the purpose of a job interview (Ritzen and Kösters, 2002; Wolf in Tillema, 2000). It is a specific type of assessment portfolio.

Another classification that is discussed in more detail comes from Smith and Tillema (2003). They make a further differentiation between different types of portfolios by combining the 'development-evaluation' dimension and the 'mandatory or voluntary' dimension. This results in four types of portfolios:

- a dossier portfolio –or ' dossier' (cf. Tillema, 2001b)-, which is a mandated collection of prior learning for selection, admission or promotion purposes;
- a reflective portfolio, which is voluntary, personal collection of prior learning that provides evidence of growth and accomplishments. It is developed for selection, admission or promotion purposes;
- a training portfolio –or 'course learning portfolio' (cf. Tillema, 2001b)-, which is mandated overview of learning efforts that have been collected during a training or study programme; and
- a personal development portfolio, which is voluntary, personal evaluation and reflective account of professional growth during a long-term process.

Figure 4-1 gives a visual presentation.

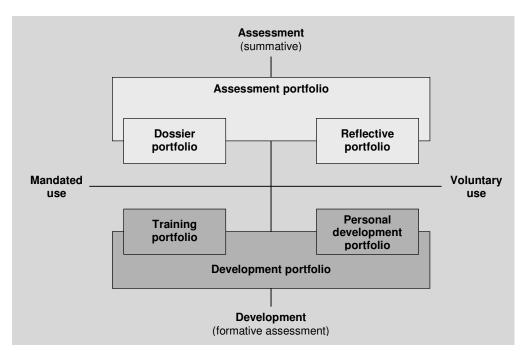


Figure 4-1 Four different types of portfolios (cf. Smith & Tillema, 2003)

Below is a brief discussion of how these four types of portfolios relate to the purposes of the recognition of competencies that were presented at the start of this section. The 'dossier portfolio' and the 'reflective portfolio' are further specifications of the assessment portfolio. The main purpose of these portfolios concerns selection, admission or promotion; the summative purpose of the recognition of competencies. However, the reflective portfolio puts more emphasis on the developmental purpose of assessment and contains outcomes of self-assessment as well (Tillema, 2001a, 2001b). Thus, it seems that:

- The 'dossier portfolio' is most relevant for formal recognition purposes. It could be used by highly-skilled immigrants to enhance the identification, assessment and recognition of their actual competencies for the purpose of 'de jure' professional recognition' as well as 'academic recognition'.
- The 'reflective portfolio' relates best to the purpose of 'social recognition'. Its use is voluntary, which means that the incentive for portfolio development comes from the highly-skilled immigrants themselves. The reflective portfolio is a personal collection of prior learning that could enhance the social recognition of competencies.

The characteristics of both types of (assessment) portfolio will be further discussed in Section 4.1.3.

The 'training portfolio' and the 'personal development portfolio' are further specifications of the development portfolio. The 'training portfolio' relates to what Barton and Collins (1997) call the 'educational portfolio'. It concerns the use of portfolios in a learning environment to document the learning process of the candidates. The learning environment can be a professional environment – the work place –or a more formal educational context. The information included in the portfolio is used to steer the learning process. The 'personal development portfolio' relates to an initiative of the individual to reflect on his professional growth over time. Referring back to the three purposes of the recognition of competencies –the identification (formative purpose), social recognition and formal recognition (both summative purposes of recognition)– it appears that:

- The 'personal development portfolio' is most relevant for the purpose of orientation (the formative purpose of competency-recognition). It is useful for highly-skilled immigrants who wish to reflect on the relevancy of their prior learning experiences in the Dutch context in order to determine their future prospects.
- The 'training portfolio' is less relevant because most of the highly-skilled immigrants are still
 part of a learning environment. The research study focuses on highly-skilled immigrants who
 wish to take up their previous profession and who are currently unemployed.

The characteristics of both types of (development) portfolio will be explored in Section 4.1.2.

Figure 4-2 gives an overview of how the three types of portfolios relate to the general purposes of the recognition of competencies and to the general purposes of the recognition of foreign diplomas.

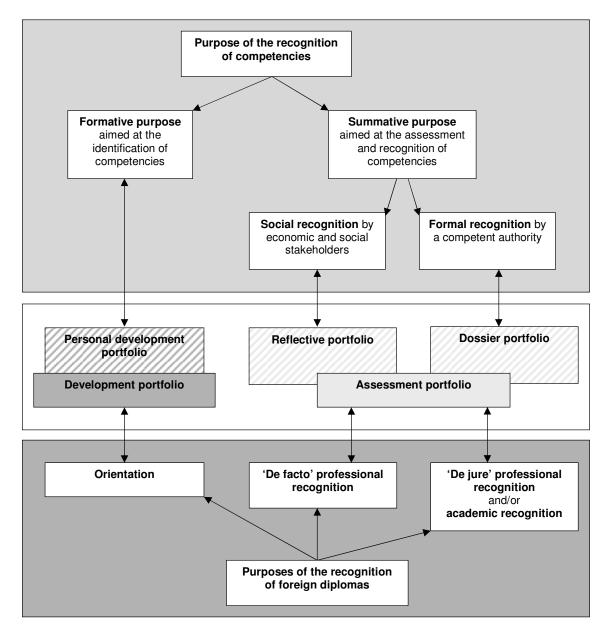


Figure 4-2 Relationship between the purpose of the recognition of competencies, the different types of portfolios, and the purposes of the recognition of foreign diplomas

4.1.2 Characteristics of the development portfolio

The aim of this section is to explore the characteristics of a development portfolio. As argued earlier, the development portfolio seems relevant for highly-skilled immigrants who wish to orient themselves in terms of their possibilities in Dutch society. This relates to the formative purpose of the recognition of competencies (cf. European Commission, 2004 and Figure 4-2). First, the function of a development portfolio is further explained, as well as, the impact that a development portfolio generally has on the candidate taking part in the development process. Following Plomp (2002) a distinction is made between the 'immediate outcomes' and the 'distant outcomes'. Thereafter, the characteristics of the structure and content are explored.

Function and impact

A development portfolio documents a candidate's (professional) growth and development (Tillema, 1998) or learning process (Beijaard, Driessen, Van Tartwijk & Van der Vleuten, 2002) over time. Its strongest feature is that it reflects the work that has actually been done; it relates to actual performance. The development portfolio helps a candidate to monitor his development. During the collection of evidence, the candidate receives continuous feedback that promotes reflection on practice (Tillema, 1998). Portfolio development therefore contributes to a candidate's reflective abilities. Driessen, Van Tartwijk, Overeem, Vermunt and Van der Vleuten (2005) have found supporting evidence that portfolio development enhances the reflective abilities of the candidates, at least if certain supporting conditions are met. These include a supportive mentor system, a clear portfolio structure, an appropriate assessment procedure and early and unambiguous portfolio introduction. Hence, the portfolio instrument can also serve as a learning tool for those candidates who need to practice their reflective skills. As became clear in Chapter 3, reflection is a more familiar process for candidates who have been educated in learning environments that are analytical or speculative in nature than for candidates who were trained in educational cultures that are based on a conserving attitude towards knowledge (see Figure 3-4 on page 61 and Table 3-5 on page 63).

Another important function is that a development portfolio shows the gap between selfperceptions and external judgement (of peers or supervisors). It provides insight into the discrepancy between the targeted performance and the current, actual level of performance. This may trigger the question of how the targeted performance can best be achieved and what kind of support is needed (Elshout-Mohr & Van Daalen-Kapteijns, 2003). A development portfolio stimulates the candidate to make choices about future development –as an employer, student or active citizen – and plan the development process (Raanhuis, Kamphuis & Pijls, 2003). It makes the candidate aware that he is responsible for his own development; it therefore contributes to the development of self-regulated learners (Tillema, 1998). Smith and Tillema (2003) distinguish between a 'training portfolio' and a 'personal development programme determine the entries in the portfolio. The purpose of a training or development programme determine the entries in the portfolio. The purpose of a 'personal development portfolio' is much broader. It is developed on a voluntary basis and used for personal reasons only. Table 4-1 below gives a summary of the main functions of the development portfolio that were briefly discussed.

Table 4-1 Main functions of the development portfolio

- To monitor a candidate's learning process;
- To promote and support the reflection process through the provision of continuous feedback;
- To practice and develop reflective skills (if certain supporting conditions are met);
- To visualize a candidate's development;
- To communicate about choices, learning objectives and learning processes; and
- To plan and document a candidate's learning process.

These functions relate to the 'soft' benefits of a PLAR procedure that were discussed in Section 2.3.1, including empowerment, building self-confidence and becoming self-regulated learners (cf. Verhaar, 2002). These 'soft' benefits relate to the distant outcomes of a development portfolio. From the discussion above, it might be assumed that a development portfolio could have the following immediate outcomes:

- It may help the candidate to think about his achievements in terms of strengths and weaknesses;
- It may help the candidate to think about the 'targeted objectives' and how these can be achieved;
- It may help the candidate to consider possible options and make decisions about future steps;
- It may contribute to the development of the candidate's reflective skills.

Structure and content

Tillema (2001a), who studied the use of portfolio for the purpose of human resource development in different organizations and businesses, discusses six dimensions to explain the differences between the four types of portfolios that were discussed earlier (see Figure 4-1 on page 69). These dimensions concern:

- The main focus of the portfolio (broad or specific);
- The type of evidence included (average or best performance);
- The nature of the portfolio (reflective focusing on the process or performance-based focusing on the product);
- The structure (open or prescribed);
- The amount of evidence (limited or multiple);
- The nature of the assessment (open or restricted).

Table 4-2 shows the basic features of the 'training portfolio' and the 'personal development portfolio'. Tillema (2001a) indicates that the 'training portfolio' has an open structure and is 'performance-oriented'. He discusses the following features:

- The training portfolio is focused on the learning objectives of the training programme (often defined in terms of competencies that need to be developed). The index shows which information on which competence (the learning objective) can be found where.;
- The learner is free to define the index (open structure);
- The training portfolio contains a 'description' that explains what has been done and what kinds of evidence have been collected with regard to each competence;
- The portfolio candidate reflects on the learning experience that indicates what has been learned and how progress has occurred during the course of the development or training programme (reflective on process of learning);
- It contains tangible products on a behavioural level, which demonstrate the level of competence that has been reached over the period of the development or training programme (best practice and performance-oriented);
- The training portfolio contains a reflection on the strengths and weaknesses in the portfolio evidence;
- The training portfolio contains a plan for further action in which the person also specifies his plans for further personnel development; and
- The training portfolio is evaluated in a restricted setting.

	Development portfolio	
	Training portfolio	Personal development portfolio
Primary purpose	Specific focus	Broad focus
Type of evidence	Best performance	Average performance
Nature of portfolio	Performance-oriented (output)	Reflective (process)
Structure	Open	Prescribed
Amount of evidence	Limited	Numerous
Nature of evidence	Evidence about guided performance, possibly developed with others	Individual performance
Assessment	Restricted assessment	Open assessment

 Table 4-2
 Two types of development portfolios (cf. Tillema, 2001a)

Raanhuis et al. (2003) emphasize that the development portfolio has a more open structure to allow candidates to include what they find relevant to prove their learning process. The open structure also enhances the 'sense of ownership' of the candidate (cf. Elshout-Mohr & Van Daalen-Kapteijns, 2003). However, the open structure draws heavily upon the ability and willingness of learners to take responsibility for their own development. It may cause insecurity

about the intention behind the requirements (Wade & Yarbrough, 1996). Therefore, Barton and Collins (1997) indicate that rich portfolios result from negotiations between the instructor and the candidate about what to include. Hence, it includes prescribed evidence as well as evidence that is selected by the candidate. In a later publication, Tillema argues that a 'training portfolio' often has a prescribed structure to help the candidate to collect the appropriate evidence (Smith & Tillema, 2003). It appears important to find the right balance between the open and prescribed nature of the portfolio. It should be clear to the candidate what to include but the instructions should not be so prescriptive as to impede the 'sense of ownership.

The 'personal development portfolio', is "a personal evaluation and reflective account of professional growth during a long-term process" (Smith & Tillema, 2003, p.627). The prior learning experiences of the candidate form the starting point for reflection. This could be the reason why Tillema (2001a) speaks of a prescribed structured (see Table 4-2); the structure is formed by the Curriculum Vitae of the portfolio candidate. However, the warning about the sense of ownership should be kept in mind. Particularly because the incentive for the development of this type of portfolio comes from the candidate; it is a voluntary activity.

Smith and Tillema (2003) note the following core elements of a portfolio regardless of it function (assessment or development):

- An index that explains the content of the portfolio; it indicates where certain information can be found in the portfolio;
- Evidence in the form of materials that have been collected over time and that are relevant to the indexed portfolio content; and
- Evaluations of impact in the form of comments and reflections on the portfolio evidence presented.

An important additional element for a development portfolio is reflection (Beijaard et al., 2002; Smith & Tillema, 2003).

Elshout-Mohr and Van Daalen-Kapteijns (2003) discuss three distinctive elements that form the core structure of a development portfolio:

- 'Claims of competence development', which are descriptions of competencies that have been developed over time. These claims should be accompanied by examples of behaviour or activities that are accepted as proof of competence (the evidence);
- An analysis of the strengths and weaknesses in the competency profile of the candidate; and
- A Personal Development Plan (PDP) that gives insight into the targeted objectives that the candidate expects to realize. The PDP could also include information on the kind of guidance and support the candidate would like to receive in order to achieve the targeted objectives.

With respect to portfolio evidence, Elshout-Mohr and Van Daalen-Kapteijns (2003) refer to the work of Barton and Collins. Collins (1991) differentiates between four types of portfolio evidence:

 'Artefacts', which are documents made by the candidate during normal work or study, for example: homework, a student paper, a report or a videotape of a lesson during an internship at a school. For this type of evidence it is therefore important that the candidate is involved in a learning experience (which could be a study programme, an internship or work). If the portfolio is used for the identification of prior learning experiences, the artefacts can also relate to documents that were developed in the past. Referring to the portfolio candidates in this research study – highly-skilled immigrants – it could be that they do not have access to artefacts from the past.

- 2. 'Reproduction', refers to documents that relate to 'extra-curricular' activities or to activities that do not regularly occur at work, for example, a reflection on a discussion with a senior teacher on class management; in the context of prior learning assessment, reproduction also relates to the past.
- 'Attestations', which are documents generated by educators, counsellors and assessors about a candidate's learning progress. It is important that the authenticity of an attestation is confirmed by the person who generated the document (Elshout-Mohr & Van Daalen-Kapteijns, 2003).
- 4. 'Product', refers to materials that were specifically developed for the portfolio. There are three types of products (Barton & Collins, 1997):
 - a. 'Goal statements', which are a candidate's personal interpretations of each of the purposes of the portfolio (that, according to Smith and Tillema (2003) form the index of the portfolio);
 - b. 'Reflective statements', which are written by the candidate as he reviews and organizes the evidence. These statements give the candidate the opportunity to summarize the documents in the portfolio and indicate how he has grown over time. It relates to what Elshout-Mohr and Van Daalen-Kapteijns (2003) call the strengths and weaknesses analysis in the candidate's competency profile; and
 - c. 'Captions', which are statements that are attached to each piece of portfolio evidence, to explain what it is, why it is evidence and for what it is evidence. The captions are very important because they help the candidate to articulate his thoughts. It makes him aware of his learning because the caption states what the candidate can prove that he knows (Barton & Collins, 1997).

Elshout-Mohr and Van Daalen-Kapteijns (2003) remark that the proof of evidence is less important in a development portfolio than in an assessment portfolio. The function of a development portfolio is formative evaluation. It is common practice that the quality criteria for formative evaluation are less strict than for summative evaluation. Tillema (2001), however, emphasizes that the preference is for a development portfolio to be part of an integrated assessment procedure and that its use be combined with the use of other instruments, like an assessment centre, a development centre, peer assessment and 360° feedback. The outcomes of the other assessment instruments can be used as evidence in the portfolio. These can be classified as 'attestations'.

If the portfolio is used for the purpose of 'Prior Learning Assessment and Recognition' (PLAR) or in Dutch *Erkennen van Verworven Competencies (EVC)*, much of the portfolio evidence relates to the past. Raanhuis et al. (2003) have indicated that an PLAR portfolio (a portfolio of prior learning and work) is a specific type of 'assessment portfolio', which was the subject of the previous section. This section will address some other categories of portfolio evidence that have been discussed by researchers who have studied the use of a portfolio in the context of PLAR (cf. Klarus, 1998; O'Grady, 1991). An analysis will be made of how these categories relate to the four types of evidence that were discussed above.

4.1.3 Characteristics of the assessment portfolio

The aim of this section is to describe the characteristics of the assessment portfolio. As discussed before, an assessment portfolio appears relevant for highly-skilled immigrants who wish to enter the labour market or enrol in a Dutch study programme. It relates to the summative purpose of the recognition of competencies (see Figure 4-2 on page 71). The 'dossier portfolio' (Smith & Tillema, 2003) appears relevant for highly-skilled immigrants who wish to gain access to a regulated profession ('de jure' professional recognition) or enrol in a Dutch study programme

(academic recognition). The 'reflective portfolio' appears relevant for highly-skilled immigrants who wish to find a job in a non-regulated profession ('de facto' professional recognition). First, attention is given to the function and impact of the assessment portfolio. Again a distinction is made between the 'immediate outcomes' of the assessment portfolio and the 'distant outcomes' (cf. Plomp, 2002). Thereafter, the characteristics of the structure and content are explored.

Function and impact

Elshout-Mohr and Van Daalen-Kapteijns (2003) note that each type of portfolio has two purposes: to contribute to the learning and reflection of students and to present competencies. In a development portfolio, the emphasis is on the learning and reflection function, while the assessment portfolio puts emphasis on the presentation function. It should enhance the communication about competency development between the learner and the assessors. Klenowski (2002) points out that an assessment portfolio is mainly used for summative assessment purposes, for example, certification or selection. To illustrate the use of portfolio for professional certification, he points to the National Board for Professional Teaching Standards (NBPTS) in the United States that has incorporated portfolio into the process of the Board certification decision. To illustrate the use of portfolio is used in addition to other instruments to reach a certification decision. To illustrate the use of portfolio for the selection function, he refers to entrance to (higher) education. Elshout-Mohr and Van Daalen-Kapteijns (2003) remark that an assessment portfolio is generally used to gain entrance to the next phase in a study programme, e.g. an internship.

As discussed in Section 2.3, PLAR procedures are often focused on gaining access to study programmes for which the candidate does not have the regular entrance qualifications, or to gain exemptions for specific parts of a study programme. The portfolio instrument is a common instrument used in this procedure. However, the specific function of the portfolio in the PLAR procedure may vary from country to country (or branch to branch). In the United Kingdom, for example, the portfolio is used as both an assessment and recognition instrument. In the Netherlands, on the other hand, its use is accepted for formative assessment purposes only (cf. Klarus, 1998, 2002). The final assessment decision takes place on the outcomes of various other instruments like observations, practical exams and theoretical exams and the like. This decision often includes an advice on future competency development, which may form the basis for a personal development plan (PDP). Hence, an assessment portfolio also has a development function.

Table 4-3 gives an overview of the main functions of the assessment portfolio that were briefly discussed above.

Table 4-3Main functions of the assessment portfolio

Give insight in the competencies that were developed and the levels achieved (presentation function) in order to: Gain entrance to a study programme for which the learner does not have the required formal entrance

- qualification;
- Gain certification (or registration in a professional register);
- Gain credits or exemptions;
- Identify competencies that need further assessment (formative assessment);
- Identify competencies that need further development (personal development plan).

These functions relate to the 'hard' benefits of a PLAR procedure that were discussed in Section 2.3.1. The 'hard' benefits can be materialized in term of money (Verhaar, 2002). Hence, the distant outcome of an assessment portfolio might be 'saving money' (if the purpose is academic recognition) or 'earning money' (if the purpose is professional recognition). Moreover, the assessment portfolio might have the following immediate outcomes:

- It may facilitate entrance to a regulated profession;
- It may facilitate entrance to a study programme;
- It may result in exemptions;
- It may result in a personal development plan.

Structure and content

Portfolios used for certification or selection purposes require a detailed specification of standards and contents by the authorities responsible for formal assessment (Klenowski, 2002). The standards that are used as a frame of reference are externally defined. Depending on the purpose of the assessment the standards relate either to the study programme (academic recognition), the standards for professional certification ('de jure' professional recognition) or the job requirements ('de facto' professional recognition). Smith and Tillema (2003) distinguish between two types of assessment portfolio: a 'dossier portfolio' and a 'reflective portfolio'. As argued earlier, the 'dossier portfolio' seems most relevant for the first two purposes, while the 'reflective portfolio' seems useful for the last. Table 4-4 gives an overview of the distinctive features of both types of assessment portfolio according to Tillema (2001a).

	Assessment portfolio	
	Reflective portfolio	Dossier portfolio
Primary purpose	Broad focus	Specific focus
Type of evidence	Average performance	Best performance
Nature of portfolio	Reflective	Performance-oriented
Nature of portiono	(process)	(output)
Structure	Open	Prescribed
Amount of evidence	Limited	Numerous
Nature of evidence	Individual performance	Evidence about guided performance, possibly developed with others
Assessment	Open assessment	Restricted assessment

Table 4-4	Two types of assessment po	ortfolios (cf Tillema 2001a)
1 able 4-4	I wo types of assessment po	n ilonios (cl. Tillettia, 2001a	9

The 'dossier portfolio' has a specific purpose and includes evidence of best performances to show that the candidate meets the assessment standards. Reflection on the included material is generally not required (Klenowski, 2002). It is the product (the collected material) that counts, not the reflective thoughts on the included material (Tillema, 1998). The structure of the portfolio is in most cases prescribed (or restricted) by the authority conducting the assessment. The assessment is restricted. However, the portfolio instrument is likely to be one of the instruments used to take a recognition decision. Klenowski (2002) also remarks that in high stakes purposes of assessment (like certification or selection) the portfolio is embedded in a wider assessment procedure. This implies that the evidence is considered along with other evidence.

The characteristics of the 'reflective portfolio' are somewhat different. Smith and Tillema (2003, p.627) describe it as:

a personally collected array of work providing evidence of growth or accomplishments to be brought forward for promotion and admission. The compilation of evidence reveals best practices or key competencies chosen to meet certain criteria along with self-appraisal showing progress over time and understanding of accomplishments across different contexts. The annotation (the why and when) of evidence is as important as the evidence itself. As indicated earlier, Tillema (2001a) studied portfolio use for HRM purposes within organizations and businesses. The reflective portfolio may be part of a development programme, which is why it was noted that the assessment can be 'open', implying that more people than the assessors are present. As the highly-skilled immigrant are not yet employed, the 'assessment' will be restricted to the people who conduct the job interview. It will be a rather informal assessment as the portfolio may not be an official part of the assessment procedure.

Raanhuis et al. (2003) categorize the portfolio of prior learning as an example of an assessment portfolio. Klarus (1998) discusses some important features of a portfolio of prior learning with regard to structure and content. He advises the portfolio be organized as follows:

- Personal data;
- Summary of relevant learning and/or working experiences and competencies;
- Overview of developed competencies;
- Evidence of the developed competencies;
- Individual action plan for further prior learning assessment, education or work.

With regard to the evidence, Klarus (1998) distinguishes between 'direct evidence' and 'indirect evidence'. Direct evidence relates to the outcomes of formal learning (diplomas, certificates and qualifications), while indirect evidence relates to references, reports, products of work and course of attendance. This labelling shows the widely-established belief that formal learning has more value than non-formal or experiential learning.

Beijaard et al. (2002) note that each portfolio has two parts: a 'dossier' part and a 'reflective' part. The dossier part contains background information on the portfolio candidate that helps to interpret the materials. This information often addresses educational background, work experience, leisure time activities, and so on. To interpret the materials adequately, the portfolio should explain the context in which the materials were developed. Materials can be structured alphabetically, thematically or chronologically like in a Curriculum Vitae. The 'reflective' part links the 'dossier' to the assessment standards and reflects on the extent to which the assessment standards have been reached. It contains the competency claims and explains which materials form the evidence for the claims. The content of this part is generally structured using the competency standards as a guiding principle. With respect to the materials that can be used as proof of competence, Beijaard et al (2002) distinguish between three categories:

- Formal evidence, which relates to former assessment outcomes, like diplomas and certificates;
- Materials that provide standardized information about learning outcomes, for example the results form a learning style test. The information does not have to be interpreted by the portfolio assessor;
- Materials that need interpretation. This concerns qualitative information about performances in authentic situations.

Elshout-Mohr and Van Daalen-Kapteijns (2003) describe the following distinctive elements of an assessment portfolio:

- 'Vision Statement', which describes the vision of the candidate about which competencies are relevant;
- 'Competency claims', which are descriptions of competencies regarded as relevant by the candidate indicating the level of achievement. These claims should be accompanied by evidence that show the claimed level of competency development; and
- Personal Development Plan (PDP) that shows the possibilities for further competency development.

Elshout-Mohr and Van Daalen-Kapteijns distinguish between five types of portfolio evidence: artefacts, reproductions, attestations, statements and captions (cf. Barton & Collins, 1997). O'Gardy (1991), who discusses the use of portfolio for PLAR purposes in the United Kingdom, presents six evidence categories:

- 1. 'Accounts of experience', which are detailed descriptions of experiences to which the candidate wishes to refer in order to support the competency claim;
- 'Endorsements', which are statements from reputable sources supporting the claim of experience and/or competency development. Collins (1991) refers to these types of evidence as 'attestations", while Klarus (1998) calls them 'references';
- 'Products of experience', which is anything that is produced while obtaining relevant experience that exemplifies the competency claim of the candidate. Collins (1991) calls these 'artefacts' or 'reproductions';
- 'Certificates and course details', which are any previous diplomas or certificates as well as information on relevant courses attended whether these resulted in a certificate or not. Collins (1991) refers to these as 'attestations';
- 'Interviews or oral assessment', which is any type of information obtained by the assessor through formal and informal face-to-face contact and discussion with the candidate. Collins (1991) refers to these as 'attestation'; and
- 6. 'Other types of current assessment', which concerns any additional tasks, cognitive or practical, aimed at gathering further evidence about the competency level of the candidate (O'Gardy, 1991).

The first four categories relate to evidence derived from prior experiences and activities, while the last two categories relate to evidence that is gathered as part of the PLAR procedure. Whitaker (1989), who discusses the use of portfolio in PLAR procedure in the United States, remarks that the provider of the assessment procedure (often an educational institution) should indicate what type of documentation is required for what type of learning. Some documents describe experience or a particular learning process rather than providing evidence of learning. He emphasizes that the guality of the documents is more important than the guantity. The guality of the documentation can be improved if the candidate is guided in the portfolio development process. This process is the subject of discussion in Section 4.2. Bartram (1992 in Klarus, 1998) makes a distinction between evidence that relates to performance and evidence that relates to cognition. This evidence can be gathered in three different settings: at the workplace, at a simulated workplace, or outside the workplace. Performance evidence relates to process and product. Cognitive evidence relates to principles (why), procedures (how), and practice (what). Evidence on cognitive aspects can be gathered during criterion-referenced interviews (Klarus, 1998), or by means of reflection papers that are specifically prepared for the portfolio; Barton & Collins (1997) refer to these as products. The quality criteria that are generally applied to judge portfolio evidence are subject to discussion in Section 4.3 that addresses the key features of portfolio assessment.

4.1.4 Theoretical building block of the product characteristics of a portfolio instrument for highlyskilled immigrants

This section reflects on the previous discussion of product characteristics and presents a theoretical building block of the product characteristics of a portfolio for highly-skilled immigrants (TBB2). The first theoretical building block (TBB1) was presented in Section 3.3 (see Table 3-6 on page 66) addressing the characteristics of the context that are likely to have a positive influence on the introduction of a portfolio instrument for highly-skilled immigrants. TBB2 is presented in Table 4-5 on page 81. It addresses the five main issues that were discussed above distinguishing between a development portfolio and an assessment portfolio. The issues are: function, impact, structure and content, standards and evidence as proof of competence.

The product characteristics of the portfolio instrument depend on the 'targeted' objectives of the highly-skilled immigrants. For highly-skilled immigrants who wish to orient themselves in terms of their possibilities in Dutch society, a development portfolio seems most relevant; more specifically the 'personal development portfolio' (cf. Smith & Tillema, 2003). This purpose relates to the formative purpose of the recognition of competencies aimed at 'identification' (see Figure 4-2 on page 71). For highly-skilled immigrants who wish to apply for a job in a non-regulated profession ('de facto' professional recognition), or who aim to gain access to a regulated profession ('de jure' professional recognition) an assessment portfolio is more suitable. The first purpose relates to the social recognition of competencies, the second to the formal recognition of competencies. The assessment portfolio also seems appropriate for highly-skilled immigrants who need to enrol in a Dutch study programme (academic recognition). This purpose also relates to the formal recognition of competencies. The 'reflective portfolio' seems relevant for social recognition, the 'dossier portfolio' for formal recognition. The distinctive features of a development portfolio and an assessment portfolio are briefly summarized below, addressing all five issues.

Development portfolio

The main function of a development portfolio is to monitor and visualize a candidate's development process, support the reflection process, and communicate about his choices, learning objectives and learning processes. It relates to the 'soft' benefits of a PLAR procedure (cf. Verhaar, 2002). The aims and objectives of a development portfolio help a candidate to think about his achievements in terms of strengths and weaknesses. This enhances self-confidence and empowerment. In addition, the development of a portfolio makes the candidate aware of: a) the discrepancy between actual competencies and the required 'targeted' competencies, and b) the possible difference between self-perceptions about achieved competence levels and the judgements of others (peers or supervisors/counsellors). These discrepancies can serve as an incentive for learning and help to steer the learning process. The candidate is the owner of the portfolio and has an important say in the organization or structure of the portfolio. The content is loosely defined and depends on the learning objectives of the candidate. Reflection is an important aspect of a development portfolio, as are self-assessment and peer assessment. Therefore, these types of documents are often included as evidence in a development portfolio. Development portfolios are assessed for formative purposes to steer the development process. They serve both the assessor and the candidate.

Assessment portfolio

The main function of an assessment portfolio is to inform the reader about the level of competency development of the candidate. The information generally contributes to the taking of high-stakes assessment decision, like certification, selection or exemption. It relates to the 'hard' benefits of PLAR procedures resulting in entrance to a study programme, exemption (or credit transfer), or the awarding of a certificate or diploma (cf. Verhaar, 2002). The content requirements of the portfolio are specified by the competent authority (either the awarding body in case of certification or the educational institution for decisions regarding selection or exemption). These specifications relate to: the structure of the portfolio, the assessment standards, and the evidence to be included. The evidence that is commonly included relates to best practices, emphasizing the strengths of the candidate. The evidence can take various forms like accounts of experiences, products of experiences, references, diplomas or certificates. Reflection statements or self-assessment are usually not included in an assessment portfolio. The assessment portfolio is usually embedded in a wider assessment procedure.

Table 4-5 summarizes the product characteristics of the portfolio for highly-skilled immigrants. The main function of the portfolio relates directly to the expected impact of the portfolio. As explained earlier, a distinction is made between the immediate outcome and distant outcome.

Issues	Development portfolio	Assessment portfolio
Function	 Formative aimed at steering development Monitoring a person's learning process Visualizing a person's development Promoting and supporting the reflection process Communicating about choices, learning objectives and learning processes 	 Summative aimed at gaining formal or social recognition High-stakes purposes like certification, selection (with or without credit transfer) or PLAR Within PLAR, its function can relate to identification, assessment or recognition
Impact	Qualitative in nature, difficult to materialize (soft benefits)	Quantitative in nature, can be materialized in terms of credits or money (hard benefits)
Immediate outcome	 Be aware of the 'targeted objectives' and how these can be achieved Be aware of strengths and weaknesses Be aware of different options and make decisions about future steps Contribute to the development of reflective skills 	 Certification (or registration in a professional register) Entrance to a study programme The awarding of credits or exemptions The identification of relevant competencies that need to be further assessed
Distant outcome	Empowerment Self-confidence Self-regulated learner	Saving moneyEarning money
Structure and content	Open Dossier section and reflective section Key elements: Personal data (CV) Competency claims Analysis of strengths and weaknesses in competency profile (self- assessment) Personal development plan (PDP)	Prescribed Dossier section and reflective section Key elements: Personal data (CV) Vision statement Competency claims Personal development plan (PDP)
Standards	Internal	External
Evidence for proving competence	Open Average performance Best performance Reflection Self assessment Peer assessment	Restricted Best performance No reflection or self assessment

Table 4-5Product characteristics of the portfolio instrument for highly-skilled immigrants: a second theoretical
building block

4.2 Specifying characteristics of portfolio development for highly-skilled immigrants

This section discusses the main characteristics of portfolio development for highly-skilled immigrants. Section 4.2.1 presents common steps and strategies for portfolio development. It describes the portfolio development process in three countries: the United Sates, the United Kingdom and the Netherlands and discusses the findings from the literature that relate to the portfolio development process. Section 4.2.2 pays attention to the characteristics of the highly-

skilled immigrants and analysis the consequences for the provision of support during portfolio development. Section 4.2.3 reflects on the discussion and presents the third theoretical building block for this research study (TBB3); see Table 4-9 on page 92.

4.2.1 Common steps and strategies for portfolio development

As discussed in Chapter 2, the portfolio instrument is a common instrument in a PLAR procedure in the United States (cf. Whitaker, 1989), the United Kingdom (cf. CNAA, 1990; Johnsson, 2002), and the Netherlands (cf. Klarus, 1998; Thomas et al., 2000). Below the commons steps in the portfolio development process in each of the three countries are briefly reviewed together with the suggested measures for support. The discussion is completed with other findings from the literature that address the process of portfolio development by the candidate for either assessment or assessment purposes.

PLAR procedures are often used to facilitate entrance to (higher) education. The outcome of the process relates to entrance to a study programme, exemptions or a certificate or diploma. Whitaker (1989) discusses the common phases in the process of the identification, assessment and recognition of prior experiential learning. These are: identification, articulation, documentation, measurement, evaluation and transcription. Figure 4-3 shows the main steps in the process that are briefly discussed below:

- The purpose of the first step, 'identification', is to review prior learning experiences in order to identify potential college-creditable learning. A common instrument used is the portfolio instrument. Whitaker (1989) strongly advises the provision of counselling during the portfolio development process preferably as part of a formal portfolio development course. Important techniques to help in recalling and describing prior experiences are a time-line, CV, work descriptions or an autobiography;
- The second step, 'articulation', focuses on linking the learning that has already taken place to the chosen study programme. There should be a demonstrable relationship between the two. Whitaker (1989) discusses three models that can be used for the analysis of prior learning and the articulation of learning outcomes: the 'college course model', the 'block credit model', and the 'competency model'. Each model is briefly described in Table 4-6 on page 83;
- During the third step, 'documentation', different kinds of documents are gathered that make the link between experience and learning evident. The documentation comes in different forms, for example: work samples, reports, certificates, diplomas, letters of reference, and so on. These types of evidence correspond to the ones that were discussed in the previous section (see Section 4.1.2 and Section 4.1.3). Whitaker (1989) remarks that the quality of the submitted documentation is likely to increase when a portfolio development course is offered. He also indicates that some institutions in the United States omit the 'documentation' phase as they prefer to assess the learning directly;
- The fourth step, 'measurement', is crucial as it addresses the key question of 'how much has been learned and what level of competence has been achieved?' It relates to both the quantity and the quality of the learning (Bjørnåvold, 2000). This phase is discussed in more detail in Section 4.3.

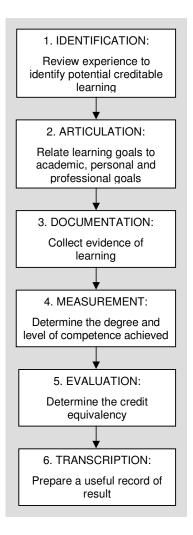


Figure 4-3 Model for the assessment of prior experiential learning (from Whitaker, 1989)

- The fifth step, 'evaluation', links prior learning to the standards of college-creditable learning in
 order to determine the amount of credit that can be awarded. Education institutions should define
 criteria for awarding credits at the institutional level and they should indicate who interprets and
 applies these criteria. The criteria can be content-based or competency-based (see Chapter 3),
 also depending on the type of model used for the analysis of prior learning (see Table 4-6).
- The last step is 'transcription'; this is more than merely an administrative step. The outcome of this phase should be a useful record of achievement. This step will be discussed in more detail in Section 4.3 as part of the discussion of portfolio assessment.

College course model	In a college course model, the learner compares prior learning to specific courses offered by the educational institution. The course objectives provide a set of indicators for assessing the learning and how many credits it is worth.
Block credit model	In a block credit model, a learner's general breadth and depth of knowledge is compared with the knowledge of a person who has graduated and is working in a particular field. It adopts a more holistic approach to what constitutes creditable learning.
Competency model	A competency model matches credit to the demonstration of competencies. An institution can define different types of competencies, for example writing, reasoning, performing a historical analysis, or organizing work.

Table 4-6 Description of three models for the analysis of prior learning (cf. Whitaker, 1989)

In the United Kingdom, the portfolio instrument takes a central position in the PLAR procedure. The portfolio is a collection of materials compiled by an individual to show what learning has been derived from prior experiences (CNAA, 1990). The former Council for National Academic Awards (CNAA) introduced PLAR into higher education as part of the Credit Accumulation and Transfer System (CATS). PLAR could result in credits as long as learning can be assessed. The main steps in the process are: a) the identification of a potential programme or award; b) portfolio development; c) portfolio assessment by a subject specialist; and d) final decision (CNAA, 1990). The chosen study programme determines the frame of reference for the analysis of the prior experiences and the learning that has occurred as a result of these experiences. CNAA (1990) describes the following steps in the portfolio development process:

- Compile a comprehensive list of prior learning experiences. These experiences can be the result of work, education, home and family, leisure interests, voluntary work, and so on.
- Identify the learning gained from these experiences. This is a very important step, which
 involves careful examination and reflection. Students need to identify their knowledge (what
 they know), their skills (what they can do), and other qualities that may be relevant for the
 study programme they have chosen.
- Express the learning in learning statements that precisely indicate the nature and level of learning. A student is expected to make a specific claim for the learning that has already taken place. This claim should specify the content and level of the learning as precisely as possible.
- Collect evidence of learning. The evidence can be divided into two categories: direct evidence and indirect evidence. The first includes project reports, case-study notes, conference papers, and work plans, while the second refers to statements from employers or clients, to documentation of courses an individual has followed, or to references.

Educational institutions should inform students on the portfolio assessment process, the guidelines for the nature of the evidence that is admissible, and the quality criteria applied (Johnson, 2002). Students should be guided in the portfolio development process (CNAA, 1990). Johnson (2002) suggests that each student should be assigned to a portfolio adviser. He distinguishes three key players in a PLAR procedure: the candidate, the portfolio advisor and the portfolio assessor. The candidate is primarily responsible for making the competency claim, but the portfolio advisor should support him in this process. He should inform him about the adequate portfolio evidence and review the portfolio before it is submitted to the assessors. Table 4-7 describes the main responsibility of each player distinguished by Johnson (2002).

Student	The student is the owner of the portfolio; he has the primary responsibility for the development process and submitting the portfolio to the assessor on time.	
Portfolio advisor	The portfolio advisor guides the student in the portfolio development process and discusses the adequacy of the submitted evidence. He can conduct a formative assessment before the portfolio is submitted to the assessor.	
Portfolio assessor	The portfolio assessor is responsible for the summative assessment of the portfolio and decides on the credit decision (sometimes by requesting a portfolio interview).	

 Table 4-7
 Key players in the portfolio development process (cf. Johnson, 2002)

In the United Kingdom, the portfolio is used as a recognition instrument (meaning that a recognition decision is often made on the basis of portfolio assessment alone). In some cases an 'assessment interview' (CNAA, 1990) or 'viva voce' (Johnson, 2002) is part of the procedure. If necessary, an assessor might ask a student to undertake further assessment, which could be an examination, a written assignment or a demonstration. The final step concerns the approval of the Board of Examiners to assign credit points to the prior learning subject. Once this approval has been given, the candidate receives a certificate of credit indicating the number of general credits that have been earned. Both the assessors and the Board of Examiners (sometimes called a

Validation Board) face concerns on issues such as reliability, validity, acceptability and creditability (Slusarchuk & Nicholl, 1990); see Section 4.3.

Bom, Klarus and Nieskens (1997) and Klarus (1998) describe the common phases of portfolio development in an PLAR procedure in the Netherlands. These are:

- Make an inventory of prior learning experiences;
- Choose relevant experiences;
- Define competencies;
- Compare competencies with the assessment standards (preferably derived from the national qualification structure);
- Gather evidence; and
- Write a personal development plan.

The steps correspond to those discussed earlier, although the link to a study programme is less explicit. Bom et al. (1997) indicate that the perspective for choosing relevant experiences depends on the targeted objectives of the candidate. It might be the candidate's interest and motivation, the labour market perspective, or enrolment in a study programme. The perspective influences the set of assessment standards that are used as a framework for self-assessment and the specification of the competency claim. Ideally, the standards are competency-based and incorporate different levels of achievement, from novice to expert. To guide the candidate in the specification of competencies one might use a criterion-referenced interview (Klarus, 1998). The competency claim should be accompanied by sufficient evidence (Bom et al., 1997; Elshout-Mohr & Van Daalen-Kapteijns, 2003; Klarus, 1998). The process concludes with the specification of a personal development plan. In this plan the candidates specifies the steps that need to be taken in order to achieve the targeted objectives. Among the possibilities are: gaining formal recognition for the developed competencies by completing a PLAR procedure, finding a job, or enrolling in a study programme (Bom et al., 1997).

Elshout-Mohr and Van Daalen-Kapteijns (2003) explain that portfolio development can either be a 'bottom-up' process or a 'top-down' process. The 'bottom-up' starts with an inventory of available evidence; what materials do I have available that could serve as portfolio evidence? Next, would be the specification of competency claims for which the materials are proof. After this, the candidate should turn back to the materials to see if these adequately support the formulated claims. In a 'top-down' process, the candidate starts with the specification of competency claims. Next, he starts looking for evidence to support these claims. Finally, he turns back to the competency statements to see if these should be revised. The common phases in the portfolio development process in PLAR procedures can best be classified as a 'bottom-up' process. In all three countries, the process starts with an inventory of prior learning experiences; what did I do previously. Next comes the question of how these experiences relate to the future plans (the targeted objectives). The candidate starts thinking of possible competency claims bearing these future plans in mind; what did I learn from these experiences? Next, comes the question of proof; with which materials can I prove the learning? It might be necessary to rewrite the competency claims because of the available evidence. Portfolio development is not straightforward but is rather a cyclical process.

Elshout-Mohr and Van Daalen-Kapteijns (2003) also address the differences in roles and responsibilities between the 'instructors' and the 'users' of the portfolio. These roles relate to what Johnson (2002) calls 'portfolio advisors' and 'portfolio assessors'. The first is responsible for:

- Informing and instructing the candidate about the main function of the portfolio, the structure and content, the requirements and useful strategies and techniques for the portfolio development process;
- Guiding the portfolio development process; and
- Determining whether the portfolio meets the standards so that it can be reviewed by the 'user' (assessors); formative feedback.

The second is responsible for:

- Taking note of the content of the portfolio;
- Using the information when communicating with the candidate;
- Referring to the content of the portfolio as a warrant for further action.

For a development portfolio, the 'portfolio assessors' are the teachers who use the portfolio to coach the candidate in their learning process, while the portfolio assessors of an assessment portfolio use the content to take a decision about entrance to the next phase of a study programme (Elshout-Mohr & Van Daalen-Kapteijns, 2003).

Klenowski (2002) points out that portfolio development draws on important learning processes. like self-assessment and reflective thinking. He remarks that these processes are useful because they foster the development of metacognitive skills that relate to knowing how, when, where and why one learns. Klenowski (2002) cites Brown and Campione (1990) who indicated that students will not acquire cognitive and metacognitive strategies unless these are explicitly taught. This means that portfolio candidates need to be taught the importance of self-assessment, dialogic learning and reflection in the portfolio development process. They also need to be taught how to use the strategies and get an opportunity to practice them, modify them and personalize them. This is also stated by Elshout-Mohr and Van Daalen-Kapteijns (2003), who note that it is important that portfolio candidates get the opportunity to find out which strategy fits them best. Klenowski (2002) draws the conclusion that this has the following implications for the 'portfolio pedagogy'. It should include "dialogical and interactive learning, scaffolding, collaboration, reflection and meaningful learning tasks and contexts" (Klenowski, 2002, p. 83). The dialogic learning process includes the discussion of and reflection on the portfolio evidence that is included in the portfolio with peers or the teacher. Klenowski (2002) cites Lyons (1998, p.5) who indicates that "validation and understanding emerge through portfolio conversations with peers, mentors, the presentation of portfolio evidence, and recognition of the new knowledge of practice generated through this process". Thus, if adequately guided, portfolio development is a valuable learning process regardless of its main function (assessment or development). Klenowski (2002) draws on research conducted by Vavrus and Collins (1991) that showed that portfolio development requires processes that facilitate the development of:

- Higher-order skills (problem-solving, analysis, synthesis, evaluation, creativity);
- Self-assessment and critique of own work, teaching, and learning experiences;
- Understanding of own learning processes;
- Self-regulation and self-direction in own learning;
- Reflectivity through examination of own beliefs and concepts;
- Enhanced professional identity and skills;
- Growth and commitment to that growth;
- Personal control through taking responsibility and ownership of own work;
- Understanding and the use of own strengths and successes (important for adult learners); and
- Appropriate professional behaviour through continuous learning and role-modelling.

As became clear in Chapter 3, portfolio development might be a completely new experience for highly-skilled immigrants who were educated and trained in a reproductive educational culture. They are probably not familiar with processes like self-assessment and reflective thinking. This makes the need for adequate guidance and support even more important. However, portfolio development might contribute to the development of some very important aspects that are important for their further professional development in the Netherlands (e.g. reflectivity through examination of own beliefs and concepts, enhanced professional identity and skills). The next section will address the support measures required to guide highly-skilled immigrants in the process of portfolio development.

4.2.2 Measures to facilitate portfolio development for highly-skilled immigrants

In first instance, the portfolio development process might seem a rather straightforward process; however, the underlying process is quite complicated and draws on metacognitive skills which are not easy to develop (cf. Klenowski, 2002). Wade and Yarbrough (1996) point out that the development of reflective skills through portfolio development can be further enhanced if educators take the following measures:

- Relate to a person's initial understanding of portfolio (do they have any previous experience with this instrument) and specifically address the goal of portfolio development in the particular course or study programme.
- Encourage student ownership and individual expression by emphasizing the positive influence portfolio development can have on (personal) development processes; students are more likely to invest time in a product that they view as valuable and relevant for later professional performance.
- Provide structure to counter the open-ended nature of a portfolio through assignments, due dates, classroom discussion on portfolio progress, and constructive feedback of students or portfolio advisers on items included in the portfolio so far.
- Evaluate the portfolio development process and how students use it in combination with the final product.

These measures are even more important if the candidates do not have any previous experience with portfolio development. Klenowski (2002) remarks that the pedagogical approach used to guide candidates in portfolio development requires: teachers (or 'portfolio advisors') to:

- Support students in the inquiry into learning and the identification of strengths and weaknesses;
- Inform students about important evidence and the quality criteria for this evidence in relation to the applicable assessment standard (Johnson, 2002 speaks of a 'student manual' that clearly specifies all the requirements in this respect.);
- Develop the ability of students to select evidence in relation to these standards;
- Develop a constructive culture of critique;
- Provide opportunities for formative assessment;
- Encourage students to be reflective about their own learning process;
- Facilitate learning, to be a guide and not a provider of information.

Elshout-Mohr and Van Daalen-Kapteijns (2003) remarks that portfolio candidates should experience the usefulness of portfolio development. They refer to research undertaken by Sluijsmans (2002) that shows that it is important that candidates review each others portfolios. This enhances the understanding of the assessment standards and they will experience the importance of a good structure and the explanation of the included evidence. However, for candidates who have been educated in a reproductive learning culture, peer assessment is just as unfamiliar as self-assessment and reflective thinking. This implies that they need to practice these skills during the portfolio development process.

Teekens (2002) discusses the specific requirements of lecturers teaching a class of international students. Some of these requirements also apply to portfolio advisors when guiding highly-skilled immigrants in the development of a portfolio of prior learning. Therefore, these are briefly discussed below. First of all, Teekens points to the issue of age and gender. She points out that some students might have problems accepting young, female lecturers because in many cultures age and wisdom are almost synonymous. Elder, more experienced teachers gain more respect than younger teachers even though they might be very knowledgeable in their field. Students from 'masculine societies' (Hofstede, 1980, 1991) might have difficulties in accepting a female lecturer. In these societies the roles of men and women are clearly defined and separated; the teaching profession belongs to the male domain. Secondly, Teekens (2002) points to the issue of

using a non-native language of instruction. In an international group, English almost automatically becomes the language of instruction even though it might not be the mother tongue of any of the participants. It is very important to be aware of misunderstandings that may arise from this. Each national group uses the English language in their own manner. People might understand the words but misunderstand the meaning because they are not familiar with the cultural context of the speaker (Teekens, 2002). It is therefore important that lecturers of international classrooms are able to rephrase sentences that are not clear or define words that are not understood in different ways. The use of audio-visual aids might be helpful in some situations.

In the context of this research study, highly-skilled immigrants are expected to develop a portfolio in the Dutch language (which is not their native language). In explaining the process of portfolio development there are a lot of concepts that are not easy to explain. Hence, it is important that the 'portfolio advisor' is creative and flexible and uses different techniques to explain the purpose of the portfolio instrument. With regard to the cultural differences in teaching and learning styles, Teekens (2002) remarks that it is important for lecturers in an international setting that they:

- Are able to make their learning objectives and teaching methods explicit to students;
- Are able to discuss with students how to cope with the cultural differences in this respect;
- Have a comprehensive approach to instruction and are able to combine teacher-directed methods of instruction with students-directed methods;
- Are able to involve students from different cultures in the learning process by using examples and cases from various cultural settings;
- Assess students with due respect for different academic cultures. This implies that they should respect the tradition in some cultures of giving a rather long introduction before asking the real question.

Baumgratz (1993) remarks that knowledge of specific cultural behaviour is useful, but it does not always contribute directly to the solution of confrontation in international classrooms. Nonetheless, it is important that lecturers recognize the cultural roots of their students (Ballard & Clanchy, 1992; Teekens, 2002). Hofstede (1980, 1991) discusses five dimensions for classifying national cultures. These dimensions relate to issues that are present in each society, namely identity, hierarchy, gender, truth, and virtue (Hofstede, 1980, 1991; Hofstede et al., 2002). For each dimension Hofstede presents two extremes resulting in ten 'synthetic cultural profiles' (Hofstede et al, 2002). Each dimension is briefly explained below:

- Identity mainly deals with the relationship between the individual and the group. It can be viewed as a spectrum ranging from individualism to collectivism.
- Hierarchy relates to the degree of inequality between people. Hofstede distinguishes between cultures with an extremely high power distance and those with an extremely low power distance.
- Gender deals with the problem of gender roles and the control of aggression. It is viewed as a
 continuum ranging from masculine to feminine. Alternative labels are 'achievement-oriented'
 versus 'care-oriented' (Hofstede et al, 2002). The tougher societies with unequal role
 distribution between males and females are classified as being masculine, while the more
 care-oriented societies with more equal role patterns are classified as feminine.
- Truth deals with the problem of how people in a culture deal with the unpredictable and ambiguous. Alternative labels addressing this aspect of culture are 'uncertainty avoidance' versus 'uncertainty tolerance', or 'one-truth' orientation versus 'many-truths' orientation (Hofstede et al, 2002).
- Virtue deals with the problem of choosing between the future and the present; it relates to 'long-term orientation' versus 'short-term orientation'. Hofstede et al (2002) point out that the dimensions of truth and virtue are complementary in a society. They both relate to the society's attitude towards time and tradition.

Table 4-8 provides an overview of each cultural profile addressing the core value, the core distinction and three aspects of communication (language, non-verbal communication and evaluation). Next, attention is given to the cultural aspects that will make the development of a portfolio more difficult.

Dimension	One extreme	Other extreme
Identity	Individualism	Collectivism
Core value Core distinction Language Non-verbal Evaluation	 Individual freedom Me versus others People are verbal and self-centred. They use I and me a lot People make eye contact freely. In groups they are likely to stand out freely People use other people and judge the importance of others in terms of how useful they are 	 Group harmony In-group versus out-group People can be very silent especially in an out-group. They use we instead of I People are physically close with in-group, but reserved with out-group People do a great deal for friends and expect the same in return
Hierarchy	Low Power Distance	High Power Distance
Core value Core distinction	 Equality between people Responsible for task X versus not responsible for task X 	Respect for statusPowerful versus dependent
Language	 People talk freely in any social context 	 People are very verbal but soft-spoken and polite
Non-verbal Evaluation	People are informal and unceremoniousPeople talk back to anybody	 People are restrained and formal People tend to blame downward for any problem
Gender	Masculinity	Femininity
Core value Core distinction	WinningMan versus woman	 Caring for others especially the weak Those who care for others versus those who need care
Language	 People are loud and verbal. They tend to criticize and argue with others 	 People do not raise their voices. They like small talk and agreement
Non-verbal	 People like physical contact, direct eye contact and animated gestures 	 People do not take much room, are warm and friendly
Evaluation	 People are hard to please, tend to be overachievers, are defensive and blame others for their mistakes 	 People tend to pity others and themselves and avoid excessive achievements
Truth	Weak Uncertainty Avoidance	Strong Uncertainty Avoidance
Core value Core distinction Language Non-verbal	 Exploration Urgent versus can wait People are not loud, they can be imprecise and ask open-ended questions People are relaxed, informal and have no taboos 	 Certainty True versus false People are very verbal, well-organized, somewhat loud and emotional People are animated in using hands but uncomfortable with physical contact
Evaluation	 People judge in pragmatic, not moral terms 	 People quickly and sometimes prematurely judge a situation to establish right and wrong
Virtue	Short-term orientation	Long-term orientation
Core value Core distinction Language	 Saving face Proper versus improper People talk a lot, they enjoy talking about the past 	 Long-term benefits Does versus does not serve a purpose People are direct and focused, they ask questions about implications of actions
Non-verbal	 People are ceremonious, attentive, stylish, warm and formal 	 People are restrained and unceremonious
Evaluation	 People are fatalistic and live from day to day 	 People tend to blame themselves, they are careful planners

Table 4-8Ten culture profiles (cf. Hofstede et al., 2002)

For candidates from a 'collectivist' culture it may be awkward to take part in self assessment and peer assessment. They are probably not used to stating their own strengths and they might find it inappropriate to critically judge the portfolio structure and content of their 'peers'. The same applies to candidates from cultures with a 'high power distance'. For them it may be awkward to review the portfolio of an elder, more senior portfolio candidate. For candidates from a 'masculine' society it may be difficult to view another female candidate as a serious peer with whom to discuss the weaknesses in the portfolio evidence that he has available. For candidates from a culture that scores highly on 'short-term orientation' and 'weak uncertainty avoidance' it may be a new experience to work on a personal development plan. They might not be used to specify learning objectives and thinking about how these can best be achieved. Planning for the future fits in better with a culture that scores highly on 'long-term orientation'. However, it is very important that highly-skilled immigrants become aware of the cultural differences between the country of origin and their new home country. Therefore, the portfolio advisor (as well as the other people who guide them in their learning process) should help them to take these into account. This is also important with respect to the assessment standards that are used to judge the competency level of the candidate.

As noted in Chapter 3, competency definitions are culture specific. This implies that highly-skilled immigrants might not directly relate to the competencies that are viewed as important in the Netherlands. As Ballard and Clanchy (1992) point out, it should be overtly explained to candidates from another culture what is expected of them. They list a number of measures that may assist in the adaptation process that needs to take place:

- Recognize the cultural roots of what in the first instance may seem to be inadequate learning habits;
- Explain overtly to students rooted in another education culture what the appropriate learning strategies are that are valued in this educational culture;
- Model appropriate behaviour;
- Build in examples of suitable styles of thinking in daily teaching practice;
- Point out effective study habits in an encouraging manner.

Whitaker (1989) and Johnson (2002) advise the development of a portfolio development course to inform candidates about the basic principles behind portfolio development. This course should bear in mind the measures listed by Ballard and Clanchy (1992), as well as those discussed by Teekens (2002). Furthermore, it is important that the pedagogical approach incorporates the requirements discussed by Wade and Yarbrough (1996) and Klenowski (2002) to foster the development of important metacognitive skills that are essential for the portfolio development process.

4.2.3 Theoretical building block for the process of portfolio development by highly-skilled immigrants

This section reflects on the previous discussions in order to summarize the main findings in a third theoretical building block (TBB3). TBB3 is presented in Table 4-9 on page 92 and addresses the main characteristics of the portfolio development process by highly-skilled immigrants. TBB3 addresses three main issues that are briefly reviewed below. These are: the steps and strategies in portfolio development, measures for guidance and support and the main roles and responsibilities of the people involved in the process.

Steps and strategies for portfolio development

Regardless of the main function of portfolio (development or assessment) there are a number of common steps and strategies for portfolio development. These should take the candidate through the process of identification, selection, self-assessment, reflective practice and documentation. Elshout-Mohr and Van Daalen-Kapteijns (2003) distinguish between a 'bottom-up process' that

starts with the identification of available portfolio evidence (materials that could support competency claims) and a 'top-down process' that starts with the specification of competency claims. The common practices in three countries (the United States, the United Kingdom and the Netherlands) show that for the PLAR procedures it is common to start 'bottom-up' by making an inventory of available experiences. Next, comes the selection of those experiences that are relevant for the 'targeted objective'. Then, the candidate specifies learning outcomes on the basis of these experiences. Elshout-Mohr and Van Daalen-Kapteijns (2003) speak of competency claims. Whitaker (1989) discusses three models for the analysis of prior learning experiences: the 'college course model', the 'block credit model', and the 'competency model' (see Table 4-6 on page 83). The learning outcomes should be compared with the assessment standards used. Preferably these standards should be competency-based and address different levels of competency development (see TBB1 that was presented in Chapter 3; Table 3-6 on page 66). The competency claims should be accompanied by portfolio evidence. Useful evidence was discussed in Section 4.1. The process ends with the writing of a Personal Development Plan (cf. Klarus, 1998; Elshout-Mohr & Van Daalen-Kapteijns, 2003).

The main steps are summarized in Table 4-9 on page 92 (TBB3). No distinction is made between a portfolio that aims to enhance the orientation process of the highly-skilled immigrant (development portfolio) and a portfolio that aims to enhance social recognition or formal recognition (assessment portfolio). The difference between these two relate to the function, impact, structure and content (see TBB2 that is presented in Table 4-5 on page 81). This Table shows that the structure of a development portfolio is generally open, which leaves the portfolio owner with many choices of how to organize and document his learning. The structure of an assessment portfolio is prescribed and generally there will be more guidelines for the inclusion of evidence. In both instances it is recommended to provide guidance during the portfolio development process, especially if the portfolio candidate has no prior experience with portfolio development.

Measures for guidance and support

The discussions in Section 4.2.2 have shown that it is important that the portfolio candidates receive adequate support during the process of portfolio development. This can be done individually or in a group (Bom et al., 1997; Johnsson, 2002). Experiences in the United Sates and the United Kingdom show that the quality of the submitted portfolio increases if candidates follow a formal portfolio development course (cf. Whitaker, 1989; CNAA, 1990, Johnson, 2002). The need for guidance and support appears to increase if the portfolio candidates come from educational cultures that value reconstructive learning and teaching strategies more than socio-constructive strategies. As discussed in Section 3.2.4, there are so many opposing characteristics between the reproductive learning approach and the socio-constructive approach on which competency-based learning and assessment is based, that it is essential to make the teaching and learning strategies explicit. In this respect it is important to be aware of:

- Cultural differences with regard to the role of a teacher and a student;
- Cultural differences with regard to communication;
- Cultural differences with regard to assessment;
- Obstacles that relate to the use of a non-native language of instruction.

For candidates who were educated in educational cultures that value a more conserving attitude towards knowledge (cf. Ballard & Clanchy, 1992) important processes for portfolio development, like self-assessment and reflective thinking (cf. Klenowski, 2002) are completely new. These aspects need to be taught and practiced before they can be mastered (Klenowski, 2002). Wade and Yarbrough (1996) have pointed out some important measures that should be taken to enhance the reflective skills of portfolio candidates. If a portfolio development course is

considered, it is also important to take note of the measures discussed by Teekens (2002) when teaching an international group. TBB3 summarizes the required measures that were discussed earlier (see Table 4-9).

Table 4-9	Main characteristics of the process of portfolio development by highly-skilled immigrants: a third
	theoretical building block

Issues	Description
Steps and strategies for portfolio development	 Portfolio development is a cyclical process that generally starts 'bottom-up' (inventory of experiences). It is based on important learning processes like self assessment and reflective thinking (Klenowski, 2002). Common steps are: Identification of prior learning experiences Selection of relevant experiences Specification of learning outcomes (using a 'college course model', a 'block credit model' or a 'competency model' (Whitaker, 1989)) Comparison of learning outcomes with the assessment standards Gathering evidence Writing a personal development or action plan
Measures for guidance and support	 The main function of the portfolio should be clearly communicated to the candidates. The assessment standards should relate to different levels of competence that facilitate the self-assessment process. The portfolio evidence that is admissible should be clearly specified, preferably with examples. Inexperienced portfolio candidates need sufficient guidance and support during the process of portfolio development, either individually or in a group. An official portfolio development course could be considered. To cope with a heterogeneous group (in terms of educational culture) the portfolio advisor should (Ballard & Clanchy, 1992; Teekens, 2002): Be explicit about learning objectives and teaching strategies Discuss how candidates should cope with cultural differences Use different teaching strategies Use examples from different cultures Be able to explain concepts in different ways and be able to rephrase sentences that are not understood Be aware of words with a cultural connotation Provide different sources of information (verbal and non-verbal) Make provisions for group discussions and interactions with other candidates to compare the portfolio content among each other (the course leaders should be aware of cultural sensitivities in this respect) To enhance reflective thinking, the portfolio advisor should (Klenowski, 2002): Support students about important evidence and the quality criteria for this evidence in relation to the assessment standards applied Develop the ability of students to select evidence in relation to these standards Develop the ability of students to select evidence in relation to these standards Pevoide opportunities for formative assessment Encourage students to be reflective about their own learning process Facilitate learning, to be a guide and not a provider of information
Main roles and responsibilities	 Common roles are (Johnson, 2002; Elshout-Mohr & Van Daalen-Kapteijns, 2003): Portfolio candidate: responsible for the development of portfolio Portfolio advisor: responsible for guidance and support; conducts a formative evaluation before it is submitted to the assessor Portfolio assessor: responsible for the portfolio assessment; in a development portfolio the assessor uses the content to coach the candidate in his learning process, in an assessment portfolio the assessor uses the content to take an assessment decision The role and responsibilities of the key players in the process must be clearly defined. The role of the adviser and assessor must be clearly separated, especially for an assessment portfolio.

Main roles and responsibilities

Different people play a role in the process of portfolio development. Johnson (2002) differentiates between: the candidate, the portfolio advisor and the assessor. The candidate is responsible for portfolio development and submitting the portfolio to the advisor and the assessor. The portfolio advisor should inform the candidate about the main function of the portfolio, the content and the requirements. They should take the measure for guidance and support that were discussed above. It is their task to review the portfolio before it is submitted to the assessor. The assessor 'judges' the portfolio. Elshout-Mohr and Van Daalen-Kapteijns (2003) indicate that the assessors of a development portfolio are the lecturers who coach the candidate in his learning process. For an assessment portfolio, the assessors are the lecturers who use the information in the assessment decision that they need to take. It is important that the assessors refer to the content of the portfolio in their decision. This increases the relevancy of portfolio development. Table 4-9 gives a summary of the main characteristics of the process of portfolio development by highly-skilled immigrants.

4.3 Specifying characteristics of portfolio assessment to enhance the recognition of competencies of highly-skilled immigrants

The aim of this section is to discuss the portfolio assessment process and specify important characteristics of this process to enhance the recognition of competencies of highly-skilled immigrants. Section 4.3.1 presents the key concepts of portfolio assessment and discusses different approaches to assure the quality of the process. Portfolio assessment is likely to be a new experience also for many of the assessors. Section 4.3.2 discusses some important requirements of portfolio assessors and describes quality measures that should be taken at the institutional level to enhance the quality of portfolio assessment. Section 4.2.3 summarizes the main issues and presents the fourth theoretical building block (TBB4); see Table 4-12 on page 100.

4.3.1 Key concepts of portfolio assessment

Portfolio assessment is an interpretive process (Griffin, 1998 in Klenowski, 2002). The interpretations come from the evidence included in the portfolio. Each portfolio contains a unique picture of an individual learner. The nature and quality of the evidence is crucial. The better the evidence the more likely it is that the inferences made about a candidate's level of achievement are accurate. Portfolio assessment can serve a formative function or a summative function (Klenowski, 2002).

- The formative function relates to the identification of competencies. The outcomes of formative assessment are used to steer the development process of the candidate, or to contribute to an assessment decision. Portfolio assessment often has a formative function in an PLAR procedure. It is used in the first phase that focuses on the 'identification of competencies'. The final assessment decision is taken on the basis of the outcomes of the assessment phase that might include: criterion-referenced interviews, authentic assessment, simulation or observation (Klarus, 1998).
- The summative function of portfolio assessment concerns the assessment and recognition of competencies. As a summative tool, portfolio assessment results in an assessment decision. This is often the case in many of the PLAR procedures in the United Kingdom. Portfolio assessment takes a central place in these procedures and directly leads to the recognition or rejection of the claim of competence. It concerns a careful assessment of the portfolio evidence that is submitted as proof of competence. In some cases an 'assessment interview' (CNAA, 1990) or 'viva voce' (Johnson, 2002) is part of the procedure. In the Netherlands, the portfolio instrument is not yet accepted as a recognition instrument (Klarus, 1998, 2001).

In Section 4.1.1 a distinction was made between a development portfolio and an assessment portfolio (cf. Elshout-Mohr & Van Daalen-Kapteijns, 2003; Smith & Tillema, 2003; Tillema, 2001a, 2001b). In a development portfolio, portfolio assessment has a formative function (to steer and monitor the development process). In an assessment portfolio, portfolio assessment can have both a formative and summative function.

Portfolio assessment is a very complicated process because of the wide variety of evidence included and the combination of purposes for which the portfolio can be used (Klenowski, 2002). Research into the quality of portfolio assessment shows that the reliability of the assessment is one of the weaker aspects of the use of portfolios in education (Beijaard et al. 2002). O'Grady (1991) contributes to the reliability discussion of portfolio assessment by presenting a quantitative methodology that could improve the reliability of portfolio assessment. This methodology can help the assessors to approach each portfolio with the same kind of mental template against which judgements are made. O'Grady (1991) remarks that the adoption of a common framework within which the judgements can be guarded might enhance the growth of the assessment culture. It can serve as a tool to assure consistency in thinking. Klarus (1998) has introduced this framework into Dutch PLAR practices. The approach is also used in the national assessment procedure for prospective teachers that is the subject of discussion in the first case study of the research project (cf. Stoas, 2000; Klarus, 2002). For this reason, O'Grady's framework is briefly discussed below. The framework itself is a matrix of the six types of portfolio evidence that were discussed in Section 4.1.3, namely: accounts of experience, endorsements (or references), products of experience, certificates or course details, interviews or other forms of oral assessment, and current assessment (see Table 4-10).

Evidence	Quality indicators				
categories	Authenticity	Retention	Relevance	Quantity	Variety
Account of experience					
Endorsements					
Products of experience					
Certificates and course details					
Interviews					
Current assessment					

Table 4-10 Exemplar assessment sheet based on O'Grady's quantitative approach

Next, O'Grady distinguishes five quality indicators:

- 1. Authenticity, which is the degree of the assessor's confidence that the evidence is in fact what it claims to be and forms an accurate reflection of the candidate's competence. If the assessor is convinced that the candidate and referees are wholly honest, then authenticity will be at a maximum.
- 2. Retention, which is the degree of the assessor's confidence that the level of competence exemplified by the individual category of evidence relates to the candidate's current level of competence. Generally, a product or certificate of recent origin will be expected to receive a higher retention rate than one of an earlier date. However, factors such as the nature of the competence (some are more enduring then others) and the degree of practice in the past will influence the rating given by the assessor.
- 3. Relevance, which is the degree to which the evidence presented (for a particular aspect of competence) links up with the assessment standards. An account of experience expressed in detailed terms that closely reflects the details of the assessment standards will gain a high 'relevance' rating, especially if it is supported by a similarly detailed endorsement (which will gain the same rating).

- 4. Quantity, which refers to the level of practice by the candidate indicated in the evidence source. In general terms one could say that it relates to the duration, amount or extent of the experience. Accounts of experience covering a few years receive a higher score than those covering a few months even if the activities described are the same. For the evidence category 'products', a high 'quantity' score implies that there are a great number of products present, although it is possible that one product might constitute evidence that certain competencies have been practised repeatedly. For certificates and courses, length of training and the opportunity to practice competencies relevant for the purpose of the assessment, would be significant in making a 'quantity' decision.
- 5. Variety, which refers to the extent to which there is evidence of relevant performance in a variety of contexts. Accounts of experience or endorsements derived from different places of employment or different posts, or products using a variety of facilities would gain a higher score for 'variety'.

O'Grady (1991) recommends that portfolio assessors rate each piece of evidence in terms of the above-mentioned quality indicators, using zero for a low score and three for a high score. The assessors can use an assessment sheet like the one depicted in Table 4-10. The use of this framework limits variability in the decision-making process. However, the assessors still have to interpret the materials and the contexts in which these have been gathered before they can assign a score. Moss (1984) explains that consistency in assessment can be approached from a psychometric perspective and from a hermeneutic perspective. To illustrate this, the inter-rater reliability in portfolio assessment can be improved by means of portfolio standardization and assessment objectification, or by using an increasing number of assessors (cf. Beijaard et al., 2002; Driessen, Van Tartwijk, Vermunt & Van der Vleuten, 2003). The first two measures address reliability from the psychometric paradigm, the second measure relates to the hermeneutic approach. Beijaard et al. (2002) note that portfolio standardization and the use of analytical criteria to enhance reliability will in turn pose threats to validity. It limits the possibilities for describing personal learning experiences in authentic situations. They cite Schulman (1998) to remind us that portfolios were introduced to make more qualitative decisions based on authentic evidence coupled to unique learning experiences.

Moss (1984), who is in favour of the hermeneutic approach, suggests warranting inter-rater reliability through critical dialogue among different assessors (see Section 3.2.3). She explains that initial disagreement among assessors does not invalidate the assessment, but rather forms an impetus for dialogue, debate, and the search for enriched understanding. The whole process should be well documented so that others can become part of the dialogue by evaluating (and challenging) the conclusions themselves. Tigelaar, Dolmans, Wolfhagen and Van der Vleuten (2005) also advocate using a hermeneutic, interpretative approach to portfolio assessment. The approach they suggest aims to generate a maximum diversity of interpretations. Tigelaar et al. (2005) recommend that portfolio assessors should continually challenge and revise their initial set of interpretations by looking for counter-examples in the submitted materials. They should keep a record of their interpretations. Moreover, they should discuss any conflicting interpretations with each other or with the candidate and or his coach or supervisor (portfolio advisor). Tigelaar et al. (2005) refer to the work of Webb, Endacot, Grag, Jasper, McMullan and Scholes (2003) who recommend organizing 'tripartite meetings'. During tripartite meetings, the candidate, the supervisor (portfolio advisor) and the assessor discuss the interpretations of the candidate's competency level that the assessor has derived from the candidate's portfolio. These meetings contribute to the understanding of the candidate and that of the portfolio advisor about how the assessor passes judgment. The candidate has the opportunity to explain his performance and present additional information. The 'tripartite meeting' relates to a 'assessment meeting' (CNAA, 1990) or a 'vive voce' (Johnson, 2002). In the research study, the term 'portfolio interview' is used. The whole process should be carefully documented to inform others about the outcomes.

The interpretative, hermeneutic approach to portfolio assessment is very time-consuming (Tigelaar et al 2005). Tigelaar et al. (2005) note that the portfolio should be read by at least two assessors. The assessors should carefully read each portfolio, challenge, revise and debate their interpretations, consider all the portfolio evidence, and document how they arrive at interpretations and conclusions. The documents should become part of the audit trail that shows that the assessment was performed fairly and responsibly. The audit trail will be further discussed in Section 4.3.2 with reference to the experiences in the United States (cf. Whitaker, 1989) and the United Kingdom (cf. Johnson, 2002).

To enhance the trustworthiness of the assessment, Tigelaar et al (2005) draw attention to the 'transferability' of the assessment outcome. They refer to Guba and Lincoln (1989) who define 'transferability' as the extent to which others are able to determine whether the assessment interpretations are applicable in their own context. Guba and Lincoln note that transferability is much more important than 'generalizability'. This requires that there is sufficient information about the context in which the assessment took place. Whitaker (1989) notes that the transcripts that form the outcome of the assessment should communicate effectively to 'third parties', like employers or other educational institutions. He states that good transcripts inform readers about:

- The content that was assessed (e.g. a description of the competencies that were assessed);
- The level that was achieved;
- How the learning was acquired;
- How the learning was assessed and by whom.

An important issue that should be added could be 'how the quality of the assessment is assured'. Bjørnåvold (2000) recommends informing readers on the date of the assessment, the assessment approach and the standards that were used. This contributes to what he calls the 'transparency' of the assessment procedure. Transparency is especially important if the condition of learning and assessment is different to what is probably assumed by third parties (Bjørnåvold, 2000).

4.3.2 Supportive measures to assure the quality of portfolio assessment

Klenowski (2002) indicates that the assessment of portfolios has important professional development implications for teachers and assessors. They need to feel confident with certain key concepts of the assessment culture. This requires support during the implementation of the principles in practice in the form of exemplars or training. Below, attention is given to different supportive measures that may enhance the quality of portfolio assessment. These measures come from PLAR practice in the Netherlands, as well as PLAR practices in the United Kingdom and the United States.

In the Netherlands, the use of PLAR is gradually increasing. In the secondary vocational sector PLAR is offered by the *Regionale Opleidingscentra (ROCs)* [regional educational centres] or the *Kenniscentrum Bedrijf en Beroep (KBBs)* [Vocational Education Business Community Knowledge Centre]. To enhance the quality of the assessments, four KBBs have drawn up a competency profile for (portfolio) assessors (Knowledge Centre *EVC*, 2003). The major competencies are briefly discussed below:

- The assessor is able to assess and judge the competency level of an candidate on the basis
 of the evidence in a portfolio, a criterion-referenced interview or an observation of a practical
 assignment.
- The assessor is able to adequately use the assessment standard to assure the validity of the assessment outcome. In secondary vocational education the assessment standards relate to the national qualification framework.
- The assessor is aware of his own personal reference framework and makes sure that this framework does not interfere with the assessment standards. The temptation for the assessor

to overvalue one's own conception of learning is one of the most serious problems of the assessment of learning (Whitaker, 1989). To prevent this, Whitaker (1989) notes that it is crucial that there is clarity about the learning objectives and the assessment standards before the assessment starts.

- The assessor is able to communicate with the participant effectively, create a positive assessment climate and a basis of trust.
- The assessor is able to cooperate with fellow assessors in such a manner that the objectivity
 of the assessment outcome is enhanced. Tigelaar et al. (2005) suggest implementing an
 interpretative, hermeneutic approach that generates a maximum of diversity of interpretations.
- The assessor is able to draw up a relevant and realistic follow-up programme that enables the participant to reach his targeted objective.

To assure the quality of the assessment, the Knowledge Centre *EVC* (2003) suggests that each assessment be conducted by two assessors. One of them can be less experienced than the other, but both should be carefully selected. The proposed selection criteria of prospective assessors relates to: work expertise in the sector, expertise in the subject that is assessed, an educational background that relates to the level that is assessed and knowledge of the assessment standards (the Dutch qualification framework). It is important that prospective assessors can practice their future tasks in a training context. Hence, they need to be trained in all phases of the assessment process: portfolio assessment, conducting criterion-based interviews, observing practical assignments, providing final judgments and reporting to the participants. It is recommended that the assessors are assigned an individual coach to discuss any problems encountered. The checklist of competencies should be used to check that assessors maintain their level of expertise. Important instruments in this respect are communication with participants, cooperation with colleagues, and peer review meetings.

Te Lintelo, Van Berkel and Castelijns (2002) discuss the role of the assessor in an PLAR procedure at the *Hogeschool van Amsterdam* and note how the quality of this process is guaranteed. This corresponds to the suggestions made by the four *KBBs* that were discussed above (cf. Knowledge Centre *EVC*, 2003). Te Lintelo et al. (2002) suggest working in teams of two assessors for each assessment. One of the assessors comes from the educational institute, the other comes from practice. The key tasks of the assessors are: the substantive assessment of the portfolio, conducting the portfolio interview, and the final assessment and feedback to the participant. The assessors were trained in the key instruments used and were certified by the institution. To exchange experiences and to discuss the assessment instruments, the institution organizes annual peer review meetings.

The development of assessors is one measure to assure the quality of the assessment process. To enhance trustworthiness, Tigelaar et al. (2005) noted the importance of an audit trail. Johnson (2002) also draws on this aspect in the context of prior learning assessment in the United Kingdom. He notes that institutions that offer a PLAR procedure should have an institutional policy towards portfolio assessment that specifies the function of portfolio assessment (formative or summative), as well as, the implemented approach. This policy should address questions like:

- Is the portfolio interview a common part of the procedure or can the portfolio assessor organize a meeting if needed?
- Is the portfolio reviewed by one or two assessors?
- If two, what is the role of the second assessor? Does he reassess the portfolio and pass an individual judgement or does he verify the assessment outcome of the first assessor? Johnson (2002) uses the term 'verifier' if the latter role is chosen.

Furthermore, the policy should describe the institutional quality assurance audit. This relates to administrative matters like the central filing of assessors' report forms, verifiers' report forms, and feedback forms of the portfolio candidate, as well as measures taken towards the development of assessors, verifiers and portfolio advisors. The assessment report forms make it possible for outsiders to verify how assessment decisions were made.

Whitaker (1989) discusses ten quality standards that are used in the United States by higher educational institutions and accrediting bodies to review the assessment process of prior experiential learning. Five of these standards relate to academic issues and five to administrative processes (see Table 4-11). Whitaker (1998) notes that academic standards must prevent the most serious temptation in the assessment of prior experiential learning, which is confusing educational (or experiential) inputs with learning outcomes.

When credit is granted for input rather than for outcomes, the assessment process is short-circuited and credit is given for experience rather than for learning. (Whitaker, 1989, p.6).

In other words, it is not the experience that counts but what is learned from this experience. The place where the experience took place (inside or outside the formal school system) is not important in this respect. The administrative standards relate to issues that were discussed earlier like: the audit trail, training and staff development of assessors as well as the counsellors of the portfolio candidates.

Academic quality standards	Administrative quality standards
Credit should be awarded only for learning, not for experience.	Credit awards and their transcript entries should be monitored to avoid giving credit twice for the same learning.
College credit should be awarded only for college- level learning.	Policies and procedures applied to assessment, including provision for appeal, should be fully disclosed and prominently available.
Credit should be awarded only for learning that has a balance, appropriate to the subject, between theory and practical application. The determination of competence levels and of	Fees charged for assessment should be based on the services performed in the process and not determined by the amount of credit awarded. All personnel involved in the assessment of learning should
credit awards must be made by appropriate subject matter and academic experts.	receive adequate training for the functions they perform, and there should be provision for their continued professional development.
Credit should be appropriate to the academic context in which it is accepted.	Assessment programmes should be monitored, reviewed, evaluated, and revised as needed to reflect changes in the needs being served and in the state of the assessment arts.

Table 4-11 Quality standards for the assessment of prior experiential learning (Whitaker, 1989)

4.3.3 Theoretical building block for portfolio assessment to enhance the recognition of competencies of highly-skilled immigrants

This section summarizes the previous discussion and summarized the most important findings for this research project in a fourth theoretical building block (TBB4). TBB4 is presented in Table 4-12 on page 100). TBB4 addresses two main issues that are briefly summarized below. These are: the main purpose of portfolio assessment and the criteria for assuring the quality of portfolio assessment.

Main purpose of portfolio assessment

Portfolio assessment is an interpretative process of portfolio evidence that is carried out for both formative and summative purposes. If one uses a development portfolio, portfolio assessment automatically has a formative purpose (to steer and monitor the development process of the candidate). If one uses an assessment portfolio, the purpose of portfolio assessment can be

formative (focused on the identification of competencies) or summative (focused on the assessment and recognition of competencies). If the portfolio instrument is used for formative purposes it is often embedded in a wider assessment procedure. The Dutch PLAR model provides a useful example. The portfolio instrument is generally used in the first phase focused on the identification of competencies, while assessment takes place using instruments like criterion-referenced interviews, simulations, observations or other forms of authentic assessment (Klarus, 1998). In the United Kingdom, recognition decisions are taken on the basis of portfolio assessment alone, sometimes combined with a portfolio interview.

Criteria for assuring the quality of portfolio assessment

Portfolio assessment is a very complicated, interpretative process (Klenowski, 2002; Tigelaar et al., 2005). Each portfolio contains a rich and unique content that needs to be interpreted before judgment on learning outcomes can be passed. To assure the validity of portfolio assessment it is important that: a) the portfolio evidences relates to the assessment standards, and b) that there is a consensus about the assessment outcome among the assessors. With respect to the first concern, Whitaker (1989) warns of the recognition of experience (inputs). He emphasizes that academic credits can only be awarded to learning outcomes (outputs). Hence, it is important that the submitted evidence proves competence and not experience. With respect to the issue of consensus among assessors, Tigelaar et al. (2005) note that the traditional approaches to evaluating quality do no longer apply. These are based on the psychometric paradigm and suggest the standardization of portfolio assessment and the use of analytical criteria to enhance the inter-rater reliability (cf. Beijaard et al., 2002). However, standardization poses a threat to the validity of portfolio assessment (Schulman, 1989 in Beijaard et al., 2002). Klarus (1998, 2002), Moss (1984) and Tigelaar et al. (2005) suggest applying a hermeneutic, interpretative approach to assure the quality of the assessment approach. Consensus is warranted through critical dialogue among knowledgeable assessors who have been trained in all elements of the assessment procedure (Johnson, 2002; Klenowski, 2002; Moss, 1984). To assure that the assessors use the same mental framework an assessment sheet could be used that draws attention to the most important quality criteria (O'Grady, 1991). Important criteria to judge the quality of different pieces of evidence are: authenticity, retention, relevance, quantity and variety (Johnson, 2002; O'Grady, 1991). However, the assessors still have to interpret the evidence and judge how it relates to the assessment standards.

Tigelaar et al. (2005) recommend that the assessors should read the portfolio carefully to derive an initial set of interpretations. However, they should continually challenge and revise these interpretations by looking for counter-examples. Moreover they should debate their findings with each other and with the candidate and his supervisor. This makes the assessment process more transparent. The training and coaching of assessors is extremely important (Klenowski, 2002, Whitaker, 1989). Assessors should get the opportunity to practice the instruments in a training context before they need to apply them in practice (KBBs, 2003; Te Lintelo et al., 2002). Assessors need to be selected on the basis of their professional and educational background as well as based on a list of important competencies that were discussed in Section 4.2.2. To assure trustworthiness, it is important to take administrative measures like the central filing of assessors' forms, and feedback forms of the candidate (Johnson, 202). To enhance the 'transferability' of the assessment outcome the 'assessment form' or 'transcript' should contain contextual information (Tigelaar et al., 2005). Bjørnåvold (2000) and Whitaker (1989) propose the provision of information on the content of the assessment, the level achieved and the assessment approach conducted (who, how and when). It might be important to add information on how the quality of the assessment is warranted. Table 4-12 summarizes the most important characteristics of the process of portfolio assessment for highly-skilled immigrants by presenting the fourth theoretical building block.

Issues	Description
Main purpose of portfolio assessment	 Portfolio assessment can serve a formative and a summative function. The formative function relates to steering development or the identification of competencies The summative function relates to the assessment and recognition of competencies If an assessment portfolio has a formative function (the identification of competencies), the portfolio instrument is generally embedded in a wider assessment procedure. Other instruments used are, among others: Criterion-based interviews Simulation Observation
Criteria to warrant the quality of portfolio assessment	Portfolio assessment is based on a hermeneutic, interpretative process. The evidence submitted in the portfolio occupies a central position in portfolio assessment. Each piece of evidence should be interpreted and linked to the assessment standards to judge whether it provides sufficient proof of competence (learning). The quality of the portfolio evidences determines the quality of portfolio assessment. Important quality criteria in this respect are: Authenticity Retention Relevance Quantity Variety Portfolio assessment is conducted by at least two assessors. The assessors are experts in the field and familiar with the assessment standards. The assessors are trained in all aspects of the assessment process: portfolio assessment, portfolio interview, communication with candidates, observation, final judgement, providing feedback and issuing recommendations. Consensus is warranted through critical dialogue among assessors Discrepancies in assessment data articulate the need for additional evidence The assessors should take part in coaching or peer review events (staff development). The assessment trail needs to be transparent for outsiders. The assessment outcome should contain contextual information that informs others about the context and purpose for which the assessment took place. Moreover, it should contain information on: The content The level The assessment approach (who, how and when) The measures taken to assure the quality of the assessment

 Table 4-12
 Main characteristics of the process of portfolio assessment: a fourth theoretical building block

4.4 Specifying characteristics of portfolio design and implementation

The aim of this section is to discuss the characteristics of portfolio design and implementation. As argued earlier, the introduction of portfolios to enhance the identification, assessment and recognition of the actual competencies of highly skilled immigrants involves a complex educational change. Understanding the complexity of change and the factors that influence the change process helps the planning of successful innovation (Fullan, 2001). Therefore, Section 4.4.1 discusses the change process and presents factors that are likely to have an influence on the initiation and implementation of change (cf. Fullan, 2001). These general findings are linked to lessons learned from previous attempts at portfolio implementation (cf. Bijeaard et al., 2002, Driessen, Beijaard, Van Tartwijk & Van der Vleuten, 2002; Klenowski, 2000; Tillema, 2001a). Section 4.4.2 focuses on the portfolio design process. It discusses different design paradigms to analyse which paradigm could be the most suitable to assure successful implementation of the portfolio instrument. Section 4.4.3 reflects on the previous discussions and summarizes the main characteristics of portfolio design and implementation in the fifth theoretical building block for this research study (see Table 4-15 on page 108).

4.4.1 Understanding the complexity of portfolio implementation

This research study explores the characteristics of a portfolio instrument to enhance the identification, assessment and recognition of actual competencies of highly-skilled immigrants. The introduction of a portfolio instrument in the current evaluation and recognition practice of highly-skilled immigrants concerns a complex innovation. It is what Fullan (2001) calls 'multidimensional' and actors at multiple levels need to adopt the change. The multiple dimensions that are distinguished by Fullan (2001) are: a) the use of new or revised 'materials', b) the possible use of a new 'approach', and c) the possible alterations of 'beliefs'. Fullan comments that a successful innovation should address all three dimensions in order to achieve its set of goals. In the context of this research study this implies that the organization or institution that starts working with the portfolio:

- Develops a portfolio format that can be used by the highly-skilled immigrant to give insight into the actual competencies developed in prior learning experiences (materials);
- Introduces a system for prior learning assessment of which portfolio assessment is a part (approach); and
- Embraces the assessment culture and the associated socio-constructivist pedagogy (cf. Shepard in Klenowski, 2000) (beliefs).

The complexity of the innovation depends on the starting situation at the institutional level. If an educational institution introduces the portfolio instrument for the enrolment of highly-skilled immigrants, the innovation is less complex if the institution has already adopted a competency-based learning paradigm and uses PLAR procedures for Dutch students.

With respect to the levels, Fullan (2001) differentiates between teachers, schools, school districts, the state, and lastly the federal government. In the context of this research study it is more relevant to distinguish between the international, national, institutional and individual levels. If the portfolio instrument is introduced to enhance the enrolment of highly-skilled immigrants in the Dutch education system (academic level) the change relates in the first instance to:

- The institutional level: The educational facility or institution that change the enrolment procedure; and
- The individual level:

The members of the exam committee (portfolio assessors), the admission officers or students counsellors (portfolio advisors) and the highly-skilled immigrants as prospective students (portfolio candidate).

However, to enhance the civil effect of the assessment decision it is important that other actors and the national and international levels also accept the outcome of the assessment procedure of which the portfolio instrument was a part. For the acceptance of change it is important that the innovation complies with policies at international, national and institutional levels (Fullan, 2001).

Other factors that commonly influence the change process are briefly reviewed below but first the three common phases in a change process are described (cf. Fullan, 2001; Huberman & Miles, 1984). The first phase is 'initiation', which refers to the process that leads up to and includes the decision to proceed with the change. The second phase is 'implementation', which concerns the initial use of the innovation. It involves the first experiences with a reform attempting to put it into practice. The third phase is 'institutionalization', which refers to the process where the change is built in as an ongoing part of the system or disappears. This research study explores the characteristics of a portfolio instrument by means of a reconstructive multiple case study. It studies the development of a portfolio instrument in practice by comparing the empirical data with theoretical building blocks (see Chapter 5 that describes the research approach). The projects that are used for the case studies are first experiments with the portfolio instrument. Hence, the innovation has not reached the institutionalization phase yet, but only involves the 'initiation' and 'implementation' phases. Fullan (2001) discusses different factors that influence each phase. Important factors that might influence the initiation of change are:

- Advocacy from the central level, which refers to the support for the change at the level of administration and management.
- Advocacy from the staff level concerns the willingness of individual staff members to adopt the change. Staff advocacy can be influenced by creating the right circumstances, for example, specifying clear and practical objectives for the innovation, support at the central level, opportunities for individuals to interact with other peers, support for innovation by a peer group, and the availability of sufficient outside resources (Fullan, 2001).
- The presence of an external change agent can also play an important role in the initiation phase to clarify the precise need for innovation. In some cases, initial use is required to make this need clear. The external change agent can play an important role in getting started and gaining support for the innovation at the central level.
- The role of the community. Fullan (2001) notes that the community can a) put pressure on administrators, b) oppose certain potential adoptions as they become aware of them, or c) do nothing. Highly educated communities seem to put more pressure on administrators to adopt high-quality, academic-oriented change than less-well educated communities. They also react more strongly and effectively against proposed change that they do not like (Fullan, 2001).
- Compliance with new policy and funds, which relates to legislation or policy that stimulates or even mandates adoption at institutional, national or international levels. It can be very effective, especially if it is combined with the presence of funds (Fullan, 2001). Bjørnåvold (2000) points out that the social acceptance of change (recognition of non-formal learning) increases if there is a legal basis for the assessment through political decisions.
- The last factor that needs to be considered concerns the main motive of the central administration at institutional or national levels to adopt change. Fullan (2001) cites Berman and McLaughlin (1977) who have found that administrators have either a 'bureaucratic orientation' or a 'problem-solving orientation'. The bureaucratic orientation puts the political and symbolic value of an innovation first. The change is welcomed to obtain extra resources without the intention of responding to a given need. The problem-solving orientation on the other hand focuses on solving a local problem. Related to this Fullan (2001) adds that organizations are more likely to adopt innovations that require superficial changes in content, objectives or structure than changes that demand changes in behaviour and beliefs.

Table 4-13 summarizes the most important factors that influence the initiation phase of change.

Factor	Description and relating elements
Advocacy from the central level	 Support for change at the central administration and management level
Advocacy from the staff level	Support for change by staff is influence by: Support at the central level Access to information Provision of clear and practical objectives for change Interaction with peers Availability of sufficient outside resources Presence of an external change agent
Role of the community	 Action taken by different pressure groups within a community: Pressure for change Support for change Apathy towards change Nothing
New policy / funds	 Compliance of change with new policy: Mandatory policy or legislation for change Supportive policy or legislation for change Presence of funds to facilitate implementation of change
Main motive	Main motive at the central level to implement change:Bureaucratic orientation to changeProblem-solving orientation to change

Table 4-13Factors that might influence the initiation of change

The implementation phase is generally influenced by a) the characteristics of the change itself; b) the characteristics of the local setting; and c) the external factors (Fullan, 2001). The factors that are relevant for the context of this research study are discussed below. With regard to the characteristics of the change itself, Fullan (2001) points out a) the need for change, b) the clarity of change, c) the complexity of change, and d) the quality and practicality of change. For the implementation process it is very important that the need for innovation fits in with the needs of the organization implementing the change. People are more likely to contribute to a development that they perceive as relevant and important (Fullan, 2001). To enhance the commitment of the central level Beijaard et al. (2002) suggest linking the introduction of portfolios to larger innovations, for example, to the implementation of a new curriculum or the introduction of the Bachelor's-Master's structure. The need for innovation should be considered alongside other priorities in the organization (Fullan, 2001). A specific innovation might be labelled as valuable and important, but other developments might gain higher priority and thus more resources.

The clarity of change relates to the development of a shared meaning of what change entails and how it can be achieved. Innovators should not neglect 'the phenomenology of change' (Fullan, 2001, p.8), which relates to the discrepancy between how change is intended and how it is experienced by individuals who need to work with it. Therefore it is important to explore what change implies at a personal and organizational level, if the innovation is to become fully implemented (the objective meaning of change). The objective description of change should order and make sense of the confusion and complexity of the numerous subjective meanings. To achieve greater meaning, innovators should understand the small and the big picture. The small picture focuses on the individual meanings of change for all those involved, while the big picture relates to a dynamic, socio-political process (Fullan, 1991. 2001). Fullan warns of the concept of 'false clarity':

False clarity occurs when change is interpreted in an oversimplified way; that is, the proposed change has more to it than people perceive or realize. (Fullan, 2001, p77).

Clarity of change is closely related to the issue of 'ownership' that is also discussed by Bjørnåvold (2000). Neither aspect is easily established, whether it takes place or not depends to a large extent on the implementation process (Fullan, 2001) and places specific demands on the design and development process of the innovation (cf. Bjørnåvold, 2000), which will be addressed in Section 4.4.2:

Ownership in the sense of clarity, skill, and commitment is a progressive process. True ownership is not something that occurs magically at the beginning, but rather is something that comes out the other end of a successful change process. (Fullan, 2001, p92).

The complexity of change depends on the characteristics of the starting situation. Fullan (2001) remarks that any change can be examined with regard to its difficulty. Difficulty depends on the extent of alterations in beliefs, strategies, and materials. An alteration of beliefs is the most difficult to achieve; it is often preceded by an alteration of behaviour (cf. Fullan, 2001). "... most people do not discover new understanding until they have delved into something" (Fullan, 2001, p.91). In this study the complexity of change depends on familiarity with the concept of competency-based learning and assessment by those who need to work with the change (the portfolio assessors and the portfolio candidates). As discussed in Section 3.4, portfolio implementation is easiest if the context in which the portfolio is introduced complies with the competency-based paradigm and if the highly-skilled immigrants were educated in an educational culture that complies with the extending attitude to knowledge (cf. Ballard & Clanchy, 1992). A complexity matrix for the introduction of the portfolio instrument was presented in Figure 3-5 on page 65.

Finally, the implementation process depends on the quality of the innovation and its practicality. This issue also relates to the need for change. It is very important that the staff who need to adopt change, value the portfolio as a 'useful' instrument that has an added value for assessment and learning practice - especially because portfolio assessment adds significantly to the workload of portfolio assessors (Klenowski, 2002). First of all, the assessors need to take part in training and professional development to conduct their new assessment task effectively (see Section 4.3). Beijaard et al., suggest that the assessors should develop their portfolio and discuss this with each other to enhance understanding of portfolio development and portfolio assessment. Secondly, portfolio assessment increases assessment time and the administrative burden (Klenowski, 2002). Beijaard et al. (2000) point out that the average time for portfolio assessment is about two hours (including an interview). Thirdly, to be successful, the portfolio instruments should be integrated with other parts of the curriculum. This requires development time on the part of the portfolio assessors as well as other staff members (Driessen et al., 2002). Hence, it is important that staff members involved in the portfolio assessment process are compensated for their time. Added to this, there should be sufficient resources that gives staff members the opportunity to take part in the portfolio design and development process (Klenowski, 2002). The factors that relate to the local setting, as well as the external factors that are discussed by Fullan (2001) relate very much to the North American and Canadian context. Most important for the implementation of a portfolio instrument is that developments at institutional level, national level and international level comply with the innovation and contribute to its relevance.

4.4.2 Guidelines for portfolio design

In the previous section it was noted that the process of portfolio design and development influences the success of the implementation of change. This section discusses the characteristics of two design paradigms in order to distil some important guidelines for portfolio design and development. These are the 'communicative design paradigm' and the 'pragmatic design paradigm' (cf. Visscher-Voerman, Gustafson & Plomp, 1999). First comes an explanation of the two perspectives towards change that are discussed by Fullan (2001): the fidelity perspective and the evolutionary perspective.

Fullan (2001) points out that an important question in the change process is who develops the new materials, defines the new approach and decides on the new beliefs. The fidelity perspective is based on the assumption that a developed innovation already exists and the task is to get a group of people to use it in practice as intended by those who developed it. This approach can be applied, for example, if an educational institution has developed a competency-based assessment procedure for the enrolment process of regular (Dutch) students of which the portfolio instrument is a part. The evolutionary perspective, on the other hand, emphasizes that change should be a result of adaptations and decisions made by those who need to work with it in practice. Fullan (2001) notes that the innovation theory does not speak out in favour of one of the two perspectives. Either way, four fundamental issues are concerned (Fullan, 2001):

- Active initiation and participation;
- Pressure and support;
- Changes in behaviour and beliefs; and
- Sense of ownership.

With regard to the first issue, Fullan (2001) remarks that change requires some impetus to get started:

There is no evidence that widespread involvement at the initiation stage is either feasible or effective. It is more likely the case that small groups of people begin and, if successful, build momentum. Active initiation, starting small and thinking big, bias for action, and learning by doing are all aspects of making change more manageable, by getting the process underway in a desirable direction. Participation, initiativetaking, and empowerment are key factors from the beginning, but sometimes do not get activated until a change process has begun. (Fullan, 2001, p.91).

Secondly, Fullan (2001) points out the need for pressure and support. Pressure might have a negative connotation, but it has a positive influence on the change process as long as it is combined with support. Fullan (2001, p.91) explains this as follows, "... pressure without support leads to resistance and alienation; support without pressure leads to drift or waste of resources." Thirdly, real change requires all three dimensions: materials, approach and beliefs. Change in behaviour often precedes a change in beliefs. This implies that people need to work with the change and come to understand its meaning. Implementation is a process of clarification, which is likely to come for a large part through reflective practice (Fullan, 2001). Fullan draws on the lessons learned from Miles (1975) and Schön (1971) to conclude that:

Real change, then, whether desired or not, represents a serious **personal** and **collective experience** characterized by ambivalence and uncertainty; and if change works out it can result in a sense of mastery, accomplishment, and professional growth. The anxieties of uncertainty and the joys of mastery are central to the subjective meaning of educational change, and to the success or failure thereof ... (Fullan, 2001, p.32, emphasis added).

Fullan therefore defines educational change as a learning process for adults. This implies that the process of portfolio design, development and implementation needs to give the people involved in change the chance to go through this learning process. Last, Fullan points out the sense of ownership, which requires involvement of those involve in change. Bjørnåvold (2000) notes that the following five criteria should be considered during the design and development process to enhance the 'ownership', 'control' and 'usefulness' of a new system for the identification, assessment and recognition of non-formal learning:

- Involve all relevant participants;
- Deliver all relevant information;
- Balance the different interests of all participants;
- Make the information on competence and/or qualification standards public including information an how these are set up;
- Secure the integrity of the candidate by transparent procedures.

Next, attention is given to two design paradigms that might contribute to the successful implementation of change bearing the above-mentioned lessons in mind: the 'communicative design paradigm' and the 'pragmatic design paradigm' (cf. Visscher-Voerman et al., 1991). The communicative design paradigm relates to different aspects of the evolutionary approach to change discussed by Fullan (2001). It highlights the social aspect of the design and development process and corresponds to what Kessels (1993) calls the 'relational approach' to design. The pragmatic design paradigm puts more emphasis on the quick development of preliminary versions of a product which can help to make the aims of an innovation more concrete. Its characteristics relate to Fullan's advice on getting the process started; he advocates active participation, starting small, thinking big and bias to action especially in the initiation phase of an innovation (cf. Fullan, 2001). Both paradigms are briefly described below. Table 4-14 on the next page provides an overview of the major characteristics of both paradigms.

	voemaneta, roooj				
Dimension	Communicative design paradigm	Pragmatic design paradigm			
Quality criteria product	The standards discussed, agreed upon and shared by the design team and other stakeholders.	Proven usefulness and effectiveness with and for users.			
Quality criteria design process	Focus is on reaching clarity and consensus about what to make and how to make it. Design decisions are based upon deliberation and consensus.	Intertwining of design and evaluation. Prototypical models are regularly tested with users for their usefulness and effectiveness.			
Function analysis	To have the design team and stakeholders specify what they want to make (or have made) and how they want to make it (or have it made).	Analysis is part the evaluation of prototypes.			
Function evaluation	To assess existing and newly made materials, and to support deliberation and discussion among design team members and other stakeholders.	To test (part of) the product (or prototypical version) in practice to evaluate the quality and to specify further design requirements.			
Function prototype	The prototype can be existing material or a new idea or perspective. It is evaluated to support deliberation among stakeholders and further clarify what to make and how to make it.	The prototype can be a rough outline of (a part of) the product. This is evaluated to identify requirements for design and to determine its usefulness and effectiveness. The prototype may also be discarded or rejected.			
Role of developer	The developer is the facilitator, helping clients to specify their needs and wishes, and facilitating the development of the product. Developers and stakeholders have a shared responsibility for what is being made.	Developers work out the prototype, with or without the client, and test it in interaction with users.			
Relation with client	Client and stakeholders are given an equal say in the process.	Users have substantial influence on the shape of the product.			

Table 4-14 The communicative design paradigm and the pragmatic design paradigm compared (Visscher-Voerman et al, 1999)

The communicative design paradigm is characterized by (Visscher-Voerman et al., 1999):

- establishing a shared frame of reference;
- reaching consensus among all people involved in the process, and
- basing design decisions on extensive communication, deliberation and consensus.

All these aspects can contribute to the development of a shared meaning of change. The function of analysis in the paradigm is to clarify the perception among stakeholders about the product and how this product should be made. Visscher-Voerman et al (199) cite Walker (1990) and note that analysis should preferably takes place during the 'platform' phase. Walker remarks that the development process should start with the formulation of a platform of ideas. These ideas should be used to conceptualize the problem and generate promising versions of materials. Next, the merits of these early versions should be assessed and revised until no further improvement can be made. Kessels (1993) maintains that developers should obtain the perceptions of all stakeholders and integrate these into the product that is to be developed. This will enhance future use in practice and generate external consistency. External consistency is an important guality criterion in the relational approach to design. The function of prototypical products in the communicative design paradigm also involves the support of the deliberation process among stakeholders to clarify the product specifications (Visscher-Voerman, 1999). This is also the case for the function of evaluation. Evaluation takes place to assess existing and newly developed materials and to contribute to the deliberation process. The quality of the product is determined in relation to the shared standards that were discussed and agreed upon by those involved (Visscher-Voerman et al., 1999).

In the pragmatic design paradigm, the use of concrete prototypes takes a central position. The prototype is used to identify the requirements of the product in interaction with the experts and members of the user population. Therefore, developers quickly start developing preliminary versions of the product, which are evaluated formatively with potential users either by discussing them or trying them out. The function of evaluation is to test prototypical versions with potential users in order to determine the quality and to specify further design requirements. Usefulness and effectiveness are two important quality criteria. Hence, the users have substantial influence on the requirements of the final product (Visscher-Voerman et al, 1999).

For the design and implementation of a portfolio of prior learning for highly-skilled immigrants a mixture of both paradigms might be best. In the initiation phase, it is important that the organization implementing the change quickly starts working with a preliminary version of the portfolio instrument. Evaluation of this 'prototypical model' can contribute to the further specification of its requirements. At the same time, it is important to initiate a process of deliberation among a wider user group to enhance acceptance (involving other recognizing bodies at the national level, or interest groups at the national and international level). The deliberation process can benefit from the practical experiences obtained in the early phase of initiation. Early involvement of 'future users', especially the portfolio assessors is very important for successful implementation (Beijaard et al., 2002). They should have a clear idea on the function of the instrument, the structure and content (Driessen et al, 2002). This also includes the assessment standards used and the portfolio evidence accepted (cf. Tillema, 2001a).

4.4.3 Theoretical building block of portfolio design and implementation to enhance the recognition of competencies of highly-skilled immigrants

This section reflects on the findings of the previous sections and gives a summary of the main characteristics of portfolio design and implementation to enhance the recognition of competencies of highly-skilled immigrants. The summary is given in Table 4-15 on page 108 that represents the fifth theoretical building block (TBB5). TBB5 addresses two main issues that are each briefly summarized below: portfolio design and development and portfolio implementation.

Portfolio design

It was argued that the introduction of portfolios into the current evaluation and recognition practice of highly-skilled immigrants constitutes a complex change. The portfolio design process contributes to the success of the implementation process. Depending on the context in which the change is introduced either the fidelity perspective to change is applied or the evolutionary perspective (cf. Fullan). Either way, Fullan (2001) lists four essential issues that should be safeguarded by the design process:

- Active involvement and participation of staff that needs to adopt the change;
- Pressure and support from the central level of administration (management);
- Changes in behaviour and beliefs; and
- Creation of a sense of ownership.

This implies that the design process should be characterized by the active involvement of the future users of the portfolio instrument (the portfolio assessors as well as the portfolio candidates). For the portfolio assessors, it is important that they are involved in the specification of the function of the portfolio, and its structure and content. Moreover, the portfolio assessors should get the opportunity to practice the new materials and approaches as this is essential for a change of beliefs (cf. Fullan, 2001). They should get the opportunity to learn (individually and collectively). A quick start might be required to enhance the clarification of the portfolio requirements. However, to assure future use it is important that the people involved develop a

shared meaning of what the change entails. It was therefore concluded that a mixture of the communicative design paradigm and the pragmatic design paradigm may be the most effective.

Portfolio implementation

The introduction of the portfolio instrument entails a multidimensional and multilevel change. Common phases in a change process are initiation, implementation and institutionalization. This reconstructive study relates to the initiation and implementation phases of change. The factors that are likely to have an influence on each phase were briefly discussed in Section 4.4.1 (see Table 4-13 on page 102). Drawing on Fullan (2001) it seems very important that there is a need for change, that the change is clear and practical. To assure need and priority, Beijaard et al., 2002 suggest linking the implementation of portfolio assessment to larger innovations at the institutional level. In any case, it is of the utmost importance that implementation is support at the management level also in terms of time, money and facilities. The introduction of the portfolio instrument places a heavy workload on the portfolio assessors (and portfolio advisors) (cf. Beijaard et al., 2002; Klenowski, 2002). They should be trained in the principles of the assessment culture and get the opportunity to practice portfolio assessment (both individually and in a group). moreover, the portfolio candidates should receive adequate support in learning the cognitive processes of self-evaluation and critical reflection (Klenowski, 2002). Table 4-15 gives a summary of the characteristics that were discussed above.

Issues	Description
Portfolio design	 If the 'fidelity perspective' to change is applied (Fullan, 2001), portfolio design focuses on the introduction of an existing innovation in a new setting. If the 'evolutionary perspective' to change is applied Fullan, 2001), the design process focuses on the design of a portfolio assessment procedure. Future users (portfolio assessors and portfolio candidates) are actively involved in all the phases of the design process. The design process contributes to the development of a shared meaning of the function of the portfolio instrument and its structure and content among the portfolio assessors. The design process contributes to the sense of 'ownership' and 'usefulness' (Fullan, 2001; Bjørnåvold, 2000). Assessors should get the opportunity to put the new materials and approaches into practice.
Portfolio implementation	 Introduction of portfolio is supported by management and relates to other innovations at institutional level. Purpose of portfolio instrument complies with the assessment system that is implemented at institutional level. There are sufficient resources for the implementation of change (time, money, facilities). Future assessors and portfolio advisors are trained in the principles of the assessment culture and get the opportunity to practice portfolio assessment. Portfolio candidates are sufficiently prepared to develop the cognitive processes of self-evaluation and critical reflection. There is an opportunity to learn from the implementation process.

Table 4-15 Main characteristics of portfolio design and implementation: a fifth theoretical building block

4.5 Further use of the theoretical building blocks: A reflection

This section reflects on the five theoretical building blocks that were presented earlier and explains how these building blocks are used in the remaining chapters of this thesis. As explained at the beginning of this chapter, the five building blocks relate to the two main research questions that motivated this research study. They addressed the following topics:

- 1. The context in which the portfolio instrument is introduced.
- 2. The product characteristics of the portfolio instrument to enhance the identification, assessment an recognition of the actual competencies of highly-skilled immigrants.

- 3. The portfolio development by the highly-skilled immigrants.
- 4. The portfolio assessment process by the organization that introduces the portfolio instrument.
- 5. The portfolio design and implementation process.

Table 4-16 gives an overview of the theoretical building blocks as well as a reference to the previous section in which the block was presented. It also indicates to which research question the topics relate.

Table 4-16	Overview of the theoretical building blocks for portfolio development by highly-skilled immigrants
	overview of the theoretical balance blocks for portione development by highly skilled intringrants

Theoretical building					
Main topic	block	Research question			
Context characteristics: Competency-based learning Competency-based assessment Quality approach Product characteristics	TBB1: Section 3.3, see Table 3- 6 on page 66 TBB2: Section 4.1.4, see Table	R2: What are the characteristics of portfolio design and implementation? R1:			
 Function Impact (immediate outcome) Structure and content Standards Evidence for proving competence 	Section 4.1.4, see Table 4-5 on page 81	What are the characteristics of the portfolio instrument?			
 Portfolio development process Steps and strategies for portfolio development Measures for guidance and support Main roles and responsibilities 	TBB3: Section 4.2.4, see Table 4-9 on page 92	R1: What are the characteristics of the portfolio instrument?			
 Portfolio assessment process Main purpose of portfolio assessment Criteria to warrant the quality of portfolio assessment 	TBB4: Section 4.3.3, see Table 4-12 on page 100.	R1: What are the characteristics of the portfolio instrument?			
 Portfolio design and implementation Portfolio design Portfolio implementation 	TBB5: Section 4.4.3, see Table 4-15 on page 108	R2: What are the characteristics of portfolio design and implementation?			

Legend: TBB = Theoretical Building Block, R1 = research question 1, R2 = research question 2.

The five theoretical building blocks will be used in Chapter 5 to develop an analysis framework to support the multiple exploratory case study. Moreover, the building blocks will be used in Chapter 7 for the theoretical replication of the case study data as part of the cross-case analysis. Some reflective comments are made below with respect to the theoretical building blocks. In summary, the portfolio characteristics (addressing TBB2, TBB3 and TBB4) are linked to the targeted objectives of the highly-skilled immigrants. Finally, some reflective comments are made with respect to the context in which the portfolio is implemented as well as the portfolio design, development and implementation process.

First of all, it should be noted that the topics addressed by the theoretical building blocks are closely related and to some extent intertwined. As became clear in TBB2, the purpose for which the portfolio is used (the function) has a large influence on the remaining issues of the product characteristics. A distinction was made between a development portfolio and an assessment portfolio. A development portfolio generally has an open structure and contains all kinds of evidence, including reflections and self-assessment, while an assessment portfolio is often prescribed and contains only evidence of best performances to prove the competency claims. The function also influences some of the issues of the portfolio development process (TBB3) and the portfolio assessment process (TBB4). It determines the purpose of portfolio assessment, which in turn influences the measures for guidance and support as well as the roles and

responsibilities of the people involved in the process. To assure the validity of portfolio assessment, it is essential that the portfolio candidate is properly informed about the standards and the type of evidence that is accepted as proof of competence. TBB1 (context characteristics) and TBB5 (portfolio design, development and implementation process) are of another nature. Both address the second research question. It is expected that both topics will have an influence on the portfolio characteristics (TBB2, TBB3 and TBB4). To understand what each topic entails, it was decided to discuss them separately. This might also enhance the analysis of the alignment between issues from different building blocks in the three case studies. After all, the TBBs are used in Chapter 5 to develop a framework of analysis that is used for the exploratory case study.

In Section 4.1 the 'targeted' objective of the highly-skilled immigrant was linked to the type of portfolio. It was argued that the development portfolio should be used by highly-skilled immigrants who wish to orientate themselves on the Dutch labour market to find out what their possibilities are. The purpose of recognition relates to the 'formative recognition' of competencies (cf. European Commission, 2004). Smith and Tillema (2003) discuss two types of development portfolios and the 'personal development portfolio' was identified as the most useful for this purpose. Distinctive features of this portfolio are: voluntary use (incentive comes from the candidate), a broad focus, prescribed structure (determined by CV), reflective information, numerous evidence of individual performance also including average performance and an open assessment (see Table 4-2 on page 73). The assessment portfolio seems to be most relevant for the highly-skilled immigrants who are aim for either the 'social recognition' or 'formal recognition' of competencies (cf. European Commission, 2004). Social recognition relates to finding a job in a profession that is not regulated by law ('de facto' professional recognition). For this purpose a 'reflective portfolio' seems to be appropriate, which is characterized by: voluntary use (incentive comes from the candidate), a broad focus, open structure, reflective information, limited evidence of individual performance including average performance (cf. Smith & Tillema, 2003) and a restricted informal assessment; see Table 4-3 on page 76. Formal recognition concerns access to regulated professions (de jure ' professional recognition) as well as enrolment in Dutch study programmes (academic recognition). For both purposes the 'dossier portfolio' may be suitable (cf. Smith & Tillema, 2003). The distinctive feature of a 'dossier portfolio' are: mandatory use (incentive comes from a recognizing body), a specific focus, prescribed structure (determined by assessment standards), performance oriented, numerous evidence that relates to best performances and which may also include evidence from guided performances, and a restricted assessment (see Table 4-3 on page 76 for an overview). The availability of competency-based assessment standards to explore the relevancy of prior learning experiences is an important prerequisite for portfolio use. Moreover, there should be some kind of agreement on the types of evidence that can be submitted to prove competency claims. Whether these conditions are met depends to a large extent on the dominant learning paradigm in the professional sector. In Chapter 3 the characteristics of competency-based curricula were compared with the more traditional content-based curricula. The first theoretical building block (TBB1) summarizes the characteristics of the context that a likely to have a positive influence on portfolio use by highly-skilled immigrants. In 2004, the Dutch Onderwijsraad [Educational Council] wrote a recommendation entitled 'Examinations in higher education' (Examinering in het hoger onderwijs). This recommendation shows that examinations in Dutch higher education are often not transparent in terms of what is being assessed (this relates to the assessment standards). The advice also states that traditional examinations prevail in Dutch higher education. These include: essay questions, multiple-choice exams, project reports and a thesis. Research shows that higher education institutions have started to develop new assessment instrument including portfolio, but it is rarely used in practice (ITS/IOWO, 2004). This finding will have implications for portfolio assessment to enhance the recognition of the actual competencies of highly-skilled immigrants in practice. Especially because such assessment requires assessors who are familiar and trained in the assessment culture.

Figure 4-4 below gives a summary of the portfolio characteristics including those of the portfolio development process and the portfolio assessment process.

The availability of competency-based assessment standards to explore the relevancy of prior learning experiences is an important prerequisite for portfolio use. Moreover, there should be some kind of agreement on the types of evidence that can be submitted to prove competency claims. Whether these conditions are met depends to a large extent on the dominant learning paradigm in the professional sector. In Chapter 3 the characteristics of competency-based curricula were compared with the more traditional content-based curricula. The first theoretical building block (TBB1) summarizes the characteristics of the context that a likely to have a positive influence on portfolio use by highly-skilled immigrants. In 2004, the Dutch Onderwijsraad [Educational Council] wrote a recommendation entitled 'Examinations in higher education' (*Examinering in het hoger onderwijs*). This recommendation shows that examinations in Dutch higher education are often not transparent in terms of what is being assessed (this relates to the assessment standards). The advice also states that traditional examinations prevail in Dutch higher education. These include: essay questions, multiple-choice exams, project reports and a thesis. Research shows that higher education institutions have started to develop new assessment instrument including portfolio, but it is rarely used in practice (ITS/IOWO, 2004). This finding will have implications for portfolio assessment to enhance the recognition of the actual competencies of highly-skilled immigrants in practice. Especially because such assessment requires assessors who are familiar and trained in the assessment culture.

	Targeted objective			
Orientation		Social recognition	Formal recognition	
Type of portfolio	Development portfolio	Assessm	ent portfolio	
(cf. Smith & Tillema, 2003)	Personal development portfolio	Reflective portfolio	Dossier portfolio	
	Voluntary use (internal incentive)	Voluntary use (internal incentive)	Mandatory (external incentive)	
Product characteristics (TBB2)	Broad focus Prescribed structure (CV) Reflection-oriented Numerous types of eviden- ce, including average per- formance Individual performance	Broad focus Open structure Reflection-oriented Limited evidence, including average performance Individual performance	Specific focus Prescribed structure Performance-oriented Numerous types of evidence Best performance, including guided performance	
Portfolio development (TBB3)	Focus on self-assessment and reflection	Focus on self-assessment, reflection and presentation	Focus on understanding assessment standards and portfolio evidence	
Portfolio assessment (TBB4)	Formative assessment	Summative assessment	Formative assessment (port- folio will be embedded in a wider assessment procedure; summative decision is based on the outcomes of all assessments)	
	Open assessment	Restricted assessment	Restricted assessment	

Figure 4-4 Relationship between the 'targeted objective' of the highly-skilled immigrant and the characteristics of the portfolio instrument

In Chapter 3, a matrix for the analysis of the implementation of portfolio was presented (see Figure 3-5 on page 65). This matrix uses the following two dimensions:

 The characteristics of the Dutch context in which the portfolio instrument is introduced; the two extremes are: competency-based versus content-based; and The characteristics of the learning environment of the highly-skilled immigrant; the two extremes are: an educational culture that values a conserving attitude towards knowledge versus an educational culture that values an extending attitude towards knowledge (cf. Ballard & Clanchy, 1992).

For the purpose of this research study, the analysis of the context characteristics can be focused on:

- The evaluation approach;
- The evaluation standards;
- The evaluation instruments;
- The characteristics of the portfolio assessors (the extent to which they are familiar with the assessment culture and trained in portfolio assessment); and
- The characteristics of the portfolio candidates (the extent to which they are familiar with the assessment culture and portfolio assessment).

In Section 4.4, it was argued that the 'fidelity perspective' to change could be applied if an innovative portfolio assessment procedure has already been implemented for another target group or another purpose in the context in which the portfolio is introduced. This could be the case if the context complies with the characteristics that were summarized in TBB1. If not, the ' evolutionary perspective' seems more appropriate, which means that change becomes a result of adaptations and decisions made by those who need to work with the change (cf. Fullan, 2001). Moreover, it was discussed that successful implementation benefits from:

- The development of a shared meaning of change;
- Active involvement and participation of the staff that needs to work with the change;
- Pressure and support form the central level of administration;
- Changes in behaviour and beliefs;
- Creation of a sense of ownership.

The complexity of change is determined by the compliance of the context with the competencybased learning paradigm. If the change is extremely complex (content-based environment and involves portfolio candidates that are trained in an educational culture that values the conserving attitude towards knowledge – cell 4 in Figure 3-5), the communicative design paradigm may be needed to establish a shared meaning of the 'how' and 'what' of change before starting portfolio design and development. On the other hand, an initial experience might be needed to grasp the meaning of change, which argues for the 'pragmatic design paradigm'. It was therefore argued that the portfolio design and development process should contain elements of both paradigms. This chapter forms the link between the theoretical part of the thesis and the empirical part. It presents the research design that has been developed to answer the main research questions that were defined in Chapter one. It explains how the theoretical building blocks that were developed in Chapters three and four are used to describe and analyse the data from five Nuffic pilot projects that have been carried out to explore the characteristics of portfolios in practice. Theoretical building blocks two, three and four relate mainly to the first research question – *what are the characteristics of a portfolio instrument for highly-skilled immigrants?*--, while theoretical building blocks one and five address the second research question – *what are the characteristics of the design, development and implementation process of such an instrument?* This chapter also addresses the practical limitations that had to be coped with in this research study and explains how these limitations have shaped the research design.

The structure of this chapter is as follows. Section 5.1 discusses the general characteristics of the chosen research approach and explains how these relate to this particular study. Section 5.2 presents the framework for description and analysis of the research data. This framework has been derived from the theoretical building blocks that were presented in Chapter 3 and 4. It explains how the framework helps to answer the main research questions of this research study. Section 5.2 till Section 5.5 describe the database in each case study. Each section explains the available data for each case study and shows how these data relate to the main issues of description and analysis. The chapter concludes with a short summary and indicates how the data are presented in the remaining parts of the thesis.

5.1 The research approach: Basic characteristics of a reconstructive multiple case study

The aim of this section is to give an account of the chosen research approach. First, it presents the basic principles of development research and indicates how these relate to this particular research study. Second, it discusses the key features of case study research and explains which choices have been made in this research design.

5.1.1 Basic principles of development research

This research study explores the characteristics of a portfolio for the recognition of prior learning of highly-skilled immigrants focusing on their actual competencies. It aims to develop guidelines for the design, development and implementation of a portfolio instrument by studying theory and practice. The introduction of a portfolio instrument in current evaluation and recognition practice of immigrants' competencies concerns a multilevel and multidimensional change (see Section 4.4.1). Development research is a suitable approach to support the design and implementation of complex, innovative interventions and to study the development process of the intervention. This research methodology helps designers and researchers to cope with uncertainties in complex and dynamic contexts that cannot be controlled (Van den Akker, 1999). Generally, development research projects serve two purposes (Plomp, 2002; Van den Akker, 1999): the development of an intervention (e.g. a product, programme, procedure, process or scenario) as a solution to a problem that is experienced, and the development of design principles. These design principles can be of a 'substantive' nature referring to the characteristics of the intervention, or of a 'procedural' nature referring to how such an intervention should be developed (Van den Akker, 1999). Plomp (2002) and also Kouwenhoven (2003) use the model of Rossi, Freeman and Lipsey

(1999) to visualize the various purposes and focuses of development research. Plomp (2002) explains that a development research study starts with the identification of an intervention that should be developed as a solution for a perceived need. As part of the first phase of the research study, state-of-the-art knowledge from theory and practice is reviewed to define theoretical ideas to support the design process of the chosen intervention, the so-called 'local' or 'mini' theories (Van den Akker, 1999). Plomp (2002) remarks that these theories can relate to the design process of the intervention (design process theory), the characteristics of the intervention (intervention theory) and/or the impact of the intervention (impact theory). During the research process these theories are tested, revised and refined. Figure 5-1 visualizes this cyclical process.

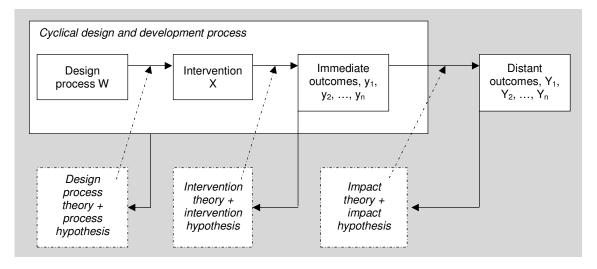


Figure 5-1 A model for the search of understanding in development research (adapted from Plomp, 2002)

The figure has been slightly adapted from Plomp (2002) to emphasize the interaction between theory and practice and the cyclical process of evaluation. The elements in dotted lines concern the theoretical building blocks that are derived from state-of the-art knowledge from theory and practice. The other elements relate to the processes that take place in practice and might result in an adaptation of theory. Figure 5-1 shows how development research can contribute to a better understanding of:

- the intervention;
- the impact of the intervention; and
- the design process of the intervention.

How Figure 5-1 relates to this research study is discussed further below. First comes an explanation of what specific type of development research this research study is.

5.1.2 Key features of a reconstructive multiple case study

Reconstructive study

Van den Akker (1999) differentiates between 'formative development research' and 'reconstructive development research'. In formative research studies, research activities are performed throughout the entire development process in order to optimize the quality of the intervention and to test design principles. Formative studies are comparable to what Richey and Nelson (1996) call 'type-I studies'. In these studies the roles of researcher and designer often coincide during the major part of the development process (Van den Akker, 1999). Reconstructive studies, on the other hand, focus on the development of design principles of a certain product.

The majority of the research activities take place during or after the development process of several interventions (Van den Akker, 1999). The reconstructive studies are comparable to what Richey and Nelson (1996) call 'type-II studies'. These studies generally do not begin with the development of an intervention but focus on previously developed interventions in order to derive design principles that are more general in nature. The outcome of a type-II studies (Richey & Nelson, 1996). In reconstructive studies the roles of researcher and designer are less intertwined than in formative studies. Often the researcher is not involved in the design and development of a specific intervention, but studies the process (Van de Akker, 1999).

This research study is a reconstructive study. It explores the characteristics of a portfolio instrument for highly-skilled immigrants by describing and analysing the development process of this instrument in practice, and compares these outcomes with a set of five theoretical building blocks. The analysis of the course of development of the portfolio instrument in practice may offer suggestions for adapting the theoretical building blocks. In 1999, Nuffic started exploring how the focus of current evaluation and recognition practice of immigrants' competencies could change so that the results of non-formal and informal learning could be taken into account in the recognition decision. The portfolio was identified as a suitable instrument in the process of identification, assessment and recognition of competencies (Evans, 2000; Johnson, 2002; Klarus, 1998; Whitaker, 1989). In 2001, Nuffic decided to gain experience with the use of portfolio development by highly-skilled immigrants by initiating different pilot projects in direct cooperation with the target users (recognizing bodies and highly-skilled immigrants). In the period 2001-2004, five pilot projects were carried out: one in the educational sector, three in the health care sector and one to facilitate the integration process of immigrants who have recently come to the Netherlands. As a staff member, the researcher was responsible for the realization of the pilot projects. Together with other colleagues, she was part of the development team that worked together with the users (the recognizing body and immigrants) to determine the characteristics of a high-quality portfolio instrument. However, many of the design, development and implementation decisions were taken by the recognizing bodies and could not be controlled by the development team of Nuffic. Therefore, it was decided to study the characteristics of the portfolio instrument and its development process 'from a distance' after the pilot projects were carried out. This decision has made this research a reconstructive development study that explores:

- a. The extent to which the portfolio approach, as applied in the pilot projects that were carried out by Nuffic, is in line with the criteria derived from literature (and which have been presented in the set of five theoretical building blocks); and
- b. Whether this results in suggestions for further refinement of the theoretical building blocks.

Multiple exploratory case study

All Nuffic pilot projects have been initial experiments with portfolios to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants. They relate to what Fullan (2001) calls the initiation and implementation phase of change (see Section 4.4.1). Initiation refers to the process that leads up to and includes the decision to proceed with the change, while implementation refers to the initial use of change. There were many actors and factors that have had an influence on the course of the pilot projects that could not be controlled by the development team working at Nuffic. For this reason it was decided to use a case study approach for the reconstructive study. The case study approach is appropriate if one is also interested in the contextual conditions. Yin (1994) defines a case study as 'an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident' (p.13). The case is the unit of analysis, which can be an individual, an organization, a programme, a procedure or an implementation decision. In this research study the case is a pilot project or a series of pilot

projects that have built on the previous outcomes to explore the characteristics of portfolio as a tool to identify, assess and recognize prior learning experiences of highly-skilled immigrants. Yin (1994) speaks about 'embedded' case study research if a single case addresses one or more subunits. This study is an embedded case study as it focuses on:

- The context characteristics;
- The portfolio product characteristics;
- The characteristics of the portfolio development process by the highly-skilled immigrant;
- The characteristics of portfolio assessment process by the recognizing body; and
- The characteristics of portfolio design and implementation.

This research study is a multiple case study. Altogether there are three cases encompassing five pilot projects in three different sectors. The first case study reviews the first Nuffic pilot project that was carried out in the educational sector in the year 2000. It explored the characteristics of portfolios for foreign-trained secondary school teachers. The second case study encompasses Nuffic pilot projects two, three and four that all took place in the health care sector. They explored the characteristics of portfolio for foreign-trained medical doctors. These pilot projects were carried out in the period 2002-2004 and have built on each other's outcomes. The third case study relates to the fifth Nuffic pilot project that has studied the use of portfolios to facilitate the integration process of immigrants who have recently arrived in the Netherlands. This pilot project was undertaken in the year 2004. From now on the pilot projects (three in total) and the refugees' pilot project. The three case studies will be referred to as: the teachers' case, the medical doctors' case and the refugees' case. Table 5-1 gives an overview.

Case study	Nuffic pilot Project	Period	Sector	Main aim of Nuffic pilot project
1	Teachers' pilot project	2000	Educational sector (secondary school teachers)	Exploring portfolio characteristics for foreign-trained teachers
2	Medical doctors' pilot projects	2002 - 2003	Medical sector (medical doctors)	Exploring portfolio characteristics for foreign-trained medical doctors (involving one medical faculty)
		2003	Medical sector (medical doctors)	Exploring portfolio characteristics for foreign-trained medical doctors (involving all medical faculties)
		2003 - 2004	Medical sector (medical doctors)	Monitoring the use of portfolio during the enrolment of foreign-trained medical doc- tors in Dutch medical science programmes (involving three medical faculties)
3	Refugees' pilot project	2004	Integration in Dutch society (multiple professions)	Exploring portfolio characteristics to enhance the integration process of highly- skilled immigrants in the Dutch society

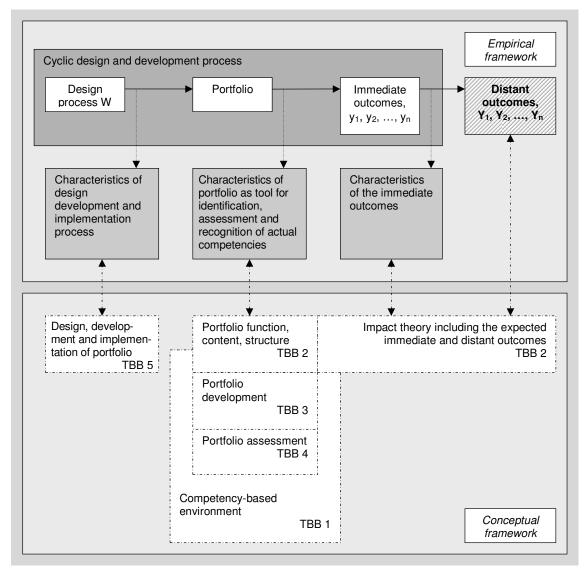
Table 5-1Overview of the three exploratory case studies

Yin (1994) indicates that case study research may be conducted for exploratory, descriptive and explanatory purposes. This reconstructive case study is exploratory in nature. It aims to identify 'what' the characteristics of a portfolio instrument for highly-skilled immigrants are, as well as those of the portfolio design and implementation process. Each case is analysed from three different perspectives (cf. Van de Akker, 2003): the substantive perspective, the technical-professional perspective and the social-political perspective. The substantive perspective concerns the nature of the educational or professional environment, as well as the characteristics of the portfolio instrument including its immediate outcomes. The technical-professional perspective relates to the characteristics of portfolio design and implementation, while the social-political perspective concerns the actors and factors that influence initiation and implementation decisions. The

theoretical building blocks that have been presented in Chapters 3 and 4 are used to develop a framework for the analysis of the Nuffic pilot project data. These data provide information on:

- the empirical characteristics of the portfolio instrument as a tool to identify, assess and recognize actual competencies (which relates to the first research question);
- the empirical characteristics of portfolio design and implementation (which relates to the second research question); and
- the experienced immediate outcomes of portfolio development in terms of added value for the highly-skilled immigrant and the assessor, i.e. the recognizing body (which addresses the first research question).

The analysis of the Nuffic pilot project data results in an empirical framework for the portfolio instrument. In this reconstructive study, the empirical framework is compared with the conceptual framework that encompasses the five theoretical building blocks. Figure 5-2 shows the relationship between the empirical framework and the conceptual framework.



Legend:

TBB = Theoretical Building Block

Figure 5-2 Studying development in practice: a reconstructive study

It should be noted that this research study does not address the distant outcomes of the portfolio instrument as the Nuffic pilot project data do not provide information on these. All pilot projects were initial experiments with the portfolio instrument. The timeframe of the pilot projects has been too short to study long-term effects. Therefore, the 'distant outcomes' block in Figure 5-2 is shaded.

5.2 Framework for data analysis

The aim of this section is to present the framework for the data analysis. This framework is derived from the five theoretical building blocks that were presented in Chapters 3 and 4. It is used for the exploration of the empirical characteristics of the portfolio. In this section the term portfolio is used as a container term referring to the product and how this product is used by highly-skilled immigrant and the assessors. Inspired by the curriculum representation presented by Van den Akker (2003), a distinction is made between the intended portfolio, the implemented portfolio and the experienced portfolio (see Table 2-2 on page 14). The intended portfolio relates to the characteristics of the portfolio as intended by the members of the development team of Nuffic and the implementers of change (the recognizing body who has agreed to experiment with the use of portfolios). The implemented portfolio refers to the characteristics of the portfolio as implemented in practice. It concerns the actual process of portfolio development and portfolio assessment. The experienced portfolio relates to how the target users (the highly-skilled immigrants and the assessors) have experienced the portfolio instrument in practice. This concerns the portfolio characteristics as experienced by the users after implementation. Table 5-2 provides a definition of the three terms and presents key questions that should be answered when analysing the characteristics of the intended portfolio, the implemented portfolio and the experienced portfolio.

-	Definition	Exploratory question
Intended portfolio	The intended portfolio relates to characteristics of the portfolio as intended by those who design, develop and implement the portfolio instrument. This concerns the basic philosophy behind portfolio as well as the wishes and opinions specified in documents and materials	What are the characteristics of portfolio as intended by the project partners?
Implemented portfolio	The implemented portfolio relates to the actual characteristics of the portfolio as implemented in practice. It concerns the actual product and the actual process of portfolio development and portfolio assessment.	What are the characteristics of portfolio as implemented in practice?
Experienced portfolio	The experienced portfolio relates to the characteristics of portfolio as perceived by the users which are the highly-skilled immigrants and the assessors	How is the portfolio instrument experienced by its target users (the highly-skilled immigrants and the assessors)?

Table 5-2	Description c	of the terme	intondod	implemented	and or	xperienced portfolio
	Description		milenueu,	implementeu	and er	

There may be a discrepancy between the intended portfolio and the implemented portfolio for various reasons. One of these might be that the necessary entry conditions were not met during the implementation. Important entry conditions for portfolio development include the possession of reflective skills, Dutch language proficiency, and familiarity with the Dutch assessment standards. The entry conditions are derived from the context characteristics that facilitate successful implementation of the innovation (see TBB1). If these conditions are not met, or only partially, the implemented portfolio is likely to differ from the intended portfolio. At the same time, it is likely that this will cause a discrepancy between the intended portfolio and the experienced portfolio. If the highly-skilled immigrants do not meet the required entry conditions, it will be more

difficult to grasp the meaning of portfolio development and the experienced value will be different than intended. There may also be a discrepancy between the implemented portfolio and the experienced portfolio. Both target groups (highly skilled immigrants and the portfolio assessors) might experience the portfolio differently than implemented, for example, because its purpose was not sufficiently well communicated.

The five theoretical building blocks that were presented in Chapter 3 and 4 have been used to develop a framework for the data analysis. The issues of analysis that have been distilled from each TBB are briefly described. They are used to explore the to explore the intended, implemented and experienced portfolio characteristics. Table 5-3 gives an overview of the five TBBs and shows were they were presented. The framework for data analysis is presented in Table 5-4 on page 121.

Main topic	Theoretical building block	Research question
Context characteristics	TBB1:	R2:
	Section 3.3, see Table 3-6 on	What are the characteristics of portfolio design,
	page 66	development, and implementation?
Product characteristics	TBB2:	R1:
	Section 4.1.4, see Table 4-5	What are the characteristics of the portfolio
	on page 81	instrument?
Portfolio development	TBB3:	R1:
process	Section 4.2.4, see Table 4-9	What are the characteristics of the portfolio
	on page 92	instrument?
Portfolio assessment	TBB4:	R1:
process	Section 4.3.3; see Table 4-12	What are the characteristics of the portfolio
	on page 100.	instrument?
Portfolio design and	TBB5:	R2:
implementation	Section 4.4.3, see Table 4-15	What are the characteristics of portfolio design,
	on page 108	development, and implementation?

Table 5-3Overview of the theoretical building blocks

Context characteristics (TBB1)

The context characteristics are explored to determine the complexity of change. It was argued in Section 3.3 that the complexity of portfolio implementation depends on the characteristics of the Dutch context in which the portfolio is introduced and on the characteristics of the portfolio candidate. In Section 4.5 it became evident that it is important to the context has implemented the assessment culture. It was argued that the analysis of the context characteristics should focus on:

- The evaluation approach;
- The evaluation standards;
- The evaluation instruments;
- The characteristics of the portfolio assessor; and
- The characteristics of the portfolio candidate.

For the purpose of this research study it is important to analyse the characteristics of the evaluation and recognition policy for highly-skilled immigrants in the particular sector and the characteristics of the professional sector itself. The analysis will focus on the first three issues specified above (evaluation approach, evaluation standards and evaluation instruments). It will describe the status quo at the time the pilot projects were carried out.

The analysis of the characteristics of the portfolio assessor focuses on:

- Experience with assessment of highly-skilled immigrants;
- Experience with portfolio instrument.

The analysis of the characteristics of the portfolio candidates concentrates on:

- Experience with portfolio instrument;
- Experience in professional sector in the Netherlands;
- Dutch language skills.

For both issues a distinction is made between the ideal characteristics and the actual characteristics. The analysis of the context characteristics results in a first empirical building block (EBB1).

Product characteristics (TBB2)

The product characteristics relate to:

- the main function of the portfolio instrument;
- the impact of the portfolio instrument;
- the structure and content;
- the standards applied; and
- the evidence as proof of competence.

All issues are addressed in the framework of data analysis. The impact is further operationalized by:

- the immediate outcome for the portfolio assessors (the recognizing body); and
- the immediate outcome for the portfolio candidate (the highly skilled immigrant).

For both issues the category 'implemented characteristics' is not applicable. The data analysis results in a second empirical building block for portfolio use by highly-skilled immigrants (EBB2).

Portfolio development (TBB3)

The third theoretical building block (TBB3) addresses three issues:

- The steps and strategies in the portfolio development process by the portfolio candidate;
- The measures taken to support the portfolio candidates in portfolio development;
- The clarity of the roles and responsibilities of the different people who take part in the process.

The data from the Nuffic project are analyzed to describe the intended, implemented and experienced portfolio characteristics (by the portfolio candidates). The analysis results in a third empirical building block for portfolio use by highly-skilled immigrants (EBB3).

Portfolio assessment (TBB4)

The fourth theoretical building block (TBB4) addresses the main purposes of portfolio assessment and the measures taken to warrant the quality of the assessment process. The issues of analysis that have been derived from TBB4 relate to both issues. They are:

- The main purpose of portfolio assessment;
- Additional instruments used to an assessment decision;
- Quality criteria for portfolio assessment.

In the description of the empirical characteristics, a distinction is made between the intended portfolio, the implemented portfolio and the experienced portfolio (by both the portfolio candidates and the portfolio assessor). The analysis results in a fourth empirical building block that addresses portfolio assessment (EBB4).

Portfolio design and implementation (TBB5)

The last theoretical building block (TBB5) relates to portfolio design and implementation. It addresses two issues: portfolio design and portfolio implementation. To analyse the portfolio design process, the following issues were derived from the framework:

- The applied perspective to change;
- The applied design paradigm, focussing on active involvement of future users in design process and the development of a shared meaning of portfolio use.

To analyse the characteristics of the implementation process, attention is given to:

- The actors and factors that influence implementation;
- Support of management;
- Available resources;
- Compliance with assessment culture;
- Training of assessors;
- Training of portfolio candidates.

In the exploration of Nuffic project data, a distinction is made between the intended characteristics of portfolio design and implementation and the implemented characteristics. The analysis results in a fifth empirical building block (EBB5).

Table 5-4 presents the framework for the data analysis. The next three sections describe the design of the five Nuffic pilot projects that are explored in the three case studies. The framework for data analysis is used to indicate the relationship between the available data in each case study and the main issues of analysis.

Table 5-4Framework for the data analysis

TBB 1: Context characteristics (Table 3-6 on page 66)			
Issues of analysis	Status quo		
Evaluation and recognition policy:Evaluation approachEvaluation instrumentsEvaluation standards			
 Professional sector: Evaluation approach Evaluation instruments Evaluation standards 			
 Characteristics of portfolio assessors: Experience with highly-skilled immigrants Experience with the portfolio instrument 	Ideal characteristics	Actual characteristics	
 Characteristics of portfolio candidates: Experience with the portfolio instrument Experience in the Dutch professional sector Dutch language skills 			

Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristics
Main function of portfolio			
Immediate outcomes for portfolio assessor			
Immediate outcomes for portfolio candidate			
Structure of portfolio			
Content of portfolio			
Standards			
Portfolio evidence			

TBB 3: Portfolio development by highly skilled immigrant (Table 4-9 on page 92)

Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristics
Steps and strategies in portfolio development			
Measures taken to support portfolio			
candidates			
The clarity about roles and responsibilities			

TBB 4: Portfolio assessment development by portfolio assessor (Table 4-12 on page 100)			
Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristics
The function of portfolio assessment			
Additional instruments to take assessment decision			
Quality criteria for portfolio assessment			

TBB 5: Portfolio design and implementation (Table 4-15 on page 108)			
Issues of analysis	Intended characteristics	Implemented characteristics	
Design processThe applied perspective to changeThe applied design paradigm			
 Implementation process The actors and factors that influence implementation Support of management Available resources Compliance with assessment culture Training of assessors Training of portfolio candidates 			

5.3 Description of the database for the teachers' case

This section describes the pilot project that was reviewed in the teachers' case and links the available database to the framework for the data analysis. Section 5.3.1 explains the context and design of the teacher's pilot project addressing: the pilot project design, the portfolio materials that were developed to support portfolio development and portfolio assessment, the portfolio candidates, the portfolio assessors and, finally, the evaluation design. Section 5.3.2 describes which data are available to explore the empirical characteristics for each issue of analysis in the framework for the data analysis. The exploration of the empirical characteristics is subject of discussion in Chapter 6.

5.3.1 Context and design of the teachers' pilot project

The teacher's pilot project was carried out in 2000 with financial support from the European Commission through the NARIC network. Its main purpose was to gather empirical data on the validity, reliability and national and international acceptability of a new assessment methodology that would focus on actual competencies of highly-skilled immigrants instead of their formal diplomas (Scholten and Teuwsen, 2001b). It has used a competency-based assessment procedure to see whether it could improve the recognition of actual competencies of foreign-trained teachers. The assessment procedure that was implemented by the Ministry of Education, Science and Culture is briefly described below. Thereafter the pilot project design is discussed.

In 2000, the Dutch introduced an assessment procedure to cope with the problem of teacher shortages. It was developed to recruit primary and secondary school teachers from other professional fields. University graduates or graduates from the universities of professional education (*hogescholen*) could undergo an assessment at a teacher training institute. They could also apply to a primary or secondary school for a temporary teaching position job and ask the school to support their assessment. If the assessment is positive, the graduate can start in the temporary teaching position and at the same time follow a teacher training programme. In the interim legislation '*Zij-instroom leraren primair en voortgezet onderwijs*' [Assessment prospective primary and secondary school teacher] that came into force in 2000, the following entrance requirements are made for the assessment:

- The candidate must have a higher education qualification if he wishes to teach in primary education or general secondary education;
- The candidate must have a secondary vocational qualification if he wishes to teach in preparatory secondary vocation education (*voorbereidend middelbaar beroepsonderwijs* – VMBO);
- A good record of conduct, and
- Relevant experience.

The assessment is based on a set of ten core competencies that had been defined by Stoas (2000) using previous teacher profiles as a starting point. The competencies are defined into four clusters. Table 5-5 gives an overview.

Table 5-5Core competencies that have formed the frame of reference in the assessment procedure for
primary and secondary school teachers

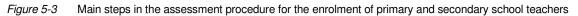
Α.	Performance within the educational learning process
1.	Ability to guide pupils in their learning process
2.	Ability to transfer information
З.	Ability to communicate and interact (social skills)
4.	Ability to organize a class and to manage a group
В.	General professional performance
5.	Subject expertise
6.	Professional attitude
7.	Ability to reflect and to take initiative
8.	Ability to work on personal development
С.	Performance within an organization
9.	Ability to work in a team
D.	Knowledge of education in general
10.	Knowledge of education in the Netherlands in general

The assessment contains different elements. First of all, a portfolio is developed and assessed. Then an authentic assessment takes place, which includes a pilot lesson, observed by two assessors, and a simulation. The final decision is one of the following three options:

- Fully qualified, which means that the candidate can start in a temporary teaching position and follow a tailor-made teaching programme (maximum duration is two years). Moreover, the candidate receives coaching on-the-job.
- Almost fully qualified, which means that the candidate cannot start teaching in a temporary teaching position. He needs to enrol on a flexible, tailor-made teacher training programme to further qualify as a teacher.
- Not yet qualified, which means that the candidate is advised to enrol on a traditional teacher training programme to qualify as a teacher.

After the training and coaching period, the candidate takes part in another assessment by the teacher training institution. If he passes this assessment, a traditional teaching qualification is awarded. Figure 5-3 on the next page presents the steps that were discussed above.

Application at primary or secondary school	Application to primary or secondary school that supports the assessment procedure or direct application to the teacher training institute to take part in the assessment.
¥	
Admission to assessment at teacher training institute	 The candidate needs to comply with the requirement in the interim legislation, which means that he needs to possess: a higher education qualification if he wishes to teach in primary education or general secondary education a secondary vocational qualification if he wishes to teach in <i>VMBO</i> A good record of conduct, and Relevant experience
\perp	
Assessment	 The aim of the assessment is to determine whether the candidate possesses the core competencies. The steps of the assessment are not regulated in the interim legislation. Common steps are: Portfolio development and portfolio assessment Authentic assessment task (a pilot lesson and a simulation) Final decision
Training and coaching agreement	The candidate signs a training and coaching agreement with the teacher training institute and the school where he starts in a temporary teaching position. The maximum duration is two years.
	
Final assessment (qualification)	At the end of the training and coaching period, the candidate undergoes a final assessment. If he passes, he receives the common teaching qualification.



Project design of the teachers' pilot project

The pilot project activities were structured with the help of the Analysis, Design, Development, Implementation and Evaluation model (ADDIE-model) (cf. Van den Akker et al., 1999; Plomp, 1982). The main activities are presented in brief below (cf. Scholten & Teuwsen, 2001b).

<u>Analysis</u>

During the analysis phase, further information was gathered on the assessment procedure (cf. Stoas, 2000). An important aim was to gather opinions from people who have been involved in the development, implementation or evaluation of the assessment procedure on whether the assessment procedures needed special adaptation to cope with the specific needs of the foreign-trained teachers. Therefore the following activities took place:

- Desk research to study the developed assessment instrument.
- Meetings with people who have been involved in either the development, the implementation or the evaluation of the national assessment procedure. Meetings were planned with the Ministry of Education, Science and Culture, Stoas Research (the organization that had been asked by the Ministry to develop the assessment procedure), and the University of Leiden (the organization that had been asked to evaluate the assessment procedure after one year time).
- Study visits to teacher training institutes to learn more about the flexible study programmes and the use of the assessment procedure in practice. Interviews were held with people from the Hogeschool Utrecht, Hogeschool Rotterdam en Omstreken and the Haagse Hogeschool.
- Meetings with people from *Educom*, the assessment centre which Nuffic decided to partner with. *Educom* is a collaborative initiative of two teacher training faculties, one from the University of Leiden and one from the University of Professional Education of Rotterdam (*Hogeschool van Rotterdam en Omstreken*). Two assessors were assigned to the Nuffic pilot project, one specialized in the training and assessment of 'grade-one' secondary school teachers (*eerstegraads leerkracht*), and one specialized in the training and assessment of 'grade-two' secondary

school teachers (*tweedegraads leerkracht*). A grade-one secondary school teacher is allowed to teach his subject of specialization at all levels of secondary education. A grade-two secondary school teacher is allowed to teach the subject in which he is specialized at secondary school, but not the last two years of the highest levels of general secondary education (*HAVO* and *VWO*).

Important questions addressed in all the conversations were:

- Should the assessment procedure be adapted to address the specific needs of foreigntrained teachers?
- Which assessment instruments should be used to assess Dutch language proficiency?
- What are the core competencies that need to be addressed in the assessment procedure?

<u>Design</u>

An important aim of the design phase was to identify the design specification of the portfolio instrument and the assessment procedure of which it is a part. To increase the civil effect of the assessment outcome, Nuffic and the (portfolio) assessors from *Educom* decided to use the national assessment procedure without major adaptations. The development team of Nuffic reviewed the original assessment materials developed by Stoas to decide which of the materials could be used without alteration and which needed to be adapted. It was decided to include the following steps in the assessment procedure:

- 1. Intake interview;
- 2. Portfolio assessment;
- 3. Planning interview;
- 4. Lesson observation;
- 5. Self-assessment;
- 6. Reflection interview;
- 7. Final decision.

Steps 3 till 6 are part of the pilot lesson. The main assessment instruments used are therefore the portfolio and the pilot lesson. Table 5-6 provides an overview of the materials that are needed in each step. It indicates which materials were used without alteration, which were slightly adapted and which were developed specifically for the Nuffic pilot project. A distinction is made between the materials that are needed by the portfolio candidate and those needed by the (portfolio) assessors.

Step in assessment		
procedure	Materials portfolio candidate	Materials for (portfolio) assessor
1. Intake interview	 Information leaflet^N Application form^A (Part 1-5 of portfolio format) 	 Checklist for selection criteria^N
2. Portfolio	 Portfolio format^A 	 Checklist for portfolio assessment^A
assessment	 (Part 6-7 of portfolio format) 	 Assessment sheet for portfolio evidence
3. Planning interview	 Information leaflet about authentic assessment^b Instruction form for pilot lesson^A 	 Interview guideline for planning interview
4. Lesson observation	■ NA	 Checklist for lesson observation
5. Self-assessment	 Self-assessment form^A 	• NA
6. Reflection interview	 NA 	 Interview guideline for reflection interview
7. Final decision	 NA 	 Checklist for developed competencies ^A Format for final decision ^A
8. Evaluation of pilot	 Logbook ^N 	 Checklist for focus group meeting
project	 Interview guideline ^N 	

Table 5-6Overview of the materials used in teachers' pilot project

Note: ^N = These materials were specifically developed for the pilot project; ^A = These materials are adapted versions of the original materials; NA = Not applicable.

Development

The materials that needed to be adapted or developed were made in the development phase. For the portfolio candidates these were:

- The information leaflet to explain the purpose of the pilot project.
- The portfolio format to gather information on the competencies developed by the candidate through prior learning experiences. The development team of Nuffic decided to structure the portfolio format into two main parts: an application form to select appropriate portfolio candidates and a part that addresses the identification of competencies.
- Information leaflet to inform the candidates on the authentic assessment that consisted of: the development of lesson plan, a planning interview (before the pilot lesson), the pilot lesson (observation by two assessors), self-assessment (after the pilot lesson) and a reflection interview.
- Instruction form for the authentic assessment: The purpose of this form was to explain the purpose of each part of the authentic assessment. It provides insight into the competencies that are addressed in the different elements of the assessment. Furthermore, it explains what is expected of the candidates in terms of preparation and planning.
- Self-assessment form:

After the pilot lesson the candidates were asked to complete a self-assessment form. This form contained various open questions that address the core competencies 1-4 (for an overview of the core competencies see Table 5-5 on page 123). The candidates had to reflect openly on the pilot lesson by answering the open questions. The issues addressed in the self-assessment are also subject of the reflection interview.

For the portfolio assessors, the following materials were developed or slightly adapted (see Table 5-6 on the previous page):

Checklist for selection criteria:

The main purpose of this form was to make notes during the intake interview to decide whether the candidate meets the selection criteria for taking part in the further assessment procedure. During the interview, the completed application form was discussed as well as the Dutch language proficiency.

Checklist for portfolio assessment:

This checklist was used during the portfolio assessment. The portfolio assessors were asked to review the portfolio before the interview and indicate which competencies are sufficiently addressed in the document. Furthermore, they could use the form to make notes on the issues they would like to discuss during the portfolio interview. The checklist could be further completed during the interview.

Overall checklist for the ten core competencies:

The main purpose of this form is to get an overall picture of the competencies developed by the candidate. It was adapted to include the elements of the assessment procedure for the foreign-trained teachers (portfolio assessment, planning interview, observation, reflection interview). The assessors can use this form to make note of the competencies shown during the different parts of the assessment procedure. It provides input for the final decision.

• Final decision form:

This form is used by the assessors to communicate their final assessment decision to the candidates. One decision category was added to the three discussed earlier: qualified, almost qualified and not qualified. This was 'qualified if Dutch language proficiency is improved'. This category is applicable to the candidates for whom the Dutch language forms the most important obstacle to teaching in a Dutch classroom.

Implementation

The implementation phase concerns the actual use of the national assessment procedure to assess the actual competencies of the selected group of foreign-trained teachers (FTs). It included the following steps:

- Selection of pilot project candidates (FTs) on basis of an application form;
- Intake interview by one portfolio assessor and two Nuffic staff members;
- Portfolio assessment by two portfolio assessors;
- An additional assessment task, including the following elements:
 - Preparation of a lesson plan;
 - Planning interview prior to a pilot lesson by two assessors;
 - Pilot lesson by FT;
 - Observation of the pilot lesson by two assessors;
 - Self-assessment by FT on the course of the pilot lesson;
 - Reflection interview after the pilot lesson by two assessors.
- Final decision by two assessors.

Evaluation

The course of the pilot project was evaluated by various groups. These were:

- The assessors who participated in the pilot project;
- The FTs who participated in the pilot project;
- The staff members of Nuffic who were responsible for the realization of the pilot project;
- Representatives of the NARIC and ENIC networks.

The evaluation design is discussed further below.

Portfolio materials in the teachers' pilot project

As indicated earlier, the portfolio format that was used contained two parts:

- An application form; and
- A part that contained the self-assessment and portfolio evidence.

The application form that was used during the intake interview to select the pilot project candidates. The second part was given to those who were selected for the assessment procedure. The candidates were given three weeks to complete the self-assessment and gather evidence for the competency claims. As in the original assessment procedure, the candidates did not receive any specific guidance in portfolio development. They could contact one of the portfolio assessors if certain aspects of the format were not clear.

Portfolio candidates in the teachers' pilot project

The portfolio candidates were selected by Nuffic with the assistance of *Informatiebeheer Groep, IBG*. *IBG* is the competent authority for the recognition of foreign-trained teachers in the Netherlands. Nuffic asked *IBG* to make a list of teachers who had applied for recognition in the period from 1999 to the first half of 2000. From this group, a selection was made using the following criteria:

- FTs who had applied for a secondary teaching qualification;
- FTs whose application met with a 'negative recognition decision'; and
- FTs whose records show that they had work experience as a teacher abroad.

A negative recognition decision means that the foreign qualification is considered to be of a lower level than that required for a Dutch teaching qualification.

In total, twenty-two FTs were selected. This group received a letter from *IBG* to inform them about the pilot project being initiated by Nuffic. If they were interested in taking part, they could contact Nuffic and ask for further information. Nine FTs responded to the letter and asked for the

application form. Seven of them returned the application form on time. One of them indicated that he had just enrolled on a Dutch engineering programme because he saw too many obstacles to working as a teacher in the Netherlands. If the pilot project would result in a teaching position, he was willing to reconsider his choice. Since this could not be guaranteed, he decided to withdraw from the pilot. Hence, six FTs were invited for an intake interview. They came from Bulgaria, Iraq, Malaysia, Morocco, Russia and South Africa. The Dutch language proficiency of one of the candidates was too limited to take further part in the assessment procedure. This means that five candidates were asked to complete the full portfolio. There were two drop-outs in this phase, which means that three candidates took part in portfolio assessment. Two of them completed the full assessment procedure. Table 5-7 gives an overview of the number of portfolio candidates in each phase of the assessment procedure.

Phase in assessment procedure	Number of candidates at the start	Number of drop-outs
Intake interview	6	1
Portfolio development	5	2
Portfolio assessment	3	1
Lesson observation		
Criterion-based interview	2	0
Self-assessment		

Table 5-7Overview of the number of portfolio candidates in the teachers' pilot project in each
phase of the assessment procedure

Portfolio assessors in the teachers' pilot project

The portfolio assessors who took part in the pilot project came from an assessment centre called *Educom*. As explained above, *Educom* is a collaborative initiative of two teacher training faculties, one from the University of Leiden and one from the University of Professional Education of Rotterdam (*Hogeschool van Rotterdam en Omstreken*). *Educom* was responsible for the assessment of the foreign-trained teachers (FTs). Two general assessors were assigned to the Nuffic pilot project. They were responsible for the assessment of the general didactical competencies. One of them was specialized in the assessment and training of 'grade-one' secondary school teachers (*eerstegraads leerkracht*), and one in the assessment and training of 'grade-two' secondary school teachers (*tweedegraads leerkracht*). In addition to the general assessors, there were three subject specialists involved in the Nuffic pilot project. They were responsible for assessing the subject specific competencies. The subject specialists were teachers at the school where the pilot lesson was conducted. They were teachers in mathematics, music and social science.

Evaluation design in the teachers' pilot project

The course of the pilot project was evaluated by four different groups of respondents:

- The (portfolio) assessors who took part in the pilot project (5 in total; two general assessors and three subject specialists);
- The foreign-trained teachers (FTs) who participated in the pilot project and underwent (parts
 of) the assessment procedure (two FTs completed the full assessment procedure);
- The staff members of Nuffic who were responsible for the realization of the pilot project (two in total); and
- Representatives of the NARIC and ENIC networks.

The (portfolio) assessors were invited to participate in an evaluation meeting at Nuffic in January 2001. The purpose of this meeting was to discuss:

- the validity and practicality of the assessment procedure for FTs;
- the problems encountered during the different phases of the assessment procedure; and
- suggestions for improvement; and
- suggestions for future initiatives to enhance the identification, assessment and recognition of actual competencies of highly-skilled immigrants.

Five people participated in this evaluation meeting: the two general assessors, a coordinator from Educom, the assessment centre which Nuffic worked with, and the two developers from Nuffic. During the meeting each step in the pilot project was separately discussed to identify the problems that were encountered. These were: the selection of participants, the intake interview, the reasons for dropping out after the intake interview, the portfolio instrument, the pilot lesson and the final assessment decision. Specific attention was given to the discrepancy between the intended purpose of the portfolio and the experienced purpose. The portfolio assessors were of the opinion that the 'entry characteristics' of the target group had a negative influence on the value of the portfolio instrument. Finally, the consequences of the entry characteristics of the target group on portfolio use were discussed. Suggestions for improvement and future use were also discussed. A report was written up after the meeting and sent to the participants for comments. In March 2001, the set-up and outcomes of the Nuffic pilot project were presented at the yearly conference of the Vereniging Lerarenopleiders Nederland (Association of Teacher Educators in the Netherlands), VELON. During a workshop, additional suggestions for portfolio use by foreign-trained teachers were made by 'peer assessors' (teacher trainers). In total, eight people participated in this workshop.

The foreign-trained teachers (FTs) were asked to reflect on the different steps in the assessment process by keeping a logbook. This logbook was handed out to the selected candidates after the intake interview. They were asked to send it back to Nuffic after they had received their assessment decision. In this way, they could be sure that their comments would not influence the assessment outcome. None of the logbooks were returned despite several reminders. To gather some data on the opinions of the FTs about the procedure, the development team of Nuffic decided to interview them by phone. In total, three FTs were interviewed, of which two had completed the full assessment procedure. An interview report was written up after the telephone interview for internal use.

The two developers of Nuffic attended the portfolio interview and the authentic assessment as observers. The made observation notes which were discussed informally with the (portfolio) assessors after each phase in the assessment procedure.

The last respondent group is formed by the representatives of the NARIC and ENIC network. To gather feedback on the course of the pilot projects and its outcomes, two meetings were planned. The first meeting was organized for the head of the NARIC network, the president of the ENIC network and the Co-Secretariat of the ENIC network. This meeting took place in The Hague at Nuffic in November 2000. In total, five people participated in this meeting. Besides the guests, two staff members of Nuffic took part.

A second meeting was arranged for a group of staff members from the Swedish NARIC in Stockholm. This meeting took place in December 2000. The Swedish NARIC became the competent authority for foreign-trained teachers in February 2000. They were very interested to learn about the Dutch experiences with the assessment of foreign-trained teachers. They gave their feedback on the basis of their own experiences. In total, six people participated in this meeting, two staff members from Nuffic and four staff members from the Swedish NARIC. The outcomes of both meetings were reported in internal documents. Table 5-8 provides an overview of the evaluation instruments that were used in the teacher's pilot project.

Respondent	Evaluation		Type of	N
group	instrument	Aim	report	participants
(Portfolio) assessors	Evaluation meeting	Discuss validity and practicality of whole assess- ment procedure with all (portfolio) assessors involved; its strong and weak points, problems encountered and suggestions for improvement.	Evaluation Report 1	5
Peer assessors	Workshop <i>VELON</i> conference	Gather additional suggestions from a group of peer assessors on how to deal with the specific entry characteristics of foreign-trained teachers	Evaluation Report 2	8
Foreign-trained teachers (FTs)	Log book	Gather feedback on the usefulness of the various steps in the assessment procedure in the eyes of the FTs; how did they proceed, what was difficult, not clear, easy, etc.?	-	0
	Semi- structured interview	Gather information on expectations, added value, problems, future steps, suggestions for improve- ment and fairness of assessment versus creden- tial evaluation	Interview Report 1, 2, 3	3
Staff members of Nuffic	Observation (informal)	Make notes on strong and weak points of a specific step in the assessment procedure. These were used as input for the reflection meetings with the participating (portfolio) assessors.	Notes	Not applicable
	Reflection (informal)	Reflect on the validity and practicality of the diffe- rent steps and instruments used in the assess- ment procedure; its strong and weak points, problems encountered and suggestions for improvement.	Notes	Not applicable
Representatives of NARIC network (peer group)	Meeting at Nuffic, November 2000	Gather feedback on the international acceptability of the portfolio instrument to assess actual com- petencies instead of formal diplomas. The out- comes of the pilot project were presented to the head of the NARIC network, the President of the ENIC network and the Co-Secretariat of the ENIC network to gather feedback	Notes	5
	Meeting at Swedish NARIC, December 2000	Gather feedback on the international acceptability of the portfolio instrument. The outcomes of the pilot project were presented to staff members of the Swedish NARIC who became a competent authority for the assessment of foreign-trained teachers. They were asked for comments from their experience.	Notes	6

 Table 5-8
 Evaluation instruments used in the teachers' pilot project

5.3.2 Linking the database of the teachers' pilot project to the framework for the data analysis

This section explains how the data available from Nuffic pilot project 1 relate to the issues addressed in the framework for the data analysis that was presented in Section 5.2 (see Table 5-4 on page 121). Indicated below is which data are available for analysis purposes for each theoretical building block. Table 5-9 on page 133 gives a summary overview.

Context characteristics (TBB1) - teachers' case

The first theoretical building block (TBB1) addresses the context characteristics (see Table 3-6 on page 66). As discussed in Section 5.2 the following issues of analysis were specified:

- the evaluation and recognition policy of highly-skilled immigrants;
- the professional sector;
- the characteristics of the portfolio; and
- the characteristics of the portfolio candidates.

The data used to analyse the evaluation and recognition policy of the foreign trained teachers are official documents that address the evaluation and recognition policy and an interview with a subject specialist from Nuffic. To gather information on the nature of the professional sector, official publications were used addressing teacher shortages, alternative programmes for teacher certification and the national assessment procedure that was developed by Stoas. During the analysis phase of the pilot project, meetings were held with various people to learn about the context and the use of the national assessment procedure in practice. The notes made during these meetings also form a source of information.

To study the intended characteristics of the portfolio assessors the following sources of information were used: the planning document of the pilot project and the pilot project report. To gather information on the implemented characteristics the notes from the development team were studied and the pilot project report. The intended characteristics of the portfolio candidates were analyzed using the planning document of the pilot project, the pilot project report and the information leaflet that was sent to the candidates who were interested in participation. To gather information on the implemented characteristics of the portfolio candidates, the notes of intake interview, the pilot project report and the report of the evaluation meeting held in January formed important sources of information. For privacy reasons, the application forms and the completed portfolios were not kept at Nuffic. Therefore, these documents were not available for the analysis of implemented characteristics.

Product characteristics (TBB2) - teachers' case

The second theoretical building block relates to the product characteristics of the portfolio instrument (see Table 4-5 on page 81). The following issues of analysis were specified in Section 5.2:

- The main function of portfolio;
- The immediate outcomes for portfolio assessors;
- The immediate outcomes for portfolio candidates;
- The structure of the portfolio;
- The content of the portfolio;
- The standards applied; and
- The evidence accepted as proof of competence.

As explained above, it was decided to use the national assessment for prospective teachers that was developed by Stoas as much as possible. Therefore, the original assessment materials were an important source of information for the intended characteristics of all issues of analysis. Additional source of information for the intended characteristics were: the planning document of the pilot project and the minutes taken during the preparatory meetings in the analysis phase of the project. The implemented portfolio characteristics were analyzed using the pilot project materials that have been published as an appendix to the pilot project report. Information on the experienced portfolio characteristics was gathered by analysing the pilot project report, the notes of the development team, the report of the evaluation meeting that was organized at the end of the pilot project for all portfolio assessors and the reports of the interviews with the portfolio candidates.

Portfolio development (TBB3) - teachers' case

The third theoretical building block addresses portfolio development (see Table 4-9 on page 92). The issues of analysis that are included in the framework for the data analysis are:

- The steps and strategies applied in the portfolio development process;
- The measures taken to support portfolio candidates;
- The clarity about different roles and responsibilities.

The intended characteristics of portfolio development were analyzed by studying the original assessment materials which were developed by Stoas, the planning document of the pilot project, the minutes of the preparatory meetings in the analysis phase of the project and the information leaflet that was developed for the portfolio candidates. To gain insight into the implemented characteristics, the pilot project materials and the pilot project report was studied, as were the observation notes of the development team of Nuffic. The experienced characteristics were explored using the observation notes of the development team of Nuffic, the report of the evaluation meeting held in January 2001, and the reports of the interviews with the portfolio candidates.

Portfolio assessment (TBB4) - teachers' case

The fourth theoretical building block concerns portfolio assessment (see Table 4-12 on page 100). The issues of analysis that were derived from TBB4 are:

- The function of portfolio assessment;
- The additional instruments used to take an assessment decision; and
- The quality criteria for portfolio assessment.

The intended portfolio characteristics were explored by analyzing the original assessment material. In addition, the project proposal, the minutes of the preparatory meetings with the portfolio assessors, and the information leaflet that was developed for the FTs provided information on how portfolio assessment was intended to take place. To gain insight into the implemented characteristics of portfolio assessment, the pilot project materials and the pilot project report were studied, as were the observation notes of the development team of Nuffic. The experienced characteristics were explored using the observation notes, the report of the evaluation meeting with the (portfolio) assessors and the interview data with the portfolio candidates. The notes made by the assessors during the assessment process, as well as the official assessment forms were not available for review due to privacy legislation. The final assessment decision was sent to the FT directly and not to Nuffic. As a consequence, the data held in these documents were not available for the data analysis.

Design and implementation process (TBB5) - teachers' case

The last theoretical building block addresses portfolio design and implementation (see Table 4-15 on page 108). The issues of analysis are:

- The design process; and
- The implementation process.

These intended characteristics of the design process were analyzed using the planning document of the pilot project, the notes from the preparatory meetings and the notes from the development team. The implemented characteristics were studied using the pilot project report, the notes from the development team and the email correspondence with the portfolio assessors. The intended characteristics of the implementation process were derived from the following sources of information: the original materials developed by Stoas, the planning document of the pilot project and the notes from the preparatory meetings in the analysis phase. The implemented characteristics were derived from the pilot project materials, the pilot project report and the email correspondence with the portfolio assessors. Table 5-9 provides an overview of the available data sources for the issues of analysis that were derived from each theoretical building block. In Chapter 6 the empirical characteristics will be presented to develop a framework of empirical findings for portfolio use by foreign trained teachers.

Table 5-9	Available	database	for the	teachers	case

TBB 1: Context characteristics (Table 3-6 on page 66) – teachers' case				
Issues of analysis Status quo				
Evaluation and recognition policy:	Official document on evaluation and recognition policy			
 Evaluation approach 	Meeting with subject specialist fro	om Nuffic		
 Evaluation instruments 	Pilot project report			
 Evaluation standards 				
Professional sector:	Official document on development	nts in teaching profession with		
 Evaluation approach 	ach respect to assessment			
 Evaluation instruments 	Notes from preparatory meetings in analysis phase of the project			
 Evaluation standards 				
	Ideal characteristics	Actual characteristics		
Characteristics of portfolio assessors:	Planning document of pilot	Notes from development team		
 Experience with highly-skilled immigrants 	project	Pilot project report		
 Experience with the portfolio instrument 	Pilot project report			
Characteristics of portfolio candidates:	Planning document of pilot	Notes of intake interview		
 Experience with the portfolio instrument 	project	Pilot project report		
 Experience in the Dutch professional sector 	Pilot project report	Report of evaluation meeting		
Dutch language skills	Information leaflet	with portfolio assessors		

TBB 2: Product characteristics portfolio (Table 4-5 on page 81) - teachers' case

		Implemented	
Issues of analysis	Intended characteristics	characteristics	Experienced characteristics
Main function of portfolio	Original assessment materials (Stoas, 2000) Planning document of pilot project Notes from preparatory meetings in analysis phase	Pilot project materials Pilot project report	Pilot project report Notes from development team Report of evaluation meeting with portfolio assessors Interviews with portfolio candidates
Immediate outcomes for portfolio assessor	As above	Not applicable	As above
Immediate outcomes for portfolio candidate	As above	Not applicable	As above
Structure of portfolio	Original assessment materials (Stoas, 2000) Planning document of pilot project Notes from preparatory meetings in analysis phase	Pilot project materials Pilot project report	Pilot project report Notes from development team Report of evaluation meeting with portfolio assessors Interviews with portfolio candi- dates
Content of portfolio	As above	As above	As above
Standards	As above	As above	As above
Portfolio evidence	As above	As above	As above

TBB 3: Portfolio development by highly skilled immigrant (Table 4-9 on page 92) - teachers' case

		Implemented	
Issues of analysis	Intended characteristics	characteristics	Experienced characteristics
Steps and strategies in portfolio development	Original assessment materials (Stoas, 2000) Planning document of pilot project Notes from preparatory meetings in analysis phase Information leaflet	Pilot project materials Pilot project report	Pilot project report Notes from development team Report of evaluation meeting with portfolio assessors Interviews with portfolio candidates
Measures taken to support portfolio candidates	As above	As above	As above
The clarity about roles and responsibilities	As above	As above	As above

TBB 4: Portfolio assessment development by portfolio assessor (Table 4-12 on page 100) – teachers' case				
		Implemented	Experienced	
Issues of analysis	Intended characteristics	characteristics	characteristics	
The function of portfolio assessment	Original assessment materials (Stoas, 2000) Planning document of pilot project Notes from preparatory meetings in analysis phase Information leaflet	Pilot project materials Pilot project report	Pilot project report Notes from development team Report of evaluation meeting with portfolio assessors Interviews with portfolio candidates	
Additional instruments to take an assessment decision	As above	As above	As above	
Quality criteria for portfolio assessment	As above	As above	As above	

Issues of analysis	Intended characteristics	Implemented characteristics
Design processThe applied perspective to changeThe applied design paradigm	Planning document of pilot project Notes from preparatory meetings in analysis phase Notes from development team	Pilot project report Notes from development team Email correspondence with portfolio assessors
 Implementation process The actors and factors that influence implementation Support of management Available resources Compliance with assessment culture Training of assessors Training of portfolio candidates 	Original assessment materials (Stoas, 2000) Planning document of pilot project Notes from preparatory meetings in analysis phase	Pilot project materials Pilot project report Notes from development team Email correspondence with portfolio assessors

5.4 Description of the database for the medical doctors' case

This section describes the database that is available for the second exploratory case study (the medical doctors' case). This case study encompasses the three medical doctors' pilot projects that have explored the characteristics of portfolio use by foreign-trained medical doctors (FMDs). Section 5.4.1 describes the design of the three pilot projects addressing the pilot project design, the portfolio materials, the portfolio candidates, the portfolio assessors and the evaluation design for each medical doctors' pilot project. Section 5.4.2 presents the framework for the data analysis for the medical doctors' case (see Table 5-13 on page 147). This overview shows which issues of analysis are addressed by which data.

5.4.1 Context and design of the medical medical doctors' pilot projects

Before describing the design of the three medical doctors' pilot projects the following general remark is made. The pilot projects have build on each others outcomes. The first medical doctors' pilot project took place from August 2002 to March 2003. It was a small-scale project that has involved one medical faculty, 13 foreign-trained medical doctors (FMDs) and three faculty members, who have served as portfolio assessors. It addressed the question 'What are the characteristics of a portfolio instrument to enhance the assessment and recognition process of foreign-trained medical doctors who need to enrol on a Dutch study programme?' (Scholten, Teuwsen & Mak, 2003a). The second medical doctors' pilot project took place from April 2003 to November 2003. It addressed the same research question, but involved a wider evaluation group, namely all Dutch medical faculties (Scholten, Teuwsen & Mak, 2003b, 2004). The third medical

doctors' pilot project focused on the impact of the portfolio instrument. It studied portfolio assessment during the enrolment procedure of a selected group of FMDs at three Dutch medical faculties. This project took place in the period November 2003 to December 2004 (Mak, Scholten, Teuwsen & Sikkema, 2005). The design of each pilot project is described in brief below.

Project design of the first medical doctors' pilot project

The main aim of this pilot project was to explore the characteristics of the portfolio to enhance the assessment and recognition process of FMDs. The project activities have been planned with the help of the Analysis Design Development Implementation and Evaluation model (ADDIE) (cf. Van den Akker et al., 1999, Plomp, 1982). The main activities in each phase are presented in brief below (cf. Scholten et al., 2003a):

<u>Analysis</u>

The following activities took place in the analysis phase:

- Establish a group of faculty members to specify the characteristics of the intended portfolio. The group consisted of five people. Two admission officers and three other faculty members with different fields of expertise. The first faculty member has longstanding experience in the assessment and recognition of FMDs. He is the president of the exam committee of the medical faculty in Utrecht and [member of the specialist group of the Bureau for Foreign Degree Holders]. Over the years, he has conducted many interviews with foreign-trained medical doctors, both at faculty level for the purpose of academic recognition (enrolment on the Dutch medical science programme) and at national level for the purpose of professional recognition (entrance to central register for medical doctors, the so-called BIG-register). The second faculty member was an educational specialist involved in the design and development of the new curriculum for the traditional medical science programme. She did not have direct responsibilities with FMDs. The third faculty member was a sociologist with teaching responsibilities in the preparatory study programme for FMDs. This programme is obligatory before entering the medical internship programme. She gives communication and attitude training to the FMDs and has longstanding experience in the teaching, guidance and assessment of FMDs.
- Organize preparatory meetings with the faculty members to explore the existing wishes, ideas and opinions about the use of the portfolio to improve the enrolment process at faculty level. As such, the characteristics of the intended portfolio were clarified with respects to its main function, structure, content, guidance, assessment and impact.
- Desk research to study current assessment standards.

<u>Design</u>

In the design phase, the development team of Nuffic defined a first set of design specifications for the portfolio instrument. These design specifications were based on the outcomes of the preparatory meetings and the desk research.

Development

In the development phase, the development team of Nuffic developed a first set of portfolio materials. These materials were evaluated by the three faculty members who were involved in the analysis phase. After the review, the materials were implemented and tested.

Implementation

The main purpose of the implementation phase was the first actual use of the portfolio materials in practice. It contained the following steps:

- Information meeting to inform FMDs on the purpose of the pilot project and portfolio development.
- Guidance of the FMDs who applied to take part in the portfolio development process.

This process is explained further below.

Evaluation

The course of the pilot project was evaluated by three different groups of respondents:

- The faculty members (FM) who reviewed the developed portfolios (the portfolio assessors).
- The foreign-trained medical doctors (FMDs) who participated in the portfolio development workshop and developed a portfolio of prior learning and work (the portfolio candidates).
- The trainers of Nuffic who gave the portfolio development workshop.

The evaluation design is discussed in more detail below.

Portfolio materials in the first medical doctors' pilot project

The following portfolio materials were implemented and tested in the first medical doctors' pilot project:

- Information material about the portfolio development course.
- A portfolio development course that consisted of five group meetings of two hours each. A short outline was developed for each group meeting (see Appendix I).
- Four portfolio assignments which had been developed as homework for each group meeting.

Portfolio candidates in the first medical doctors' pilot project

In August 2002, an information meeting was organized by the admission officers to inform the FMDs about the new enrolment procedure. In addition, an information leaflet was handed out to explain the purpose of the pilot project and portfolio development. After this information meeting, thirteen FMDs sent in the application form. They came from a variety of countries (seven from Afghanistan and one each from Brazil, Peru, Yugoslavia, Lebanon, Turkey and Iraq). All thirteen FMDs took part in the first group meeting. Seven of them completed the full portfolio development course.

Portfolio assessors in the first medical doctors' pilot project

A group of eight faculty members was selected by the admission officers to take part in the evaluation of the pilot project outcomes. Besides the three faculty members involved in the analysis and development phase of the pilot project, five other faculty members were asked to take part in the evaluation of the portfolio characteristics. These were all medical doctors. Two of them were members of the exam committee and occasionally conduct enrolment interviews with FMDs. The other three medical doctors had training responsibilities. All eight faculty members were asked to review two example portfolios. These were selected from the seven portfolios developed in the portfolio development course. Three of the eight 'portfolio assessors' responded. All three had direct responsibility in the assessment or training of FMDs. Two were medical doctors and one was a sociologist.

Evaluation design in the first medical doctors' pilot project

The evaluation design was as follows (cf. Scholten et al., 2003a). The faculty members were asked to evaluate the implemented portfolio characteristics focusing on the product characteristics; they served as portfolio assessors. This was done by means of a questionnaire followed by a semi-structured interview. They were asked to review two example portfolios and reflect on the following issues:

- The content of the portfolio; are the subjects addressed relevant and sufficiently covered in terms of the breadth and depth of the information provided?
- The relevance and importance of the evidence categories;
- The role of the portfolio instrument in the admission procedure at faculty level; and
- The additional assessment instruments that are needed to further enhance the assessment and recognition of the competencies of the foreign medical doctors.

Eight faculty members received a letter explaining the purpose of the evaluation. Enclosed with the letter were two example portfolios and a questionnaire. Two medical doctors responded by email to say that they found the pilot project very interesting but did not have the time to respond to the questions asked. In total, three faculty members did take part in the evaluation process.

The FMDs were asked to evaluate the characteristics of the implemented portfolio development course. At the last group meeting, they received a questionnaire addressing the following matters:

- The clarity of the purpose of the pilot project in general, and the portfolio development course specifically;
- The quality of the information that was provided about the project and the portfolio development course;
- The group meetings;
- The portfolio assignments; and
- The final product, the portfolio of prior learning, developed by themselves.

As remarked before, seven of the thirteen FMDs completed the portfolio development course. Six of them filled in the questionnaire. To gather information on the reasons for dropping out, a non-response questionnaire was developed by the development team. The six FMDs who did not complete the portfolio development course received a non-response questionnaire by post. Three of them returned the questionnaire to Nuffic.

The trainers of Nuffic evaluated the course of the implementation process via informal methods, such as observation and reflection. In addition, an unforeseen evaluation event took place as the pilot project results were presented at a restricted conference organized by the Bureau for Foreign Degree Holders (*CBGV*) of the Ministry of Health, Welfare and Sport in March 2003. In 2001, the Ministry had asked *CBGV* to study the consequences of a central assessment procedure for highly-skilled immigrants who wish to work in the Dutch health care sector. Towards the end of 2002, *CBGV* published their recommendations under the title of 'Professional competence without borders' (*Vakbekwaamheid zonder grenzen*). The aim of the conference was to present the recommendations to a broader public together with other initiatives that could influence the thinking on a central assessment procedure for highly-skilled immigrants in the health care sector. In total, more than a hundred people were invited from about fifty organizations, counselling organizations, pressure groups and politic parties. Table 5-10 provides a summary of the evaluation instruments that were used for each respondent group. It also indicates the number of respondents.

Respondent	Evaluation	A:	
group	instrument	Aim	N/Nres
Faculty members (FM)	FM-questionnaire	The aim was to gather information on the function, the expec- ted outcome, content and structure of the implemented portfolio characteristics	8/3
	Semi-structured interviews	The aim was to gather in-depth information on the suggestions made for revising the implemented portfolio characteristics and the ideas and opinions about portfolio use for identification, assessment or recognition purposes.	3/3
Foreign-trained medical doctors	FMD- questionnaire	The aim was to gather information on the implemented portfolio characteristics with respect to portfolio development.	7/6
(FMD)	Non-response questionnaire	The aim was to gather information on the reasons for dropping- out.	6/3
Trainers of Nuffic	Observation	The trainers observed the participation of the FMDs during the group meetings and took revision notes.	2/2
	Reflection	The trainers reflected on the strong and weak points of each group meeting and took reflection notes.	2/2
Peer group	Presentation of	The project results were presented at an invitational confe-	
(conference)	project results	rence organized by the Ministry of Health, Welfare and Sports.	

Table 5-10 Description of the evaluation instruments in the first medical doctors' pilot project

Legend: N/Nres = Number of total group/Number of respondents.

Project design of the second medical doctors' pilot project

The aim of the second medical doctors' pilot project was the same as the first; it explored the characteristics of the portfolio instrument to enhance the identification, assessment and recognition of actual competencies of FMDs. It built on the results of the previous pilot project. The outcomes of the second pilot project were evaluated using a wider respondent group, involving faculty members of all eight medical faculties in the Netherlands. The project activities were again planned using the ADDIE-model as a starting point. The main activities in each phase are described in brief below (cf. Scholten et al, 2003b, 2004).

Analysis

The analysis phase focused on the evaluation outcomes of the first medical doctors' pilot project. First of all, the outcomes of the evaluation among the FMDs (questionnaire) were analysed to revise the implemented portfolio development course. The most important issues that came out of the evaluation were:

- Improving the clarity about the purpose of portfolio development, the content of the portfolio (which subjects need to be addressed and in what detail?), and the structure of the portfolio; and
- Improving the measures of feedback during portfolio development.

Secondly, the outcomes of the FMD-questionnaires were compared with the observation and reflection notes of the trainers. These notes reveal room for improvements in the following areas: the clarity of the purpose of the portfolio, stimulation of reflection skills, and more guidance in making short statements on prior learning experiences in the Dutch language. Thirdly, the outcomes of the evaluation among the faculty members were used to revise the implemented characteristics of the portfolio product (its content and structure). These outcomes revealed a preference for a fixed portfolio format, and more specific information about:

- the work experiences abroad;
- the guidance and assessment during internships (or work experience) in the health care sector in the Netherlands;
- future prospects in the Netherlands.

Design and development

In the design and development phase, a second set of design specifications for the portfolio instrument was defined, and the portfolio materials were revised accordingly. To improve the clarity of the purpose of portfolio development, a course manual was developed, including:

- a short article about portfolio development;
- the requirements for participating in the portfolio development course;
- the organization and set-up of the portfolio development course;
- the portfolio assignments that served as homework for each group meeting.

After the second group meeting, a fixed portfolio format was developed by the trainers to facilitate the structuring of the information in the portfolio.

Implementation

During the implementation phase, the revised portfolio materials were tested in practice. The following activities took place:

- Selection of FMDs by the student counsellor at the medical faculty in Utrecht;
- Guidance of portfolio development by the trainers of Nuffic.

Evaluation

During the evaluation phase, the implemented portfolio characteristics were evaluated using the same three respondent groups as in the previous pilot project: the faculty members, the FMDs, and the trainers of Nuffic. The evaluation design is discussed in more detail below.

Portfolio materials in the second medical doctors' pilot project

The portfolio materials that were implemented and tested were:

- Information material about the portfolio development course, including the course manual;
- A portfolio development course consisting of six group meetings of three hours each. Three of these meeting were held in a lecture hall and three in a computer room;
- A revised set of portfolio assignments included in the course manual;
- A fixed portfolio format, which was introduced during the third group meeting. The portfolio assignments were included in the format. The portfolio candidates received a floppy disk and a print-out to accompany the disk.

Portfolio candidates in the second medical doctors' pilot project

The portfolio candidates in were selected as follows. In February 2003, the admission officers sent a letter to the FMDs that had been assigned by CIBA to the medical faculty in Utrecht (CIBA is the central committee for the enrolment of FMDs). In total, twenty-one FMDs received a letter, together with an information leaflet on the purpose of the pilot project and the set up of the portfolio development course. Eight of them returned the application form, and six FMDs started on the portfolio development course in March 2003. The portfolio candidates came from three different countries (four from Afghanistan, one from Turkey and one from Somalia).

Portfolio assessors in the second medical doctors' pilot project

The implemented portfolio characteristics were evaluated with the support of the faculty directors of all eight medical faculties. The president of the Education Committee of the Consultation Body for the Discipline of Medical Science (*Opleidingscommissie van het Disciplineoverlegorgaan Medische Wetenschappen (OCG-DMW)*) sent an email to all eight faculty directors. He asked them to select faculty members to review the portfolio characteristics. The faculty members had to be involved in either the assessment and recognition of FMDs or their education. In total,

seventeen faculty members were asked to take part in the evaluation. They received a letter explaining the purpose of the evaluation. Enclosed with the letter were the portfolio format and a questionnaire. The faculty members could ask for two example portfolios if they wished. In total, fourteen faculty members responded to the evaluation.

Evaluation design in the second medical doctors' pilot project

The evaluation design of the second medical doctors' pilot project resembles the design of the first. The same three groups of respondents were distinguished: the faculty members, who were selected by the faculty directors of all eight medical faculties (these were the portfolio assessors), the FMDs who participated in the portfolio development course, and the trainers of Nuffic, who gave the portfolio development course. The same set of evaluation instruments was used. Table 5-11 provides an overview of these and shows the number of respondents. As indicated before, seventeen faculty members were asked to evaluate the implemented portfolio characteristics. In total, fourteen responded. Seven of them filled in the questionnaire, while seven others chose to respond via other means (interview, letter or email).

Project design in the third medical doctors' pilot project

The aim of third medical doctors' pilot project twofold. First of all, it has built on the project results of the second medical doctors' pilot project to further explore the characteristics of the portfolio instrument. Second, it has monitored the actual use of the portfolio during enrolment at the Dutch medical faculties in the 2003-2004 academic year. The design of the third medical doctors' pilot project is presented below using the five phases of the ADDIE-model (cf. Mak et al, 2005).

Respondent	Evaluation	••••	N1/N1
group	instrument	Aim	N/Nres
Faculty	FM-	The aim was to gather information on the function, expected	17/7
members	questionnaire	outcome, content and structure of the implemented portfolio	
(FM)		characteristics.	
	Semi-structured interviews	The aim was to gather in-depth information on the suggestions made for revising the implemented portfolio characteristics, and the ideas and opinions about the use of portfolio for	17/7
		identification, assessment or recognition purposes.	
	Other	Some of the respondents chose to respond in a way other than by questionnaire or interview, e.g. they sent a letter or email to give their opinion.	17/3
Foreign-trained	FMD-	The aim was to gather information on the implemented portfolio	6/5
medical doctors (FMD)	questionnaire	characteristics with respect to portfolio development.	
Trainers of Nuffic	Observation	The trainers observed the participation of the FMDs during the group meetings and took revision notes.	3/3
	Reflection	The trainers reflected on the strong and weak points of each group meeting and took reflection notes.	3/3

Table 5-11 Description of the evaluation instruments used in the second medical doctors' pilot project

Legend: N/Nres = Number of total group/Number of respondents.

<u>Analysis</u>

First of all, the evaluation outcomes of the second medical doctors' pilot project were analysed to revise the portfolio characteristics that had been implemented in that pilot project. The most important issues that came out of the evaluation were:

 The portfolio format was a welcome addition to the portfolio development course and should be given a more central position in the course, as this could improve the clarity of the purpose of portfolio development. The portfolio candidates still have difficulties in determining the degree of detail required in their portfolio descriptions.

The development of reflective skills should be given more attention, just as the development of certain computer skills that are needed to work with the portfolio format.

Design and development

In the design and development phase, a third set of design specifications and portfolio materials were developed. The most important revisions were related to:

- The portfolio format; the new revised format contains seven chapters;
- The course manual including a print out of the portfolio format with example descriptions;
- The course set-up and outline; the revised portfolio development course contains five group meetings of four hours each. Every meeting is organized in a computer room (see Appendix I for an outline of the course);
- In addition, some extra reflection assignments were developed to stimulate the reflective skills of the portfolio candidates.

Implementation

The new revised materials were implemented and tested in the period September 2003 – June 2004. In total, four portfolio development courses were offered in two different contexts.

- First of all, three portfolio development courses were part of a preparation programme that had been developed by the *Stichting Vluchteling Studenten (UAF)* [Foundation for Refugee Students]. This programme is offered to *UAF* clients who wish to prepare for enrolment on Dutch medical science programmes. This involves refugee doctors who have received a negative recognition decision from the Ministry of Health, Welfare and Sports. About ten to twelve FMDs participated in each portfolio development course.
- Secondly, one portfolio development course was part of a preparation programme that was
 offered by the Municipality of Rotterdam in cooperation with an employment service agency
 for refugees (*Emplooi*) and a regional educational centre (*Albeda College*). This programme
 lasts one-year and aims to prepare FMDs who live in Rotterdam for admission to the medical
 faculty at Erasmus University Rotterdam.

In total, forty-four FMDs enrolled on a portfolio development courses. Of them, forty completed the full course and developed a portfolio of prior learning and work. In July 2004, information was collected about the status of preparation of these FMDs via CIBA and *UAF*. Twelve of them could be monitored during their enrolment process at three medical faculties: Erasmus University Rotterdam, University of Utrecht and University of Nijmegen.

Evaluation

The evaluation focused on the revised portfolio development course, as well as on the actual use of the portfolio instrument during the enrolment of the twelve selected FMDs. With respect to the first, the FMDs who took part in the portfolio development courses received a questionnaire during the last meeting. The enrolment interviews with the FMDs took place in July and August. In preparation for the interview, the portfolio assessors received the portfolios of the FMDs and were asked to review them carefully before the interview. In addition, they were asked to fill in two questionnaires, one before the interview and one after. The evaluation design is discussed in more detail below.

Portfolio materials in the third medical doctors' pilot project

The portfolio materials that were implemented and tested were:

 A course manual containing background information about portfolio development, a revised portfolio format with exemplary portfolio descriptions and a Word manual;

- A revised portfolio format containing seven chapters and an appendix for the portfolio evidences;
- A portfolio development course consisting of five group meetings of four hours each, all of which were held in a computer room;
- A Dutch language module to improve the language skills on basis of the portfolio descriptions. This module was implemented and tested during the *UAF* portfolio development courses.

Portfolio candidates in the third medical doctors' pilot project

As indicated above, forty-four FMDs enrolled on a portfolio development course. Forty of them completed the full course. They came from seven different countries: Afghanistan (28), Azerbaijan (2), D.R. Congo (2), Iraq (4), Romania (1) Russia (2), and Turkey (1).

In July, information was gathered on the status quo of these forty FMDs with respect to enrolment on a Dutch medical study programme. Seventeen of them had to postpone their enrolment because they had not passed the Dutch language exam yet. Five other candidates had chosen not to enrol on a Dutch medical programme, instead they were following another educational path. Six candidates had already concluded the enrolment procedure and were studying at a medical faculty. Another four candidates had postponed the enrolment for personal reasons. As a result, twelve FMDs could be monitored during the selection and/or enrolment procedure at the medical faculty in Rotterdam, Utrecht and Nijmegen. Ten of them agreed to participate.

Portfolio assessors in the third medical doctors' pilot project

The portfolio assessors that took part in the third medical doctors' pilot project came from three medical faculties (Rotterdam, Utrecht and Nijmegen). In Rotterdam the enrolment procedure includes a selection interview conducted by three faculty members (two medical doctors and one Dutch language teacher). In Utrecht and Nijmegen, the purpose of the interview is different. The FMDs assigned to these two faculties are already certain of enrolment and the interview might only influence the duration of study. In Utrecht, the enrolment interview is normally conducted by four people: two medical specialists, one Dutch language teacher (or communication specialist) and a student counsellor. Three of them participated in the third medical doctors' pilot project. In Nijmegen, the enrolment interview is normally conducted by three people: one medical specialist, one language or communication expert and a student counsellor. Two of them took part in the evaluation study. The portfolio assessors received the portfolio prior to the interview. They were asked to review it carefully and use it during the interview.

Evaluation design in the third medical doctors' pilot project

As indicated before, the evaluation focused on:

- The revised portfolio development course (including the revised portfolio format); and
- The actual use of the portfolio instrument during the selection and/or enrolment procedure at the Dutch medical faculties.

The revised portfolio development course was evaluated by the FMDs who participated in the course. In each portfolio development course, a questionnaire was handed out during the last group meeting. Thirty of the forty FMDs responded to the questionnaire (response rate of 75%).

The following evaluation design was chosen to evaluate the actual use of the portfolio instrument during the enrolment/selection procedure at the three medical faculties. In preparation of the interview, the 'portfolio assessors' received the portfolio of the FMD with whom the interview was being held. Both the portfolio assessors and the FMD were asked to fill out two questionnaires, one before and one after the interview. In addition, semi-structured interviews were conducted

with both respondent groups after the interview. Table 5-12 describes the purpose of each evaluation instrument. In addition it provides an overview of the number of respondents. These numbers are explained below.

Ten FMDs agreed to take part in the evaluation study. Six of them had a selection interview in Rotterdam, one in Nijmegen and three in Utrecht. At all three faculties, the portfolio was not an official part of the normal enrolment/selection procedure. As a consequence there was no administrative procedure for the distribution of the portfolios among the portfolio assessors (the faculty members of the exam committee). In some cases Nuffic distributed the portfolios (after receiving the final up-date of the FMD). In other cases, the FMD gave the portfolio to the admission officer, who in turn distributed it to the portfolio assessors.

Respondent group	Evaluation instrument	Aim	N/Nres Rotterdam	N/Nres Nijmegen	N/Nres Utrecht
Number of FM	l		3	2	3
Faculty members (FM)	Pre-interview questionnaire	Information is collected about the impression that the portfolio assessor has of the FMD after reading the portfolio and without having seen or spoken to the person.	18/11	2/2	9/4
	Post-interview questionnaire	Information is collected about whether reading the portfolio was a valuable preparation for the interview, how the portfolio assessor used the portfolio during the interview and whether using the portfolio instrument in the enrolment process might have any additional value.	18/12	2/2	9/3
	Semi- structured interview	Per faculty, a semi-structured interview was planned with the portfolio assessors in order to gain more detailed information on the results of the pre- and post-interview questionnaires.	1/3	-	
Number of FM	IDs		6	1	3
Foreign- trained medical doctors (FMDs)	Pre-interview questionnaire	Information is collected about the added value of portfolio development for preparing for the selection or enrolment interview, whether the FMD thinks that the portfolio gives a good impression of his actual competencies, and how he thinks he can use the portfolio to prepare for the interview.	6/6	1/1	3/3
	Post-interview questionnaire	Information is collected about how the portfolio was used during the interview, on the topics about which extra information had to be given in addition to the portfolio, and the perceived value of the portfolio in the enrolment process.	6/5	1/1	3/2
	Interview	After the interview at faculty level, telephone interviews were held with the FMDs to gain further information on the results of the pre- and post-interview questionnaires.	6	1	-

Table 5-12 Evaluation instruments used to evaluate the actual use of portfolio during selection / enrolment

Legend: N/Nres = Number of total group/Number of respondents

In Rotterdam, the selection interview was conducted by three portfolio assessors. Two of them filled in the pre-interview questionnaire and the post-interview questionnaire for each of the six FMDs (except for one pre-interview questionnaire for one FMD, see Table 5-12). The third portfolio assessors agreed to take part in the interview, but was not willing to fill in the questionnaires as this was too time-consuming. During the semi-structured interview with all three portfolio assessors, each of the six portfolios were briefly reviewed. The issues discussed were summarized in a report that was sent to the portfolio assessors for comments. In Utrecht, the data collection process was more complicated because some of the interviews had been re-scheduled and there were changes in the portfolio assessors that were to conduct the interviews. As a consequence, not all portfolio assessors received the portfolio of the FMD before the interview. In total, there were three FMDs with whom an enrolment interview was planned. For the first FMD, three portfolio assessors filled in a pre-interview questionnaire and two returned a post-interview questionnaire. For the second FMD, only one portfolio assessor completed a pre-interview questionnaire, and no post-interview questionnaire was received. For the third FMD, only one portfolio assessor completed a post-interview questionnaire. This explains the total number of four pre-interview questionnaires and three post-interview questionnaires in Table 5-12. Due to the busy timetables of the portfolio assessors, it was not possible to plan a semi-structured interview before the focus group meeting. Therefore no interviews were conducted with the portfolio assessors in Utrecht. In Nijmegen, two of the portfolio assessors returned both the preinterview questionnaire and the post-interview questionnaire. Also, no interview was conducted with the portfolio assessors at this faculty.

The third medical doctors' pilot project was concluded with an expert meeting that was organized in December 2004 for various groups of stakeholders in the health care sector (e.g. the Ministry of Health, Welfare and Sports, representatives of all eight medical faculties, representatives of organizations that support the interests of FMDs, for example *UAF*, *UAF* Job Support, *Emplooi* and municipalities). The main purpose of this meeting was to present the outcomes of the pilot project and to discuss the future role of the portfolio in a central assessment procedure for FMDs, as well as the requirements with regard to its structure and content. In total, 28 people participated in the meeting. The outcomes of the meeting were summarized in a brief report, which was sent to the participants afterwards.

5.4.2 Linking the database of the medical doctors' pilot projects to the framework for the data analysis

The aim of this section is to explain how the available data from Nuffic pilot projects 2, 3 and 4 are linked to the framework for the data analysis that was presented in Section 5.2 (see Table 5-4 on page 121). Below, it is briefly indicated which data are available for the analysis of the issues that were derived from each theoretical building block. Table 5-13 on page 147 gives a summary overview.

Context characteristics (TBB1) - medical doctors' case

The first theoretical building block addresses the context characteristics that are likely to have a positive influence on the introduction of the portfolio use by highly-skilled immigrants (see Table 3-6 on page 66). As discussed in Section 5.2 the following issues of analysis were specified:

- the evaluation and recognition policy of highly-skilled immigrants;
- the professional sector;
- the characteristics of the portfolio; and
- the characteristics of the portfolio candidates.

To gather information on the current evaluation and recognition policy, the following data was available:

- Documents and reports describing the existing evaluation and recognition practice for highlyskilled immigrants who wish to work in the Dutch health care system published by the Ministry of health, Welfare and Sports, Nuffic, the medical faculties in the Netherlands and UAF.
- Documents that contain evaluation data on the current recognition policy and practice.
- Interviews with experts in the field who know about the implementation of the policy in practice (staff members of CBGV, and credential evaluators at Nuffic).
- Preparatory meetings with faculty members (including the admission officers) to learn about the existing enrolment procedure.

To gather information on the professional sector the Framework for Medical Doctors 2001' (*Raamplan Basisarts, 2001*) that describes the target objectives of the medical science programmes in the Netherlands was studied. In addition different documents and reports on the assessment of professional competence of (foreign-trained) medical doctors were used to get an impression. The minutes of the preparatory meetings with faculty members also gave insight in the nature of the current study programmes and the evaluation instruments used.

To gather information on the characteristics of the portfolio assessors the following data was used: the project proposal gave insight in the ideal characteristics, just as the emailcorrespondence with admission officers concerning the selection of faculty members for the portfolio assessment. The actual characteristics were explored using the email correspondence and the outcomes of the questionnaires used in the first and second medical doctors' pilot projects.. For the exploration of the characteristics of portfolio candidates, the following data was available: the project proposal, the information brochure and the application form gave information on the intended selection criteria. To explore the actual characteristics, the returned and completed application forms were used in combination with administrative data from the admission officers. Furthermore, the draft versions of the portfolio provided information on the actual characteristics of the portfolio candidates.

Product characteristics (TBB2) - medical doctors' case

The second theoretical building block relates to the product characteristics of the portfolio instrument (see Table 4-5 on page 81). The following issues of analysis were specified in Section 5.2:

- The main function of portfolio;
- The immediate outcomes for portfolio assessors;
- The immediate outcomes for portfolio candidates;
- The structure of the portfolio;
- The content of the portfolio;
- The standards applied; and
- The evidence accepted as proof of competence.

The intended characteristics were explored using the pilot project proposals, the minutes of the preparatory meetings in the analysis phase of the project, and the pilot project reports. The implemented characteristics were studied using the portfolio materials that were developed during the pilot projects and the pilot project reports. The experienced characteristics were analyzed using the evaluation data and the pilot project reports. Different evaluation data was available for analysis purposes, like the questionnaires and minutes of evaluation meetings with portfolio assessors. Table 5-14 on page 149 indicates how the questions in the questionnaires relate to the issues of analysis addressed above. It also shows which issues were addressed during the interviews with the portfolio assessors.

Portfolio development (TBB3) - medical doctors' case

The third theoretical building block addresses portfolio development (see also Table 4-9 on page 92). The issues of analysis that are included in the framework for the data analysis are:

- The steps and strategies applied in the portfolio development process;
- The measures taken to support portfolio candidates;
- The measures taken to cope with heterogeneous groups;
- The clarity about different roles and responsibilities.

The intended characteristics were explored using the pilot project proposals, the minutes of the meeting with the faculty members in the analysis phase of the pilot projects and the pilot project reports. The implemented characteristics were studied using the developed portfolio materials focusing on the assignments, workshops and portfolio development manual. In addition, the pilot project reports are analysed. The experienced characteristics were derived from the evaluation data from the portfolio candidates. Table 5-14 shows which questions in the questionnaires provided information on the issues of analysis that were relevant for this topic.

Portfolio assessment (TBB4) - medical doctors' case

The fourth theoretical building block concerns portfolio assessment (see Table 4-12 on page 100). The issues of analysis that were derived from this theoretical building block are:

- The main purpose of portfolio assessment;
- The additional instruments used to take an assessment decision; and
- The quality criteria for portfolio assessment.

The data that was available to study the intended characteristics are the pilot project proposals, the minutes of the meetings with the faculty members in the analysis phase of the pilot projects and the notes from the development team on portfolio assessment. The implemented characteristics were derived from the pilot project reports and the experienced characteristics from the evaluation data. Table 5-14 shows which questions in the questionnaires were particularly useful in gathering information on the issues of analysis that were specified above. The Table makes it clear that these issues are mainly addressed in Nuffic pilot project 4.

Portfolio design and implementation (TBB5) - medical doctors' case

The last theoretical building block addresses portfolio design and implementation see Table 4-15 on page 108). The issues of analysis that were derived from TBB5 are:

- The design process; and
- The implementation process.

The intended characteristics of portfolio design and implementation were analyzed using the pilot project proposals, the minutes of the meetings with the faculty members in the different phases of the pilot projects, the email correspondence with the faculty members and the pilot project reports. To gather information on the implemented characteristics the portfolio materials were studied in addition, just as the notes from the development team on the implementation process. Table 5-13 gives a summary overview of the available sources of information for the medical doctors' case. In the next chapter the empirical characteristics will be presented to develop a framework of empirical findings for portfolio use by foreign trained doctors.

Table 5-13 Available database for the medical doctors' case

Issues of analysis	Status quo		
 Evaluation and recognition policy: Evaluation approach Evaluation instruments Evaluation standards 	Official document on evaluation and recognition policy Meeting with subject specialist from Nuffic Notes from meetings with staff members from Ministry of Health Documents on the national assessment procedure for highly- skilled immigrants		
 Professional sector: Evaluation approach Evaluation instruments Evaluation standards 	<i>Framework 2001</i> (cf. Metz et al., 2001) Official document on developments in medical profession with respect to assessment		
	Ideal characteristics	Actual characteristics	
 Characteristics of portfolio assessors: Experience with highly-skilled immigrants Experience with the portfolio instrument 	Project proposals Notes from development team Email correspondence with admission officers	Questionnaire (FM-Q) Notes from development team Email correspondence with portfolio assessors	
 Characteristics of portfolio candidates: Experience with the portfolio instrument Experience in the Dutch professional 	Project proposals Information leaflet Application forms	Administrative data Application forms Portfolios	

TBB 1: Context characteristics (Table 3-6 on page 66) – med	ical doctors' case

	Intended	Implemented	Experienced
Issues of analysis	characteristics	characteristics	characteristics
Main function of portfolio	Project proposals Minutes of meetings with faculty members (analy- sis phase) Pilot project reports	Pilot project materials Pilot project reports	Questionnaires (see Table 5-14 on page 149 for a further specification)
Immediate outcomes for port- folio assessor	As above	Not applicable	As above
Immediate outcomes for port- folio candidate	As above	Not applicable	As above
Structure of portfolio	As above	Pilot project materials Pilot project reports	As above
Content of portfolio	As above	As above	As above
Standards	As above	As above	As above
Portfolio evidence	As above	As above	As above

TBB 3: Portfolio development by highly skilled immigrant (Table 4-5 on page 92) - medical doctors' case				
Issues of analysis	Intended	Implemented	Experienced	
	characteristics	characteristics	characteristics	
Steps and strategies in portfolio development	Project proposals Minutes of meetings with faculty members (analysis phase) Pilot project reports	Pilot project materials Pilot project reports	Questionnaires (see Table 5-14 on page 149 for a further specification)	
Measures taken to support portfolio candidates	As above	As above	As above	
The clarity about roles and responsibilities	As above	As above	As above	

TBB 4: Portfolio assessment development by portfolio assessor (Table 4-12 on page 100) – medical doctors' case

Case			
Issues of analysis	Intended	Implemented	Experienced
	characteristics	characteristics	characteristics
The function of portfolio assessment	Project proposals Minutes of meetings with faculty members (analy- sis phase) Pilot project reports	Pilot project reports	Questionnaires (see Table 5-14 on page 149 for a further specification)
Additional instruments to take an assessment decision	As above	As above	As above
Quality criteria for portfolio assessment	As above	As above	As above

TBB 5: Portfolio design and implementation (Table 4-15 on page 108) – medical doctors' case				
Issues of analysis	Intended characteristics	Implemented characteristics		
Design processThe applied perspective to changeThe applied design paradigm	Project proposals Pilot project reports Minutes of meetings with faculty members Email correspondence with faculty members	Portfolio materials Pilot project reports Email correspondence with faculty members Notes from development team		
 Implementation process The actors and factors that influence implementation Support of management Available resources Compliance with assessment culture Training of assessors Training of portfolio candidates 	As above	As above + Official documents on national assessment procedure for highly-skilled immigrants who wish to work in the Dutch health care system		

Table 5-14 shows the relationship between the questions in the various questionnaires that were used, and the issues of analysis. A distinction is made between the questionnaires that were filled in by the portfolio candidates (the FMDs) and those completed by the portfolio assessors (the faculty members - FM). Table 5-14 also indicates which issues of analysis were addressed during the interviews that were conducted in addition to the questionnaires.

	Issue of analysis	Questic MD p	onnaire bilot1	Questic MD p	onnaire ilot 2	Questionnaire MD pilot 3		erview onnaire		terview onnaire
твв		FMD	FM	FMD	FM	FMD	FMD	FM	FMD	FM
TBB1	Characteristics FM	-	1	-	1,2,3,4	-	-	0	-	-
TBB2	Function	1, 15	2, 3, lv	1, 19	6, 7, lv	1, 15	1	3	-	6,lv
	Immediate outcomes	NR-Q4	7, Iv	3, 20	6, 7, Iv	2, 15, 16	4	3, 4	-	1, 2, 6, lv
	Structure	-	7, Iv	-	lv	-	-	2	-	lv
	Content	10, 13,	4, 6, Iv	11, 17,	5, Iv	8, 13, 14	7	1, 2	6	4, 5, lv
		14		18						
	Standards									
	Portfolio evidence	-	5, Iv	-	lv	-	-	2	-	lv
TBB3	Measures to guide portfolio development	4		5, 15, 16		11	-	-	-	-
	Group meetings	5, 6, 7		6, 7, 8		3, 4, 5	-	-	-	-
	Portfolio assignments Portfolio format	9, 11		10, 12, 14	5, 9	7, 9, 10	-	-	-	-
	Roles and responsi- bilities	2		2		-	-	-	-	-
TBB4	Main purpose of port-	-	7	-	7	-	3, 5, 6, 8	4		1, 2, 3, 7,
	folio assessment								5, 7	lv
	Additional instruments	-	8	-	7, 8	-	8	-	7	6, Iv
	Quality measures	-	9, 10	-	7	-	-	-	-	6

Table 5-14 Relationship between questions in the questionnaires and the issues of analysis

Legend: TBB = Theoretical Building Block; MD pilot = Medical Doctor pilot; FMD = Foreign-trained Medical Doctor; FM = Faculty Member ; NR-Q = Non response Questionnaire ; Iv = Interview.

5.5 Description of the database for the refugees' case

This section describes the available database for the third exploratory case study that focuses on the use of portfolio to improve the integration process of highly-skilled refugees who have recently come to the Netherlands. It also explains how this database relates to the framework for the data analysis that was discussed in Section 5.2. Section 5.5.1 presents the context and set up of the refugees' pilot project that was reviewed in the refugees' case study. It addresses the project design, the portfolio materials, the portfolio candidates, the portfolio assessors and the evaluation design. Section 5.5.2 indicates how the available data relate to the issues that were specified in the framework for the data analysis (see Table 5-17 on page 158).

5.5.1 Context and set-up of the refugees' pilot project

The pilot project was carried out in 2004 with financial support of the Ministry of Social Affairs and Employment. It was coordinated by the Empowerment Centre *EVC* and Nuffic was one of the six project partners⁶. The main purpose of the project was to test if the portfolio instrument could improve the integration process of highly skilled refugees who had recently come to the Netherlands. Nuffic took part because it wanted to validate in another context the outcomes of previous experiences with portfolio use. Refugees and asylum seekers go through three common phases before they enter the labour market:

- a. Phase 1 concerns the arrival in *Azielzoekers centrum (AZC)* [Asylum Seeker Centre], where they await for the decision on their residence permit;
- b. Phase 2 concerns the arrival in a municipality after a residence permit has been granted. In this phase the refugee starts with the official integration process to learn the Dutch language and become familiar with the Dutch society and culture;
- c. Phase 3 relates to the orientation on the labour market after the integration process is completed.

⁶ The other project partners were: Empowerment Centre EVC, the Centre for Work and Income (CWI), The Foundation of Refugee Students (UAF), The Central Organization for Asylum Seekers (COA), Stimulanz, and the Ministry of Social Affairs and Employment.

In the whole process 'from AZC to labour market', refugees are confronted with a large variety of organization that need information on personal details and prior learning experiences for counselling purposes. It was expected that the portfolio instrument could inform the counsellors at the various organizations about these issues, and about agreements that had been made in a previous phase. Furthermore, portfolio development could encourage refugees to think about their future prospects in the Netherlands. As such, the portfolio instrument could improve the integration process of refugees in the Dutch society.

Project design of the refugees' pilot project

The pilot project activities were structured with the help of the ADDIE-model (cf. Van den Akker et al., 1999; Plomp, 1982). The main activities in each phase –analysis, design, development, implementation and evaluation—are discussed below (cf. Claassen & Kaemingk, 2005; Kaemingk, 2003; Kaemingk, Mak, Geers, Goossen & de Bar, 2005).

<u>Analysis</u>

In the first phase of the pilot project -the analysis phase- the following activities took place:

- Meetings with the six project partners to clarify the objectives and set up of the pilot project. An important subject of discussion was the selection of the regions in which the use of the portfolio instrument could be tested. The duration of the pilot project was one year. This period is too short to monitor the pilot project candidates through all three phases in the process from 'AZC to labour market'. It was therefore decided to select regions in which the use of the portfolio in one particular phase could be tested.
- Meetings with the project partners in the regions that were selected for portfolio use. The Utrecht and Flevoland clusters of the *Centraal Orgaan opvang Azielzoekers (COA)* [Central Organization for Asylum Seekers] were selected for the use of the portfolio instruments in phase 1 (arrival at *AZC*). The municipality of Amsterdam was chosen to test the use of the portfolio instrument in phase 2 (start of integration process) and phase 3 (end of integration process). This was done in direct cooperation with *Stichting Vluchtelingenwerk Amsterdam (SVA)*. The common steps in each phase were identified at various meetings. Attention was also given to the different organizations that play a role in each phase and their information needs.

<u>Design</u>

In the second phase of the pilot project, the design specifications for the portfolio instrument were specified. This phase started after the selection of the pilot project regions: Utrecht, Flevoland and Amsterdam. In March 2004, a two-day meeting was organized to define the design specifications of the portfolio instrument as well as the workshops that were intended to guide the portfolio development process. It was the aim of the pilot project to use the portfolio instrument as an addition to the existing procedures of *COA* and *SVA* to guide and support the refugees. Therefore the following activities were carried out at the two-day meeting:

- Analysis of the current steps and instruments used by *COA* and *SVA* to guide and support refugees in their integration process into the Dutch society;
- Analysis of the information needs of the organizations that are part of the procedures in all three phases;
- Analysis of existing portfolio materials used in other contexts or by other target groups;
- Definition of the design specifications of portfolio instrument;
- Definition of the design specifications of the workshops to support portfolio development.

All project partners participated in the two-day meeting (nine participants in total).

Development

After the two-day meeting, Nuffic and the *UAF* developed the portfolio materials and the guidelines for the portfolio meetings. The first set of materials has been reviewed by the other project partners. Their feedback was discussed at a separate meeting and Nuffic subsequently revised the materials.

Implementation

The main purpose of the implementation phase was the first use of the revised portfolio materials in practice. As explained earlier, three regions were selected to test the portfolio instrument in one of three phases. In each region the following activities took place:

- Meeting with the project partners to discuss the set-up of the pilot project (selection requirements of pilot project candidates, division of tasks and responsibilities, practical arrangements);
- Presentation for the counsellors from *COA* and *SVA* about portfolio use;
- Portfolio workshops in the regions for the selected candidates;
- Evaluation of portfolio use.

Evaluation

The use of the portfolio instrument was evaluated by three different respondent groups:

- The counsellors of COA and SVA were asked to evaluate the added value of the portfolio instrument in the counselling process. They were asked to fill-in an evaluation form after each counselling session in which the portfolio instrument was used. To gather more in- depth information on the experienced impact of the portfolio instrument, different evaluation meetings were organized by the project group.
- The portfolio applicants were asked to evaluate the portfolio development process. They have
 received an evaluation form at the end of the workshops. To gather information on the
 starting situation, some refugees were asked to complete an evaluation form before the
 portfolio workshops started.
- The trainers who guided the portfolio development workshops were asked to reflect on the quality of the portfolio materials. The trainers from Nuffic, the *UAF* and *CWI* participated in different evaluation meetings to reflect on the strengths and weaknesses of the materials and to suggests points for improvement.

The evaluation design is discussed in more detail below.

Portfolio materials in the refugees' pilot project

The portfolio materials that were implemented and tested in the refugees' pilot project were:

- A prescribed portfolio format that has contained four different parts and an appendix:
 - Part one: personal data;
 - Part two: descriptions of prior learning experiences;
 - Part three: personal development plan;
 - Part four: portfolio evidence;
 - Appendix, which contained a logbook to keep track of all the activities undertaken and a card to visualize the network being constructed.

The portfolio format contained numerous open, probing questions to encourage reflection. The format was offered in Microsoft Word so that portfolio applicants could easily add to or change the information included.

A portfolio manual to explain how the portfolio format should be used. A sample portfolio was
included to support the portfolio applicants in the process;

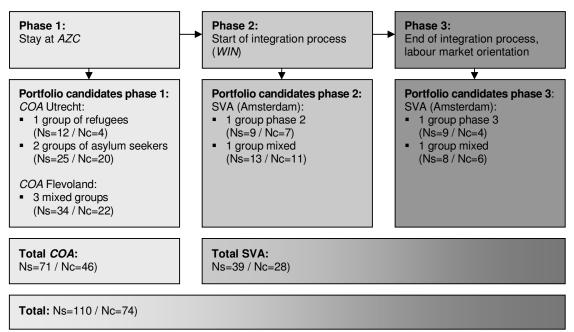
 A portfolio development learning line that consisted of six workshops of four hours each. These workshops were offered by course leaders from Nuffic, the UAF and CWI. They were offered in a room with computer facilities to support the portfolio applicant in using the digital format and provide them with hands-on experience.

Portfolio candidates of the refugees' pilot project

In the period from May 2004 to December 2004, one hundred and ten portfolio applicants commenced portfolio development. They were divided into ten portfolio development groups. A total of seventy-four (67%) has completed the process. Figure 5-4 visualizes the division of portfolio groups among the three phases in the process 'from AZC to labour market':

- Phase 1 (arrival at AZC): In phase 1, seventy-one portfolio applicants started the portfolio development process (both refugees and asylum seekers). They were staying in an AZC in COA Utrecht or Flevoland cluster. Forty-six of them have completed the process (65%). They were divided into six portfolio developments groups that followed the workshops offered by Nuffic, the UAF and CWI. In addition to the workshops, the refugees and asylum seekers took part in the regular counselling process offered by COA.
- Phase 2 (start of integration process): About eleven portfolio applicants were situated in 'phase 2'. However, in practice the distinction between phase 2 and 3 was completely clear-cut. Only a very few portfolio applicants were at the start of the integration process. Most of them had already started the educational part of the integration process, for example, with a Dutch language course. In total, two groups of portfolio applicants were guided in the process; one with only portfolio applicants in phase 2 (N=9) and one mixed group (phase 2 and 3) (N=13). The total number of refugees that started the workshops was twenty-two; eighteen of them have completed the process (82%).
- Phase 3: (end of the integration process, start of orientation on the labour market): About twenty-five portfolio applicants were at the end of the integration process⁷. They had started the orientation process to find a job on the Dutch labour market or they were looking for a short study programme to improve their chances on the labour market. In total, two groups of portfolio applicants were guided in portfolio development. One group only contained portfolio applicants in phase 3 (N=9) and one mixed-group (N=8). Of the total number of 17 portfolio applicants who started the process, a group of 10 has completed it (59%).

⁷ This number also contains portfolio applicants from the mixed group in 'phase 2'.



Legend: Ns = Number at the start; Nc = Number completed.

Figure 5-4 Overview of number of portfolio candidates in each phase of the process

Portfolio assessors of the refugees' pilot project

The duration of the pilot project was too short to monitor the portfolio applicants from one phase to another. The portfolio assessors were the counsellors from *COA* and *SVA* who used the portfolio in addition to the instruments they normally use to guide and support refugees in their orientation process. In total thirteen portfolio assessors participated; 3 from *COA* Utrecht, 4 from *COA* Flevoland and 6 from the *SVA*. Only one external portfolio assessor participated in the refugees' pilot project. This was a work experience officer who has an interview with one of the portfolio candidates about an internship at a nursing home. The thirteen portfolio assessors from *COA* and *SVA* used the portfolio during regular counselling meetings with twenty-eight portfolio candidates (see Table 5-15). They reported on the added value of the portfolios during these counselling meetings by responding to a questionnaire (see Table 5-16 on page 154 for an overview of the evaluation instruments that were used).

Table 5-15Overview of the portfolio assessors per phase and the number of portfolios they have reviewed

Phase	Organization / region	Number portfolio assessors	Number of portfolio candidates
1	COA-Utrecht	3	5
1	COA-Flevoland	4	9
2/3	SVA (Amsterdam)	6	14
Total		13	28

Evaluation design of the refugees' pilot project

As mentioned earlier, respondents were classified in three groups: the counsellors from the *COA* and *SVA* (the portfolio assessors), the refugees (portfolio applicants) and the trainers of portfolio development workshops. The purpose of the evaluation, how the information was gathered and the number of respondents is explained below for each group. Table 5-16 gives a summary of this information. The evaluation outcomes will be used in Section 6.3 to explore the experienced portfolio characteristics.

The thirteen portfolio assessors from *COA* and *SVA* were asked to reflect on the main function of the portfolio in the process 'form *AZC* to labour market'. The portfolio instrument was added to the common instruments in the counselling process. The evaluation was aimed at gathering information on:

- The use of the portfolio instrument;
- The quality (information value) of the portfolio;
- The immediate impact of the portfolio (for both the counsellor and the refugee.

To gather this information two evaluation instruments were used: a questionnaire and evaluation meetings. The questionnaire was completed by the portfolio assessors after a counselling meeting during which the portfolio was used. In total twenty-eight evaluation forms were returned (see Table 5-16). The evaluation meetings were organized with the portfolio assessors to discuss their experiences with portfolio use in more detail. Three evaluation meetings were organized for the counsellors from *COA* (in July, October and December) and one for the counsellors from the *SVA* (February 2005).

The portfolio applicants were asked to reflect on the portfolio development process. More specifically, five issues were addressed in the evaluation:

- The purpose of portfolio development;
- The content characteristics of the portfolio instrument;
- The content of the portfolio workshops;
- The organization of the portfolio workshop; and
- The overall impression (the immediate impact).

In all ten portfolio development groups, a questionnaire was handed out during the last workshop that addressed each of the five issues mentioned above. As discussed earlier, a total number of seventy-four portfolio applicants completed the portfolio development process. Of them, sixty-four responded to the questionnaire (a response rate of 86%). For a distribution of the respondents among the different phases see Table 5-16.

To get a better impression of the entry characteristics of the portfolio candidates, a questionnaire was handed out during the first portfolio workshop in four portfolio development groups. This questionnaire gathered information on the following issues:

- Prior experience with the development of a Curriculum Vitae;
- The number and type of organizations with which the respondent had already been in contact and where counselling meetings had taken place;
- Current (learning) activities;
- Language proficiency; and
- The expectations of the portfolio development process.

In total, thirty-seven questionnaires were returned for analysis.

Respondent group	Evaluation instrument	Aim	Type of report	N/Nres Uph1	N/Nres Fph1	N/Nres Aph2/3	N/Nres Total
Portfolio assessors (counsellors of refugees)	Questionnaire (Qas)	To gather information on the use and immediate outcome of the portfolio instrument	Summary report of the answers given	3/5	4/9	6/14	13/28
	Evaluation meetings	To discuss the use and immediate outcome of portfolio development in more detail	Minutes of evaluation meeting PowerPoint presentation	1 meeting	-	1 meeting	2 meetings
Portfolio candidates (refugees)	Questionnaire of entry characteristics (Qap_ec) Questionnaire	To gather information on the entry characteristics of the refugees To gather	Summary report of the answers given Summary	- 24/15	22	15 28/27	37 74/64
	(Qap)	information on the clarity of the purpose of portfolio development, the workshops and the final product	report of the answers given				
Trainers (from Nuffic, <i>UAF</i> and <i>CWI</i>)	Evaluation meetings	To reflect on the strengths and the weaknesses of the portfolio development learning line.	Minutes of the evaluation meetings				2 meetings

Table 5-16 Evaluation instruments used in the refugees' pilot project

Legend: N/Nres; Uph1: Utrecht, phase 1; Fph1: Flevoland, phase 1; Aph2/3: Amsterdam, phase 2 and phase 3; Qas: Questionnaire for portfolio assessors; Qap: Questionnaire for portfolio candidates; Qap_ec: Questionnaire for portfolio candidates to gather information on the entry characteristics.

Finally, the trainers from Nuffic, the *UAF* and *CWI*, who were responsible for the portfolio development workshops reflected on the course of the process. In total two evaluation meetings were organized, one in July 2004 and one in August 2004.

5.5.2 Linking the database of the refugees' pilot project to the framework for the data analysis

This section explains how the available the available database is linked to the framework for the data analysis that was presented in Section 5.2 (see Table 5-4 on page 121). Indicated below is which data is available for analysis purposes for each theoretical building bock. Table 5-17 on page 158 gives a summary overview.

Context characteristics (TBB1) - refugees' case

The first theoretical building block (TBB1) addresses the context characteristics (see Table 3-6 on page 66). As discussed in Section 5.2 the following issues of analysis were specified:

- the evaluation and recognition policy of highly-skilled immigrants;
- the professional sector;
- the characteristics of the portfolio; and
- the characteristics of the portfolio candidates.

Below it is indicated which data was available for the analysis of these four focal points. The sources of information are summarized in Table 5-17 on page 158. First, for the analysis of the

evaluation and recognition policy of refugees and the nature of the professional sector different documents were used that give an impression of the starting situation. These reports address the linking of international credential evaluation and PLAR, the labour market perspectives of highly skilled refugees and the integration process (König, 2004; Mak, Scholten & Teuwsen, 2003; Ministry of Social Affairs and Employment, 2002, Scholten & Teuwsen, 2002).

The pilot project did not specifically address the characteristics of the portfolio assessors. The information on this issue is therefore limited. The sources of information that can be used to explore the ideal characteristics are the pilot project proposal and the minutes of the meetings with the project partners in the analysis phase of the project. The actual characteristics were reviewed using the pilot project report and the evaluation reports from the evaluation meetings with the counsellors from *COA* and *SVA*). The characteristics of the portfolio candidates were analysed using the following sources of information. To explore the ideal characteristics, the pilot project proposal and the minutes of the meetings were reviewed to determine the selection criteria that had been specified. Second, the data provided by *COA* and *SVA* on the selected the portfolio candidates was used to analyse the actual characteristics of the portfolio candidates, the questionnaires that addressed the entry characteristics of the portfolio candidates, the evaluation reports of the trainers and the pilot project report.

Product characteristics (TBB2) - refugees' case

The second theoretical building block relates to the product characteristics of the portfolio instrument (see Table 4-5 on page 81). The following issues of analysis were specified in Section 5.2:

- The main function of portfolio;
- The immediate outcomes for portfolio assessors;
- The immediate outcomes for portfolio candidates;
- The structure of the portfolio;
- The content of the portfolio;
- The standards applied; and
- The evidence accepted as proof of competence.

The intended product characteristics were explored using the pilot project proposal, the minutes of the two-day workshop that was organized to define the design specification of the portfolio materials, and the minutes of the meetings with the project partners in the analysis phase. The implemented characteristics were explored using the pilot project report and the portfolio format that was developed and tested in the ten portfolio development groups. The experienced portfolio characteristics were explored using the outcomes of the evaluation events. The following data was available to analyse the immediate outcome of the portfolio for the portfolio candidates: the questionnaires, the evaluation reports of the trainers and the pilot project report. The reports of the evaluation meetings were used together with the outcomes of the portfolio assessors.

Portfolio development (TBB3) - refugees' case

The third theoretical building block addresses portfolio development (see Table 4-9 on page 92). The issues of analysis that are included in the framework for the data analysis are:

- The steps and strategies applied in the portfolio development process;
- The measures taken to support portfolio candidates;
- The measures taken to cope with heterogeneous groups;
- The clarity about different roles and responsibilities.

The intended characteristics were analyzed using the pilot project proposal, the minutes of the meetings with project partners in the analysis phase, the minutes of the meetings with the project partners in the regions that were going to test portfolio use and the design specifications of the portfolio workshops that were defined during the two-day workshop. The implemented characteristics were explored using the portfolio development manual, the guidelines for the portfolio development workshops, the reflective group assignments and the presentations to inform the project partners about the portfolio development process. The experienced characteristics were analyzed using the outcomes of the evaluation events.

Portfolio assessment (TBB4) - refugees' case

The fourth theoretical building block concerns portfolio assessment (see Table 4-12 on page 100). The issues of analysis that were derived from this theoretical building block are:

- The main purpose of portfolio assessment;
- The additional instruments used to take an assessment decision; and
- The quality criteria for portfolio assessment.

First of all, the intended characteristics of the portfolio assessment process were analyzed using the pilot project proposal, the minutes of the meetings with the project partners and the minutes of the meetings with the portfolio assessors (the counsellors from *COA* and *SVA*). The implemented characteristics were explored using the pilot project report. To monitor the use of portfolio some of the trainers have conducted a number of monitoring visits. The reports of these visits were used for the analysis of the implemented characteristics of portfolio assessment. Furthermore, the pilot project report was reviewed. Finally, the experienced characteristics of portfolio assessment were analyzed using the evaluation outcomes. As indicated earlier, the time frame of the pilot project was rather tight. There was almost no possibility to monitor the refugees from one phase to another (from phase 1 'arrival at *AZC*' to phase 2 'start of integration process in municipality'; or from phase 2 to phase 3 'orientation on the labour market'). Therefore, the portfolios were not reviewed by external parties with the exception of one case.

Portfolio design and implementation (TBB5) - refugees' case

The last theoretical building block addresses portfolio design and implementation (see Table 4-15 on page 108). The issues of analysis that were derived from TBB5 are:

- The design process; and
- The implementation process.

The intended characteristics of the design and implementation process were explored using the project proposal for the project as a whole as well as those developed for the three regions in which the portfolio instrument was implemented and tested; Flevoland, Utrecht and Amsterdam. The implemented characteristics were analyzed using the pilot project report and the reports and minutes of the meetings that were produced in the course of the pilot project. The available data are summarized in Table 5-17 on the next page.

Table 5-17 Available database for the refugees' case

TBB 1: Context characteristics (Table 3-6 or	page 66) – refugees' case			
Issues of analysis	Status quo			
Evaluation and recognition policy:Evaluation approachEvaluation instrumentsEvaluation standards	Reports on linking international credential evaluation and PLAR, evaluation studies of the <i>WIN</i> , evaluation studies on portfolio use by refugees and other immigrants. Project proposal.			
Professional sector:Evaluation approachEvaluation instrumentsEvaluation standards	As above			
	Ideal characteristics	Actual characteristics		
 Characteristics of portfolio assessors: Experience with highly-skilled immigrants Experience with the portfolio instrument 	Project proposal Minutes of the meetings with project partners in the analysis phase (selection of regions to test portfolio use)	Pilot project report Reports from the evaluation meetings with portfolio assessors		
 Characteristics of portfolio candidates: Experience with the portfolio instrument Experience in the Dutch professional sector Dutch language skills 	Project proposal Document that specifies the selection criteria of the portfolio candidates	Administrative data on the selected refugees Questionnaire focused on entry characteristics (N=37) Reports from evaluation meetings with trainers Pilot project report		

TBB 2: Product characteristics portfolio (Table 4-5 on page 81) – refugees' case						
Issues of analysis	Intended Implemented Experienced ues of analysis characteristics characteristics characteristics					
Main function of portfolio	Pilot project proposal Minutes of the meetings in the analysis phase Minutes of two-day workshop	Pilot project report Pilot project materials	Evaluation data Pilot project report			
Immediate outcomes for portfolio assessor	Pilot project proposal Minutes of the meetings in the analysis phase	Not applicable	Questionnaire (N=28) Reports of evaluation meetings with portfolio assessors			
Immediate outcomes for portfolio candidate	As above + Questionnaire entry characteristics (N=37)	Not applicable	Questionnaire (N=64) Pilot project report			
Structure of portfolio	Pilot project proposal Minutes of the meetings in the analysis phase Minutes of two-day workshop	Design specifications portfolio materials Pilot project materials Pilot project reports	Evaluation data Pilot project report			
Content of portfolio	As above	As above	As above			
Standards	As above	As above	As above			
Portfolio evidence	As above	As above	As above			

TBB 3: Portfolio development	TBB 3: Portfolio development by highly skilled immigrant (Table 4-9 on page 92) – refugees' case				
Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristics		
Steps and strategies in portfolio development	Project proposal Minutes of the meetings in the analysis phase Minutes of the meetings with counsellors <i>COA</i> and <i>SVA</i>	Design specification for portfolio workshops Pilot project report Pilot project materials (focussing on the materials developed for the workshops)	Evaluation data Pilot project report		
Measures taken to support portfolio candidates	As above	As above	As above		
The clarity about roles and responsibilities	As above	As above	As above		

TBB 4: Portfolio assessment development by portfolio assessor (Table 4-12 on page 100) - refugees' case				
Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristics	
The function of portfolio assessment	Project proposal Minutes of the meetings in the analysis phase and with the counsellors from <i>COA</i> and <i>SVA</i>	Pilot project reports	Evaluation data Pilot project report	
Additional instruments to take an assessment decision	As above	As above	As above	
Quality criteria for portfolio assessment	As above	As above	As above	

Issues of analysis	Intended characteristics	Implemented characteristics
Design process	Pilot project proposal (for the	Minutes of preparatory meetings
 Perspective to change 	project as a whole and for the pilot	Pilot project report
 Design paradigm 	regions)	Notes from the development
		team
Implementation process	As above	As above
 Actors and factors that influence 		
implementation		
 Support of management 		
 Available resources 		
 Compliance with assessment culture 		
 Training of assessors 		
 Training of portfolio candidates 		

Table 5-18 on the next page indicates how the questions from the different questionnaires that were used relate to the issues of analysis. It shows that the there is little information available on the experienced characteristics of portfolio assessment except for its function. There is also no information on how the different roles and responsibilities of the parties involved were experienced by the portfolio candidates and the portfolio assessors.

		Question		Question
TBB	Issue of analysis	in Qap_ec	Question in Qap	in Qas
TBB1	Characteristics portfolio candidates	All	2	2, EM
	Regular procedure			1, 8a, EM
TBB2	Function	-	1,2, 6, 7	8a, 8b, EM
	Immediate outcomes	-	14	3, 5, 7, 8b
	Structure	-	-	-
	Content	-	-	4, EM
	Standards	-	-	-
	Portfolio evidence	-	-	-
TBB3	Measures to guide portfolio development:	-	4, 8	-
	Workshops	-	11, 12, 13, 15	EM
	Portfolio format		3, 9, 10	EM
	Manual for portfolio development	-	5, 9, 10	
	Roles and responsibilities	-	-	-
TBB4	Main purpose of portfolio assessment	-	-	6, 8b
	Additional instruments	-	-	-
	Quality measures	-	-	-

Table 5-18 Relationship between questions in questionnaires and issues of analysis in the refugees' pilot project

Legend: TBB = Theoretical Building Block; Qap_ec = Questionnaire portfolio candidate (entry characteristics); Qap = Questionnaire portfolio candidate; Qas = Questionnaire portfolio assessor; EM = Evaluation Meeting.

5.6 Further use of the available databases

The section reflects briefly on the five pilot projects that were carried out by Nuffic to explore the characteristics of portfolio use by highly-skilled immigrants and the three available database for the case study analysis that were presented earlier. It also explains how the databases are used in the remaining parts of this thesis. Table 5-19 gives an overview of the pilot projects, the available databases and the case studies to which these relate. It also gives a reference to the sections where these subjects are discussed.

Nuffic pilot project	Available database	Exploratory case study
Teachers' pilot project (see Section 5.4.1)	Teachers' database: Table 5-9 on page 133 (see Section 5.4.2)	Teachers' case (see Section 6.1)
Medical doctors' pilot project (see Section 5.5.1)	Doctors' database: Table 5-13 on page 147 (see Section 5.5.2)	Medical doctors' case (see Section 6.2)
Refugees' pilot project (see Section 5.6.1)	Refugees' database: Table 5-17 on page 158 (see Section 5.6.2)	Refugees' case (see Section 6.3)

Table 5-19 Overview of the Nuffic pilot project, the available databases and the case studies

The teachers' database gives of an overview of the data that are available from the teachers' pilot project. Three reflective notes are made with respect to the quantity of data. First of all, the database shows that there is only limited data for the exploration of the 'experienced' characteristics of the portfolio instrument. The number of portfolio candidates was limited (five of which only two had completed the whole assessment procedure). None of the candidates had returned the logbook. Three candidates were interviewed at the end of the project. Also the variety of data sources for the portfolio assessors is limited; an evaluation meeting. However, this meeting has resulted in rich contextual data. Secondly, since the teachers' pilot has used an existing competency-based assessment procedure, the design activities were limited. As a consequence there is little data on the issues of analysis that relate to the design process. Last, the teachers' pilot concerned a one-time experiment to see if portfolio assessment could be used

to enhance the identification, assessment and recognition of actual competencies of highly-skilled immigrants. Its outcomes were used as input for further debate nationally and internationally. As a consequence, the teachers' pilot project does not address the issues of analysis for implementation process.

Looking at the medical doctors' database, it can be noted that this database contains a lot of data that can be used for the exploration of the product characteristics and portfolio development. However, the data for the review of the characteristics of portfolio assessment are limited. That topic was mainly addressed in the third medical doctors' pilot project. The pilot projects have build on each other outcomes; it has applied a cyclic design approach with direct involvement of the future users. As a consequence, there are different sources of information that address the design and implementation process. The refugees' database contains the available data for the exploration of the portfolio characteristics for refugees. Also in this pilot project the information sources on the product characteristics and portfolio development are more extensive than on portfolio assessment (see Table 5-17 on page 158). This is caused by the function of the implemented portfolio which was development oriented. This leads the discussion to the 'targeted objectives' of the highly-skilled immigrants in each pilot project.

As discussed earlier a distinction is made between: orientation, social recognition and formal recognition (cf. European Commission, 2004). The last objective can be further divided in: 'de jure' professional recognition' that relates to recognition to start working in a regulated profession, and 'academic recognition' that concerns entrance to a study programme. Looking at the teachers' project is can be concluded that the assessment procedure is focussed on gaining access to the profession (via a dual training programme); it has explored the characteristics of a portfolio use for formal recognition purposes. The doctors' projects have explored the characteristics of portfolio use to enhance access to the Dutch medical science study programmes; this concerns academic recognition which is also formal recognition. The refugees' pilot project was focussed on portfolio use for orientation purposes. Hence it concerns orientation. Figure 5-5 gives an overview.

	Pilot projects			
	Teachers	Medical doctors	Refugees	
	Formal recognition		Orientation	
Targeted objective of highly-skilled immigrant	De jure professional recognition	Academic recognition	Orientation on possibilities in Dutch society including work	

Figure 5-5 Overview of the 'targeted objectives' of the highly-skilled immigrants in the different pilot projects

The three databases are used in the next chapter to explore the empirical characteristics of portfolio use for respectively the foreign-trained teacher, the foreign-trained medical doctor and the refugee. In Chapter 7, the empirical characteristics will be compared with the theoretical characteristics of two types of portfolio that seem relevant for the above mentioned purposes: the assessment portfolio and the development portfolio.

Chapter 6

Frameworks of empirical findings for portfolio use by highly-skilled immigrants: The outcomes of three case studies

This chapter addresses the two research questions from an empirical perspective. The research question were first presented in Section1.3 and are repeated below:

- 1. What are the characteristics of the portfolio instrument and its use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?
- 2. What are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice?

The first research question is addressed by discussing the empirical characteristics of portfolio use with respect to:

- the product characteristics of portfolio including its function, immediate outcome, structure, content, standards and evidence;
- the characteristics of portfolio development; the process that is carried out by the highlyskilled immigrant (the portfolio candidate);
- the characteristics of portfolio assessment; the process that is carried out by the recognition body (the portfolio assessor).

The second research question is addressed by discussing the empirical characteristics of:

- the context; and
- portfolio design and implementation.

In Chapter 5, different 'issues of analysis' were derived from the five theoretical building blocks (TBBs) that address the above mentioned topics. It was also explained which data is available for the exploration of the portfolio characteristics in each case study. This chapter presents the results of the explorative case studies and presents empirical building blocks (EBBs) for each topic:

- 1. the context (EBB1);
- 2. the portfolio product (EBB2);
- 3. portfolio development (EBB3);
- 4. portfolio assessment (EBB4); and
- 5. portfolio design and implementation (EBB5).

At the end of each case study the five empirical building blocks are used to develop a summarizing framework of empirical findings of portfolio use by respectively the foreign-trained teachers, the foreign-trained medical doctors and the refugees. These three frameworks will be used for the cross-case analysis in Chapter 7.

The structure of this chapter is as follows: Section 6.1 addresses the teachers' case, Section 6.2 the medical doctors' case and Section 6.3 the refugees' case. Section 6.4 reflects briefly on the results of the three exploratory case studies and discusses how the conclusions and observations are used in the next chapter of this thesis.

6.1 Exploring the empirical building blocks in the teachers' case

The aim of this section is to present the results of the teachers' case. The case study analyzed the data from the first pilot project that was initiated by Nuffic to explore the characteristics of portfolio use by highly-skilled immigrants. The design of the pilot project was discussed in Section 5.3.1. The data that was available for the case study analysis was presented in Table 5-9 on page 133. The structure of this section is as follows:

- Section 6.1.1 describes the context characteristics and presents the first empirical building block (EBB1-1);
- Section 6.1.2 explores the empirical characteristics of the portfolio product and summarizes its findings in a second empirical building block (EBB2-1);
- Section 6.1.3 explores the empirical characteristics of the portfolio development process by the foreign-trained teacher. The key characteristics are summarized in a third empirical building block (EBB3-1);
- Section 6.1.4 analyzes the empirical characteristics of portfolio assessment and summarizes the key characteristics in a fourth empirical building block (EBB4-1);
- Section 6.1.5 focuses on the empirical characteristics of portfolio design and implementation and presents a fifth empirical building block (EBB5-1);
- Section 6.1.6 reflects on the results of the case study and summarizes the main characteristics in a framework of empirical findings of portfolio use by foreign-trained teachers. Table 6-1 provides an overview of the empirical building blocks that will be developed in this section with references to the pages on which these will be presented.

Context	Product characteristics	Portfolio development	Portfolio assessment	Portfolio design and implementation	Framework for portfolio use
EBB1-1	EBB2-1	EBB3-1	EBB4-1	EBB5-1	-
Section 6.1.1, Table 6-2, page 168	Section 6.1.2, Table 6-4, page 174	Section 6.1.3, Table 6-5, page 179	Section 6.1.4, Table 6-6, page 183	Section 6.1.5, Table 6-7, page 187	Section 6.1.6 Table 6-8, page 190

 Table 6-1
 Overview of the empirical building blocks in the teachers' case

6.1.1 Exploring the context characteristics of the teachers' case

The aim of this section is to explore the complexity of portfolio use by analyzing the context characteristics of the teachers' case. The following issues of analysis are addressed:

- the evaluation and recognition policy for foreign-trained teachers;
- the professional sector;
- the characteristics of the portfolio assessors; and
- the characteristics of the portfolio candidates.

Evaluation and recognition policy for foreign-trained teachers

First, the evaluation and recognition practice regarding foreign-trained teachers is briefly described. In the Netherlands, the teaching profession is a regulated profession. This means that Dutch law specifies which diplomas are needed to start working as a teacher. Three types of teaching qualifications are distinguished:

- the primary school teaching qualification that qualifies one to teach in primary education (age group 4 - 12 years old), known in Dutch as the *onderwijsbevoegdheid basisonderwijs*;
- the lower secondary teaching qualification, which qualifies one to teach in the lower secondary education and in secondary vocational education (age group 12 - 16 years old and 12 -18 year old in vocational education), known in Dutch as the *onderwijsbevoegdheid*, graad 2;
- higher secondary teaching qualification, which qualifies one to teach at all levels of secondary education and in secondary vocational education, known in Dutch as the *onderwijs-bevoegdheid, graad 1*.

Foreign-trained teachers need to submit a request for recognition to the *Informatie Beheer Groep* (*IBG*) [Information Management Group]. The credential evaluation department of *IBG* compares the level and content of the foreign study programme with the requirements of a Dutch

programme that leads to a comparable teacher qualification. *IBG* can ask for a credential evaluation advice from one of the two expertise centres: Nuffic for higher education and Colo for secondary vocational education. *IBG* has the following instruments at its disposal:

- The first is a legal instrument, namely the General Systems for Mutual Recognition of Professional Qualifications that applies for EU/EEA citizens with EU/EEA qualifications. As explained in Section 2.2.2 this system is based on the premise that an individual who is qualified to work in a profession in one of the EU/EEA Member States should in principle be treated as qualified to perform the same profession in another EU/EEA Member State. The immigrant can only be asked to compensate for substantial differences, for example, through an internship, a period of supervised work placement or an aptitude test. Substantial differences relate to: learning outcomes, access to further activities, key elements of the study programme, or quality. If there are no substantial differences, the recognition decision is positive and the applicant receives a Dutch teaching qualification.
- The second instrument is an evaluation of the foreign diploma on a case-by-case basis. For this, the foreign study programme is compared with the national study programme using the set of criteria that was explained in Section 2.2.3. If there are no substantial differences, the applicant receives a positive recognition decision. In this case, this means that the foreign teacher receives a temporary teaching qualification. With this qualification they can start looking for a teaching position. After one year, the Education Inspectorate decides whether the temporary teaching qualification can be converted into a permanent teaching qualification.

Hence, the evaluation and recognition policy for foreign-trained teachers focuses on the foreign diplomas earned in the formal system of education abroad. As mentioned earlier, credential evaluators have no instruments available that help them to take account of the learning experiences gained outside the formal system of education. The evaluation is curriculum-based. If there are no substantial differences, the teacher will receive a permanent teaching qualification (if the General System of Directives applies) or a temporary teaching qualification (if the General System of Directives does not apply).

Professional sector

The shift to competency-based learning and assessment started in the early-nineties, when the Ministry of Education proposed a set of measures to improve the status of the teaching profession. One of these measures was to modify the existing systems of gualification requirements by establishing a new system of job profiles, initial standards of competence and an assessment to determine that the standards were being met (cf. Uhlenbeck, 2002). The competency standards define what beginning teachers should know and be able to do. These standards make it possible to shift the attention from the completion of the required modules (disciplinary content) to the outcomes of the learning process. Uhlenback (2002) indicates that the proposals from the Ministry led to the publication of the Primary Education Teacher Job Profile in 1993. In 1996, the Secondary Education Teacher Job Profile was completed. These documents were used for the development of initial standards of competence for teachers in primary and secondary education (Initial Standards of Competence for Primary Education, 1997; Initial Standards of Competence for Secondary Education, 1999). To cope with teacher shortages, the Ministry of Education, Science and Culture decided to initiate a competency-based assessment procedure for prospective primary and secondary teachers. This procedure was developed by Stoas (2000) and was briefly described in Section 5.4. Stoas (2000) used the existing job profiles to define a list of ten core competencies that form the frame of reference of the assessment procedure. As part of the implementation of the national assessment procedure, assessors were trained by Stoas in using the instruments including portfolio. The availability of a national competency-based assessment procedure has made portfolio use less complex. Nuffic decided to cooperate with an official assessment centre.

Characteristics of portfolio assessors

The characteristics of the portfolio assessors are briefly reviewed, addressing the following:

- The experience with assessment and training of foreign-trained teachers; and
- The experience with the portfolio instrument.

As indicated in Table 5-9 on page 133 the ideal characteristics of the portfolio assessors were explored using the planning document of the pilot project, while the pilot project report and the evaluation data provided information on the actual characteristics.

Ideal characteristics

To enhance the civil effect of the pilot project outcomes, Nuffic cooperated with an assessment centre called *Educom*. This is a collaborative initiative of two teacher training faculties. The assessment centre works with (portfolio) assessors who had been trained in the assessment procedure that was applied in the pilot project. Based on this decision, it can be said that the development team of Nuffic had the intention of working with portfolio assessors who were familiar with the portfolio instrument and the assessment culture. However, the available data does not specifically address this issue.

Actual characteristics

In total, five portfolio assessors participated in the project; two general assessors from *Educom* who were responsible for the assessment of the general didactic competencies, and three subject specialists (mathematics, music and social science), who were teachers at secondary schools. The two general assessors had been trained in the assessment procedure developed by Stoas. Both of them had previous experience with the assessment procedure. They were not specifically trained in the assessment of training of highly-skilled immigrants. However, they all had experience with foreign students or students from foreign backgrounds. The general assessors recommended using the original assessment procedure as much as possible to enhance the civil effect of the outcome. The three subject specialists were familiar with the portfolio instrument, but they had been trained as official assessors for the national assessment procedure.

There is no discrepancy between the ideal and the actual characteristics of the portfolio assessors. This had a positive influence on the complexity of portfolio use. The actual characteristics of the portfolio assessors made the innovation less complex.

Characteristics of portfolio candidates

Finally, the characteristics of the portfolio candidates are described, addressing the following:

- The experience with portfolio development;
- The experience in the professional sector in the Netherlands; and
- The Dutch language skills.

As explained in Table 5-9 on page 133 the ideal characteristics were explored using the planning document of the pilot project and the pilot project report. The actual characteristics were analysed using the pilot project report, the evaluation data and the notes made by the development team.

Ideal characteristics

The pilot project report shows that it was the intention that the portfolio candidates would meet the following requirements (cf. Scholten & Teuwsen, 2001b). They should:

 Have a foreign higher education qualification that is not recognized as sufficient to gain access to the teaching profession in the Netherlands (e.g. the applicant has a foreign teacher training qualification that is considered to be of a lower level than the Dutch teaching qualification or a higher education qualification that lacks a didactic component);

- Have relevant work experience or other prior learning experiences that could have contributed to the development of competencies relevant for the teaching profession;
- Have sufficient proficiency in the Dutch language to participate in the assessment procedure;
- Be interested in a secondary teaching qualification.

Actual characteristics

As discussed in Section 5.3 six portfolio candidates were invited for an intake interview. They came from Bulgaria, Iraq, Morocco, Malaysia, Russia and South Africa. Three of them wished to obtain a grade-one teaching qualification; one in mathematics, one in music and one in social studies. The other three wished to obtain a grade-two teaching qualification; one in mathematics, one in English and one in fine arts. None of the portfolio candidates had previous experience with new assessment instruments, like simulation, lesson observation or portfolio development. Four of the portfolio candidates had experience in the Dutch teaching sector. These experiences related to participation in a school's Parent Council, a language internship at a school, voluntary work at a school and teaching experience at the *Volksuniversiteit*.

Four of the portfolio candidates had passed the highest level of state exams for proficiency in the Dutch language (NT-2). The remaining two were still studying for this exam. The judgement of Dutch language proficiency by the general assessor who took part in the intake interview varied from sufficient (4), to doubtful (1) to insufficient (1). The self-assessment of language skills of the portfolio candidates shows that four of them thought their language skills were not sufficient to start working as a teacher in a Dutch school. Two others indicated that they thought that they could manage. These two also completed the full assessment procedure.

There was a discrepancy between the intended and implemented characteristics of the portfolio candidates which made the portfolio use more complex. It can be questioned whether the Dutch language skills of the selected candidates were sufficient for portfolio development. The candidates who had doubts about there language skills dropped out during the process. In addition, the candidates may not have had sufficient experience in the Dutch educational sector to reflect on the differences between the competencies of a teacher abroad and in the Netherlands.

Summary of the context characteristics in the teachers' case (EBB1-1)

The empirical characteristics of the context of the teachers case are summarized in a first empirical building block below (EBB1-1). This block gives insight into the complexity of the change process. Looking at the evaluation and recognition policy for foreign-trained teachers it can be concluded that for non-EU/EEA citizens the formal diploma forms the ultimate proof of competence. The curriculum of the foreign study programme is compared with the curriculum of the national study programme required for a teacher qualification. If there are no substantial difference, the foreign-trained teacher receives recognition. The national assessment procedure for prospective primary and secondary school teachers (introduced in 2000) has not had an influence on the recognition practice for foreign-trained teachers. It was used to see whether the portfolio instrument could enhance the identification, assessment and recognition of the actual competencies of foreign-trained teachers. The procedure is competency-based. The portfolio assessors were trained in portfolio assessment. The portfolio candidates had no prior experience with portfolio development or the assessment culture. Table 6-2 gives a summary overview of the context in the teachers' case.

Table 6-2 Empirical context characteristics in teachers' case (EBB1-1)

Empirical context characte	ristics - teachers' case			
Issues of analysis	Status quo		Conclusion	Observations
 Evaluation and recognition policy: Evaluation approach Evaluation instruments Evaluation standards 	International credential evalution is content-based.	nentioned by credential evaluators but they	Content-based evaluation paradigm is dominant.	Shift towards competency- based assessment paradigm for highly-skilled immigrants has not yet started.
 Professional sector: Evaluation approach Evaluation instruments Evaluation standards 	The shift from content-based curriculum to competency-based curriculum started in early nineties. Transparent set of competency standards is available. National competency-based assessment procedure available to cope with teacher shortages.		Competency-based environment. Competency standards are derived from professional profiles.	The national assessment procedure was implemented in early 2000. The first evaluation studies had just started at the time the pilot project took place.
Ideal characteristics Actual characteristics				
 Characteristics of portfolio assessors: Experience with highly- skilled immigrants Experience with the portfolio instrument 	Trained and knowledgeable assessors.	Experience with competency-based assessment including portfolio. Trained in the use of the assessment instru- ments that are part of the national assess- ment procedure. Previous experience with foreign students or students from a foreign background.	Assessors were familiar with portfolio assessment. Assessors were culturally sensitive.	The implemented characteristics of portfolio candidates made portfolio use less complex.
 Characteristics of portfolio candidates: Experience with the portfolio instrument Experience in the Dutch professional sector Dutch language skills 	In possession of a foreign higher education diploma. Relevant work experience (abroad or in the Netherlands). Sufficient Dutch language skills.	No experience with new forms of assessment including portfolio development. All six were in possession of a foreign higher education qualification. Four had relevant work experience in the Netherlands (paid or voluntary). Four had passed NT-2 (highest level). Two felt that their language skills were sufficient to teach in a Dutch class.	No experience with portfolio development. Limited experience in the Dutch educational sector as secondary school teachers. For the majority of the candida- tes, their Dutch language skills were insufficient.	The implemented characteristics of portfolio candidates made portfolio use more complex.

6.1.2 Exploring the characteristics of the portfolio product in the teachers' case

The aim of this section is to explore the intended, implemented and experienced product characteristics of the portfolio instrument that was used in the teachers' case. As discussed in Section 5.2, the following issues of analysis are addressed:

- The main function of portfolio;
- The immediate outcomes for portfolio assessors;
- The immediate outcomes for portfolio candidates;
- The structure of the portfolio;
- The content of the portfolio;
- The standards applied; and
- The portfolio evidence accepted as proof of competence.

Table 5-9 on page 133 shows what data was available for the analysis of the empirical characteristics as intended, implemented and experienced. The results of the analysis are discussed below. First, attention is given to the function and the immediate outcome of portfolio use, thereafter the structure and content is discussed.

Function and immediate outcome in the teachers' case

Intended characteristics

The intended function of the portfolio instrument in the original assessment procedure was the 'identification of developed competencies' (cf. Klarus, 2002; Stoas, 2000). Portfolio assessors get a first impression of the competence level of the portfolio candidate by reading the portfolio, but no summative assessment decision is made on the basis of portfolio assessment alone. The instrument is embedded in a wider assessment procedure. Klarus (2002) explains that the portfolio has a combined function of 'assessment' and 'development'. In the first instance, the portfolio is used as an assessment tool; it documents proof of competence. However, after the assessment decision is given, the portfolio can also serve as a development tool to plan and monitor professional growth. The prospective teacher can use the instrument to plan how he aims to develop the competencies he lacks. He can also use the portfolio for the documentation of his professional growth during the learning process that follows. To stimulate the use of portfolio for development purposes too, the original assessment procedure contained an assignment that concerned the development of a personal development plan after the final assessment decision had been given (cf. Stoas, 2000). However, in the teachers' case it was decided to focus portfolio use on the assessment of competencies alone.

The pilot project report shows that it was also the intention of the development team to use the portfolio for two purposes:

- the selection of pilot project candidates; and
- the identification of competencies.

It was therefore decided to divide the portfolio into two parts: an application form and a part that addresses the self-assessment of competencies and portfolio evidence. The intended function of the application form was to select portfolio candidates. The content of the form would be discussed during the intake interview. Only the selected candidates would be asked to conduct a self-assessment and gather evidence for the competency claims. The two parts together formed the completed portfolio. The completed portfolio would be discussed during the portfolio interview.

The intended immediate outcome of the portfolio instrument relates to the intended function of the completed portfolio (the identification of competencies). It was expected that the completed portfolio would enable the portfolio assessors to gain insight into the prior learning experiences of the portfolio candidate and identify his actual competencies using the Dutch competency standards as a reference. The intended immediate outcomes for the portfolio candidate were the following:

- 1. It was expected that portfolio development would result in a well-documented overview of prior learning experience that contains an analysis of the relevance of these experience in comparison to the Dutch assessment standards; and
- 2. It was expected that portfolio development would give insight into any discrepancies between the actual competencies of the candidate and the required competencies to work as a teacher in the Netherlands. This might help to plan and monitor future learning opportunities.

Implemented characteristics

The pilot project data shows that the implemented function of portfolio corresponds with the intended function. The application form was developed to select portfolio candidates. In total, seven candidates completed this form and six were invited for an intake interview. The intake interview was conducted by the general assessor from *Educom* and a developer from Nuffic. Five candidates were selected for further participation and were asked to conduct a self-assessment and gather proof of their competency claims. As intended, a portfolio interview took place to discuss the portfolio content in more detail. Two portfolio candidates dropped out during the portfolio development process. Hence, three of them took part in the portfolio interviews. The portfolio interviews were conducted by the general assessor from *Educom* and a subject specialist. A developer from Nuffic took part as an observer. Table 5-7 on page 128 gives an overview of the number of candidates in each phase of the assessment procedure.

Experienced characteristics

Looking at the data that gives insight into the experienced function of the portfolio instrument it can be concluded that the experienced function of the application form corresponds with the intended and implemented function. The completed application forms did contain the necessary information to select candidates for the intake interview. Moreover, the completed forms were a good basis for the intake interview. The intake interviews were experienced as useful to select portfolio candidates for the next phase. The Dutch language proficiency of one of the candidates was too limited to proceed. The portfolio candidates understood the function of the application form and they experienced the intake interview as useful.

The experienced function of the completed portfolio (self-assessment and portfolio evidence) and related to this the portfolio interview, does not correspond with the intended and implemented function. The completed portfolios were reviewed by two assessors (the general assessor from Educom and a subject specialist). The assessors involved noted that the quality of the completed portfolio was very poor. The documents showed that the foreign teachers had had great difficulty in understanding the purpose of self-assessment. The completed documents also showed that the meaning of the core competencies had not been understood. In addition, the portfolios included very little portfolio evidence. The assessors commented that the completed portfolios did not provide added value compared to the application forms. The minutes from the evaluation meeting with the portfolio assessors give the following explanation for the discrepancy between the intended and implemented function of the completed portfolio, and on the other hand, the experienced function:

- The terminology that was used to explain the ten core competencies was unclear for the target group;
- The target group lacks a clear picture of the teaching profession in general secondary education in the Netherlands, which makes it very difficult to compare prior learning experiences with required standards in the Netherlands (the list of ten core competencies);
- The command of the Dutch language was for most of the candidates insufficient to write an analysis about the relevance of their prior learning experiences and to reflect on the differences;
- The reflective skills of most of the candidates were poorly developed, also the portfolio interview showed that many of them were not used to reflecting on their strengths and weaknesses or to pointing out the lessons learned from a specific experience.

The data that relates to how the portfolio candidates experienced the function and immediate outcome of the completed portfolio also shows a discrepancy between the intended and implemented characteristics. Most of the portfolio candidates found it difficult to conduct a self-assessment and gather evidence that could prove that they had developed certain competencies. Two candidates dropped out during this phase of the assessment procedure. An important reason was that their Dutch language skills were insufficient to understand the meaning of the competency definitions and make a thorough analysis of the relevance of their prior learning experience in relation to the assessment standards. The three candidates who did develop a portfolio commented during the portfolio interview that they did not understand the purpose of the self-assessment form. Remarks made, also during the evaluation interview included:

- 'I did not understand the meaning of the core competencies';
- 'I did not understand the meaning of the portfolio. Of course, all the ten competencies are important. I have developed these during my previous experience'; what can I say?'
- 'It is difficult to submit evidence, I did not bring lesson plans or products developed at home'.

In this respect, it is important to refer to the outcomes of other studies that concern the original assessment procedure for prospective teachers (cf. Beckmann, Tillema & Verberg, 2000; Smith & Tillema, 2003). Both studies show that Dutch portfolio candidates also had problems with the assessment standards used as a frame of reference. As a consequence, the portfolio assessors in these studies were also disappointed about the quality of the information submitted in the portfolio. It was concluded that more guidance and support is needed during portfolio development. This issue is discussed in more detail in Section 6.1.3.

Structure and content of the portfolio instrument in the teachers' case

The intended, implemented and experienced portfolio characteristics are discussed below with respect to:

- The structure of portfolio;
- The content of portfolio;
- The standards applied for reflection and self-assessment; and
- The portfolio evidence that is accepted as proof of competence.

Intended characteristics

As described above, it was intended to structure the portfolio in two parts: and application form and a part that addresses the self-assessment of competencies and portfolio evidence. The application form would have a thematic prescribed structure addressing the following content issues:

- prior learning experiences;
- the motivation to participate in the assessment procedure; and
- the Dutch language proficiency.

The second part of the portfolio format, which addresses the self-assessment of the core competencies and the portfolio evidence, was intended to be structured using the ten core competencies as an organizing principle. As indicated by Stoas (2000), the portfolio instrument would specifically address the following competency definitions:

- the subject of expertise (competency 5);
- the ability to reflect and take initiative (competency 7);
- the ability to work on professional development (competency 8); and
- knowledge of education (competency 10).

See Table 5-5 on page 123 for an overview of the core competencies defined by Stoas (2000).

It was the intention that the portfolio candidate would submit all evidence available to prove the defined competency claims.

Implemented characteristics

The pilot project report shows that the implemented characteristics correspond with the intended characteristics. The implemented portfolio did contain two parts: an application form and a self-assessment form. The application form contained five forms that addressed the following content issues:

- Personal data (including Dutch language proficiency and the targeted teaching qualification);
- Formal education;
- Non-formal education and training;
- Work experience;
- Experience in the Dutch educational sector.

Form six concerns the self-assessment of the ten core competencies, while form seven addresses the portfolio evidence to support the competency claims that were defined in form six. Table 6-3 below gives a more detailed overview of the content of the different forms. As intended, all seven parts had a prescribed structure but contained open questions to enhance reflection. The implemented standards were the ten core competencies defined by Stoas (cf. Stoas, 2000). The evidence that could be submitted was not explicitly addressed. As Table 6-3 shows 'form seven' gave some examples of evidence that could be used to prove the defined competency claims.

Form 1:	Personal data, like name, address, date of birth, Dutch language proficiency and the type of teaching qualification one wishes to obtain.
Form 2:	Overview of formal education. Information was gathered on the study programme, the educational institute, the period in which one studied and the available evidence.
Form 3:	Overview of non-formal education such as private training courses or non-recognized education. Information was gathered on the name of the training programme, the educational provider, the purpose and content of the training programme, the period in which the training course was followed, the hours per week and the available evidence.
Form 4:	Overview of working experience as well as leisure time activities or volunteer work. Information was gathered on the profession, job title or activity, the organization where this profession or activity was carried out, the (job) responsibilities, the period in which these were carried out, the hours per week and the available evidence.
Form 5:	 Open questions concerning: the experience with the Dutch educational system the key differences between education in the Netherlands and the home country the main tasks of a secondary school teacher
Form 6:	 Self-assessment of the ten core competencies Extra assignment, containing open question on: the rights and duties of pupils, teachers and parents in the educational learning process recent developments in secondary education in the Netherlands the most important development in the opinion of the foreign teacher
Form 7	Evidence, like diplomas, certificates, references, products of work and publications

Table 6-3The implemented portfolio format in the teachers' case

Experienced characteristics

The pilot project data shows that the implemented structure and content of the application form was well evaluated by both the portfolio assessors and the portfolio candidates. The five forms resulted in a well-structured overview of prior learning experiences. The information presented was sufficient to select candidates for the next phase of the assessment procedure. However, the completed portfolios showed that 'form 6' and 'form 7' were not well-understood. As a consequence, the completed portfolio did not contributed to the intended function and immediate outcome. With respect to the standards it was concluded by the portfolio assessors that the foreign-trained teachers did not understand the meaning of the competency definitions. Possible explanations relate to:

- lack of work experience in the Netherlands;
- lack of Dutch language proficiency;
- insufficient guidance and support.

The portfolio candidates commented that it was difficult to gather portfolio evidence. They only have formal documents like diplomas and certificates. Most of the teachers are not in possession of lesson plans or other materials that could support a competency claim. They did not know how to deal with this problem. Furthermore, they were unsure about the amount of evidence that was needed; 'Is my foreign qualification not enough?', was one of the questions asked. During the evaluation meeting with the portfolio assessors it was suggested that the portfolio should be developed as part of an orientation programme that precedes the assessment. As part of this programme the competency standards could be explained and experienced during an internship. The orientation programme could also devote extra attention to the portfolio evidence that is accepted as proof of competence.

Beckmann et al. (2000) report that some of the assessors of the national assessment procedure criticized the set of core competencies used by Stoas (2000) as they related to the final level that had to be achieved. For portfolio candidates who are not familiar with teaching jargon it is difficult to interpret the meaning and to assess the extent to which this competency has already been achieved. Therefore, it is important that level-descriptors are added. Furthermore, it was felt that some important competencies were missing, especially with respect to the subject in which one wishes to teach. Smith and Tillema (2003) found that the Dutch portfolio candidates were also insecure about the scope of the portfolio; how much evidence is needed? Hence, the national assessment procedure is not without flaws and needs some improvements based on experience.

Summary of the empirical product characteristics (EBB2-1)

Below the product characteristics of the portfolio instrument used in the teachers' case are summarized in a second empirical building block (EBB2-1), see Table 6-4 on the next page. It provides an overview of the intended, implemented and experienced characteristics that were described above. In addition, it draws conclusions about the main issues of analysis. The most important results are briefly discussed below.

With respect to the function of the portfolio instrument for foreign-trained teachers, it can be concluded that the intended function was implemented in practice; the emphasis was on the assessment function of the portfolio instrument (the identification of competencies). To support the selection of portfolio candidates, the portfolio format was divided into two parts; an application form and a part that concerned self-assessment and portfolio evidence. The experienced characteristics show that the application form served its purpose; however, the function and immediate outcome of the completed portfolio was not realized. The guality of the reflective information in the completed portfolios was too poor to use as a formative assessment instrument. The portfolio assessors indicated that the completed portfolios were informative about prior learning experiences, but they did not contain evidence of the competencies that were developed during these experiences. As a consequence, the portfolio assessors did not experience the intended immediate outcomes of portfolio use.. The portfolio candidates remarked that they found it useful to have a well-structured overview of prior learning experiences in the Dutch language. However, given that the competency standards were not understood, it can be concluded that portfolio development did not raise the awareness of the discrepancy between the actual competencies of foreign-trained teachers and the required competencies. It is important to note that other studies also showed that the competency definitions were difficult for Dutch portfolio candidates to understand (cf. Beckmann, et al, 2000; Smith & Tillema, 2003). Hence, there is more than only a cultural problem. The case study shows that it was suggested to make portfolio development part of an orientation programme. However, it can also be questioned if certain extra selection criteria should be defined, for example, with respect to Dutch language proficiency or experience in the Dutch professional sector.

Empirical proc	duct characteristics - teachers	s' case			
Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristic	Conclusions	Observations
Main function of portfolio	The application form was intended for the selection of foreign teachers; the completed portfolio for the identification of competencies.	As intended	The application form was useful; the completed portfolio provided infor- mation on prior learning experiences; motivation and Dutch language proficiency. Foreign teachers did not understand competency standards. Foreign teachers were not used to self- assessment. Foreign teachers had limited portfolio evidence.	The application form served its purpose. The main function of the completed portfolio was the identification of competencies; this function was not realized. The completed portfolios were des- criptive documents that provided insight into prior learning experiences. The foreign teacher did not explore learning.	Self-assessment, reflection and portfolio evidence should receive more attention to assure the quality of the portfolios.
Immediate outcomes for portfolio assessor	The application form should give insight into prior learning experiences, motivation, Dutch language proficiency; the completed portfolio is for the identification of competencies.	Not applicable	The application form served its purpose; self-assessment had no added value.	The completed portfolio provided insight into prior learning experiences; self-assessment had no added value.	As above
Immediate outcomes for portfolio candidate	Well-documented overview of prior learning experiences. Increased awareness about the discrepancy between actual and required competencies. Plan future learning.	Not applicable	The application form resulted in a well- structured overview of prior learning experiences; self-assessment had no added value.	Portfolio development resulted in a well-structured overview of prior learning experiences; self- assessment has had added value.	As above
Structure of portfolio	 Prescribed structure; two parts: Application form Self-assessment and portfolio evidence 	Prescribed structure with open questions Two parts as intended.	Prescribed structure with open questions. Self-assessment needs more guidance and support. Portfolio evidence needs more attention.	Prescribed structure with open questions. Different components with own function Self-assessment, reflection and portfolio evidence need more attention/	Reflection requires a variety of prior learning experiences and a thorough understanding of the assessment standards.

Table 6-4 Empirical product characteristics in the teachers' case (EBB2-1)

Content of portfolio	 Application form: Prior learning experiences Motivation Dutch language proficiency 	 Application form, Five forms: Personal data Formal learning Non-formal learning and training Work experience Experience in the Dutch educational sector 	Application form: The five forms provide sufficient information to take selection decision.	Application form Five parts: Personal data Formal learning Non-formal learning and training Work experience Experience in Dutch educational sector	 Should selection criteria be up- graded, with respect to: Dutch language proficiency Experience in Dutch educational sector?
	Completed portfolio Two additional forms Self-assessment of ten core competencies Portfolio evidence	Completed portfolio As intended.	Completed portfolio No added value. Provides insufficient information to identify actual competencies.	The portfolio format should contain different forms each with its own function. The current forms do not give sufficient guidance and support.	Foreign teachers need to practice self- assessment.
Standards	 Set of ten core compe- tencies 	Set of ten core compe- tencies. Language proficiency.	Set of ten core competencies were meaningless.	Set of ten core competencies need more explanation.	Evaluation studies have shown that the assessment standards were also problematic for Dutch portfolio candidates.
Portfolio evidence	Not specifically addressed.	Examples of evidence were mentioned	More guidelines for amount and type of portfolio evidence	Portfolio evidence needs more attention.	Foreign teachers have little evidences and need an opportunity to collect or reconstruct materials that prove competence.

Table 6-4 Empirical product characteristics in the teachers' case (EBB2-1) (Continued)

6.1.3 Exploring the characteristics of portfolio development in the teachers' case

The aim of this section is to explore the characteristics of portfolio development as intended, implemented and experienced in the teachers' case. As explained in Section 5.2 the exploration addresses the following issues of analysis:

- The steps and strategies applied in the portfolio development process;
- The measures taken to support portfolio candidates;
- The clarity about different roles and responsibilities.

Table 5-9 on page 133 explained which data were available for the analysis of the empirical characteristics. All five issues are discussed together below, addressing the intended characteristics, the implemented and the experienced characteristics.

Intended characteristics

The intention was to organize the process of portfolio development in the same way as in the original assessment procedure. In this procedure, portfolio development is an independent activity (cf. Stoas, 2000). Hence, no specific measures were foreseen despite the fact that the portfolio forms would contain some instructions to make independent work possible. It was the intention to explain the purpose of portfolio development during the intake interview. If needed, the portfolio candidate could contact the general portfolio assessor from *Educom* for clarification of any questions. No specific measures were foreseen to explain portfolio development or practice development strategies. The prescribed forms would guide the portfolio candidates in taking the necessary steps.

Implemented characteristics

The pilot project report and the developed portfolio material show that the implemented characteristics of the portfolio development process equalled the intended characteristics. The purpose of the portfolio instrument was briefly described in an information leaflet that was handed out after the intake interview (pre-selection phase). An instruction form was developed for the application form (forms one to five, the self assessment of the core competencies (form six) and the portfolio evidence (form seven). The instructions for the application form explained the purpose of each form. The common steps in portfolio development were not explicitly addressed. The instructions for the self-assessment of the core competencies and the portfolio evidence explained how these parts relate to the application form. Furthermore, the purpose of selfassessment was addressed. It was explained that the portfolio candidates should reflect on the extent to which each of the ten core competencies were addressed during their formal education and later while working. In addition, the candidates were asked to reflect on the importance of each competency, comparing the education culture in the Netherlands with the educational culture in the country in which they were educated and employed. Finally, it was explained that they should pass a final judgment on the extent to which they had developed the competency concerned (self-assessment). To clarify the meaning of the ten core competencies, a detailed overview of relevant performance indicators was included for each competency. In addition to the self-assessment, form six contained two open questions to gather insight into their knowledge of the Dutch educational system (competency ten); see Table 5-5 on page 123 for an overview of the ten core competencies.

The portfolio candidates were given three weeks to complete the portfolio. It was explained that the portfolio would be assessed by two assessors during a portfolio interview. It was noted that the portfolio candidates would be able to contact the portfolio assessor from *Educom* if the portfolio development process was not clear.

Experienced characteristics

The evaluation data shows that the portfolio assessors felt that the intended and implemented characteristics of portfolio development were inadequate. The developed portfolios showed that neither the self-assessment of the core competencies nor the inclusion of portfolio evidence was understood. The reflections were poor and the portfolio candidates submitted very little portfolio evidence. The portfolio candidates were not used to conducting self-assessments. Moreover, the core competencies were not properly understood, in part because most of the candidates did not have experience as secondary school teachers in the Netherlands. The implemented characteristics of the portfolio candidates were not suited to independent portfolio development. Self-assessment cannot be taught by reading an instruction form. The portfolio assessors commented that the purpose of self-assessment should be explained in a learning environment. The foreign-trained teachers should be given the opportunity to practice self-assessment before presenting a completed portfolio to the assessors. Furthermore, they should get a chance to learn the meaning of the core competencies.

During the evaluation meeting, the portfolio assessors noted that the implemented portfolio characteristics were apparently not suited to the characteristics of the portfolio candidates. The portfolio assessors suggested to develop an orientation programme that would precede the assessment. The nature of the orientation programme should be further explored. It could serve the purposes of:

- a. getting acquainted with the Dutch teaching profession;
- b. exploring the suitability of being a teacher in the Netherlands; or
- c. gathering evidence for a well-documented portfolio.

All three purposes put additional demands on the set-up of the orientation phase.

There is only little data available on how the portfolio candidates experienced the portfolio development process. Looking at the course of the pilot project, it can be concluded that portfolio development was a difficult step in the process; two portfolio candidates dropped out at this stage. The three candidates have completed this phase, commented during the portfolio interview that the purpose of the self-assessment was not properly understood. None of the portfolio candidates contacted the general portfolio assessor to ask for clarification of questions. One of the teachers commented that she did not want to contact the general assessor for advice. She was not sure whether this would have an influence on the assessment outcome. The interview reports showed that most of the portfolio candidates had difficulty with the portfolio evidence. Most of them only have formal evidences, like diplomas and/or certificates, but no direct proof like lesson plans or evaluation reports.

The studies that address the national assessment procedure also showed that the Dutch portfolio candidates felt that the instructions for portfolio development were insufficient to gather adequate portfolio evidence for all the required standards. More guidance and support was needed especially for the portfolio candidates without teaching experience; they were not familiar with many of the terms used (Beckhamm et al., 2000; Smith & Tillema, 2003). Johnsson (2002) pointed out the clear distribution of roles and responsibilities. The portfolio candidates should be assigned to a portfolio advisor who guides and supports them in the portfolio development process and conducts a formative assessment before the portfolio is submitted to the portfolio assessors. These should be two different people. The results from the case study relate to this finding. Asking the general assessor for advice caused confusion.

Summary of the characteristics of portfolio development in the teachers' case (EBB3-1)

The characteristics are summarized below in a third empirical building block for the teachers' case (EBB3-1), see Table 6-5. This Table shows the intended, implemented and experienced characteristics of portfolio development and draws a conclusion for each issue of analysis. The most important aspects are briefly described below.

Table 6-5 shows that there was no discrepancy between the intended characteristics of the portfolio development process and the implemented characteristics. However, the experienced characteristics show that these characteristics were not adequate to explain the purpose of self-assessment to the portfolio candidates. The instructions for the application form were understood. The application form contained adequate information to get a general impression of the prior learning experiences of the foreign teacher. The instructions for self-assessment were not adequate. It was noted by the portfolio assessors that the portfolio should be developed in a learning environment so that the purpose of self-assessment can be explained and practiced. Bearing this suggestion in mind, the question arises of what the purpose of portfolio development tool; or would it be used as an instruction tool to develop reflective skills (cf. Wade & Yarbrough, 1996). Or could these instructions be part of an official portfolio module that prepares portfolio candidates adequately for the assessment task. This notwithstanding, it is important to note that the portfolio assessors felt that the assessment outcome was invalidated by the unfamiliarity of the candidates with:

- a. the assessment standards; and
- b. the cognitive processes that are needed for portfolio development.

Referring to the literature, Klenowski (2002) emphasized that self-assessment and reflective skills need to be taught to students. Furthermore, it is important that portfolio candidates have the opportunity to discuss and reflect upon the included portfolio evidence with peers or with a portfolio advisor. For that reason, Johnsson (2002) advised that each portfolio candidate should have a portfolio adviser for support. Table 6-5 shows that the roles and responsibilities of the different players involved in the process were not clearly defined beforehand. The implemented characteristics show that the roles of portfolio advisor and portfolio assessor were intertwined, which caused confusion for the portfolio candidates. It can therefore be concluded that these roles and responsibility should be clearly addressed and separated.

Table 6-5	Empirical characteristics of port	folio development in the teachers' case (EBB3-1)

Empirical charact	eristics of portfolio developn	nent – teachers' case			
Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristic	Conclusions	Observations
Steps and strategies in portfolio development.	The portfolio forms guide the foreign teachers through the process. The steps are not specifically addressed.	As intended.	The application form was well-understood; thematic overview of prior learning, self-assessment and portfolio evidence were not understood.	Thematic overview of prior learning was understood. Completion of the forms did not contribute to understan- ding the portfolio develop- ment process.	Completing forms makes portfolio development a linear process while it should be a cyclic one.
Measures taken to support portfolio candidates.	Independent process. Instructions in the portfolio format. Contact general assessor for clarifying questions about the process.	As intended.	The completed portfolios showed that the support measures were insufficient.	The characteristics of the foreign teachers were not appropriate for independent portfolio development.	Should portfolio development be part of an orientation programme that prepares foreign teachers for the profession in the Dutch context? What is the purpose of portfolio development in such a process: development, instruction?
Roles and responsibilities.	Roles and responsibilities were not specifically addressed.	The roles of portfolio advisor and portfolio assessor were intertwined.	Contacting the assessor for advice caused confusion.	The roles and responsibilities need to be carefully defined and communicated. No mixture of guidance and assessment.	

6.1.4 Exploring the characteristics of portfolio assessment in the teachers' case

This section explores the intended, implemented and experienced portfolio characteristics of portfolio assessment in the teachers' case. It gives attention to:

- The function of portfolio assessment;
- The additional instruments used to take an assessment or recognition decision;
- The quality criteria for portfolio assessment.

The data available for the analysis of the empirical characteristics was explained in Section 5.3.2 (see Table 5-9 on page 133). All four issues of analysis are discussed together below, addressing the intended characteristics, the implemented characteristics and the experienced characteristics.

Intended characteristics

The intended function of portfolio assessment was 'the identification of competencies' or 'formative assessment' (Stoas, 2000, Klarus, 2002). It was expected that the portfolio would address the following four competencies (Staos, 2000):

- the subject expertise (competency 5);
- the ability to reflect and take initiative (competency 7);
- the ability to work on professional development (competency 8); and
- knowledge of education (competency 10).

The portfolio assessors were expected to review the portfolio evidence and, in addition, indicate which competencies were addressed by the submitted evidence. The portfolio instrument is embedded in a wider assessment procedure. It gives a first impression of the extent to which the portfolio candidate has achieved the targeted assessment standards. The final assessment decision is taken after the full assessment is completed. The intended additional assessment instruments are:

- Development of a lesson plan;
- Planning interview;
- Lesson observation by portfolio assessors, the lesson is given by the portfolio candidate;
- Self-assessment of the lessen; and
- Reflection interview.

To assure the quality of the portfolio assessment, a 'checklist for portfolio assessment' was developed by Stoas (2000) as well as an 'assessment sheet for portfolio evidence' (see Table 5-6 on page 125). The checklist can be used by the portfolio assessors to note observations during the portfolio interview and make comments on the extent to which the core competencies appear to be developed. The portfolio assessors can use the assessment sheet to judge four types of portfolio evidence, namely 'accounts of experience', 'references', 'products of experience' and 'certificates and course details'. Each category needs to be judged using the following criteria: authenticity, retention, relevance, quantity, and variety (cf. O'Grady, 1991). The types of portfolio evidence and the quality criteria were discussed in more detail in Section 4.3. Table 4-10 on page 94 shows a sample assessment sheet for portfolio evidence. The sheet is based on the dominant quantitative approach.

The intended assessment criteria to warrant the quality of the overall assessment decision relate more to the qualitative approach. The assessment protocol stipulates that at least two assessors should take part in the assessment. The assessors are expected to combine the evidence from different sources to reach a final judgement. The judgement makes note of the competencies for which sufficient evidence was given during the assessment. In the first instance, the assessors complete the different (standardized) assessment forms individually. Thereafter, the final judgement is discussed using each other's initial interpretations. The final judgement states for which competencies sufficient evidence was submitted. Furthermore it contains a recommendation on how the missing competencies can be developed. Hence, the intended

assessment approach is 'multimodal'; it uses different assessment instrument to reach an assessment decision. The quality of the final assessment decision is assured using qualitative measures like: the use of more than one assessor who is trained and knowledgeable in the subject, consensus through dialogue and the interpretation of different assessment outcomes.

Implemented characteristics

The intended function of portfolio assessment was also implemented; formative assessment focused on the identification of competencies. Two portfolio assessors took part in the portfolio assessment; a general assessor for the general didactic competencies and a subject specialist for the field of specialization. Three foreign teachers took part in the portfolio assessment. Two of them completed the full assessment. They developed a lesson plan and they conducted a lesson to a class of secondary school pupils. A planning interview was conducted before the lesson was given, using the standardized questionnaire. After the lesson, the candidates had to conduct a self-assessment. Furthermore, a reflection interview was held using a standardized questionnaire. The third candidate was advised to observe a few lessons to get more acquainted with the Dutch educational culture before he could continue with the assessment procedure.

For the portfolio assessment, the assessors used the 'checklist for portfolio assessment', which had been slightly adapted, and the 'assessment sheet for portfolio evidence'. The adaptations did not involve the quality criteria that were applied. This means that the assessors were asked to review the submitted evidence using the following criteria: authenticity, retention, relevance, quantity, and variety. The quality criteria that were implemented to warrant the quality of the assessment outcome were the same as intended.

Experienced characteristics

The data shows that there is no discrepancy between the intended and implemented function of portfolio assessment. However, the experienced function was different than intended. The quality of the completed portfolios was insufficient to conduct formative assessment. The reflective information on the developed competencies was poor and the foreign teachers submitted very little portfolio evidence as proof of competency development (mainly 'certificates and course details'). The evaluation data shows that the portfolio assessors experienced the portfolio interviews as informative. It informed them on:

- The motivation of the portfolio candidate to participate in the assessment;
- The subject of expertise;
- The work experience abroad and in the Netherlands; and
- The Dutch language proficiency.

The variance between the three interviews was large as no checklist was used to make sure that all relevant aspects were covered. Normally the completed portfolio is used to structure the interview, but these were not useful for this purposes. The minutes from the evaluation meeting shows that the assessors felt a need for a checklist for the portfolio interview. Moreover, the assessors felt that the portfolio candidates were not sufficiently prepared for the assessment procedure. They questioned if the unfamiliarity with the assessment standards and the assessment procedure had invalidated the assessment outcome. The candidates who completed the full assessment indicated that it was a useful learning experience. However, both of them felt that giving one lesson was not sufficient to give a good impression of their capabilities. There are so many unpredictable factors that it is difficult to plan the competencies one would like to demonstrate. Moreover, they were disappointed that there was no follow-up after the assessment. Both would like to take part in an internship programme that would give them the opportunity to learn in practice and develop the required Dutch competencies.

Summary of the empirical characteristics of portfolio assessment (EBB4-1)

The empirical characteristics are summarized in Table 6-6. It presents a fourth empirical building block for the teachers' case (EBB4-1). EBB4-1 gives an overview of the intended, implemented and experienced characteristics of portfolio assessment. The last two columns give the conclusions that can be drawn from the data as well as the observations. The most important aspects are briefly described below.

There was no discrepancy between the intended characteristics of portfolio assessment and the implemented characteristics. However, the quality of the completed portfolio meant that the intended and implemented function was not experienced by the portfolio assessors. The portfolio interview was informative with respect to the motivation of the portfolio candidate, the work experience, and the Dutch language proficiency, but it gave little insight into the extent to which the foreign-trained teacher meets the assessment standards. Portfolio assessment was further complicated by the lack of evidence included in the portfolios. Most of the evidence was 'certificates and course details' (cf. O'Grady, 1992); or 'formal evidence' (cf. Beijaard et al., 2002). This raises the question of how foreign diplomas can be linked to competency claims? To ensure fairness, it should be questioned if the portfolio candidates should be given the opportunity to reconstruct or gather evidence during the process of portfolio development. It can be concluded that the portfolio candidates need more guidance and support to ensure that the completed portfolios are of sufficient quality. They need to be supported by a portfolio adviser before the portfolio is submitted for assessment. The portfolio advisor must be a different person to the assessor. Only then will the implemented function be experienced by the portfolio assessors and perhaps also by the portfolio candidate himself.

Issues	Intended	Implemented			
of analysis	characteristics	characteristics	Experienced characteristic	Conclusion	Observations
Main purpose of portfolio assessment.	Formative assessment: the identification of competencies	Formative assessment: the identification of competencies.	Informative: to gain insight into prior learning experien- ces, motivation and Dutch language proficiency.	Completed portfolios were descriptive in nature; extra support measures are needed to ensure the development of a high- quality portfolio.	Portfolio advisors must give formative feedback on the quality and content of the portfolio before it is submitted to the portfolio assessors.
Additional instruments to. Take assessment decisions.	Authentic assessment: planning interview lesson observation self-assessment reflection interview final decision	As intended.	Portfolio assessors felt that the assessment was invali- dated by unfamiliarity with the assessment standards and assessment instruments. Portfolio candidates found one lesson too little to show their competencies.	Portfolios need to be part of an assessment procedure. The recognition decision is based on a variety of sources (multimodal).	The foreign teachers were not sufficiently prepared for the assessment.
Quality criteria for portfolio assessment.	Two assessors. Standardized forms for individual assessment. Criteria for portfolio evidence are: authenticity, retention, relevance, quantity and variety. Collaborative inquiry to challenge initial interpretation.	As intended.	Portfolio advisors should give feedback on the quality and content of portfolios before they are submitted for assessment. There was insufficient port- folio evidence. Foreign teachers need to be better prepared for authentic assessment.	Portfolio assessors felt that the assessment was invali- dated by unfamiliarity with the assessment standards and assessment instru- ments, despite the measures taken to assure the quality of the assessment process.	High quality support is just as important as a qualitative competency-based assessment procedure.

Table 6-6 Empirical characteristics of portfolio assessment in the teachers' case (EBB4-1)

6.1.5 Exploring the characteristics of portfolio design and implementation in the teachers' case

The aim of this section is to discuss the intended and implemented characteristics of portfolio design and implementation in the teachers' case. As discussed in Section 5.2, the following issues of analysis are explored with respect to the design process:

- Perspective of change;
- Design paradigm.

For the exploration of the characteristics of the implementation process attention is given to:

- Actors and factors that influence implementation;
- Support of management;
- Available resources;
- Compliance with assessment culture at institutional level;
- Training of assessors;
- Training of portfolio candidates.

Table 5-9 on page 132 shows what data is available for the analysis of the empirical characteristics of the issues of analysis. The information on the implementation process is very limited because of the main purpose of the pilot project. There were no long-term objectives for the implementation of a new assessment procedure for foreign-trained teachers who had received a negative recognition recommendation from *IBG*. Instead, Nuffic wanted to gather data on the usefulness and acceptability of the portfolio instrument to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants. It was a one-off experiment to feed discussions on linking international credential evaluation and PLAR at the national and international level.

Design process

Intended characteristics

In the teachers' case, it was the intention to apply the 'fidelity perspective' (cf. Fullan, 2001) to change the national assessment procedure for prospective teachers that was introduced by the Ministry of Education in 2000. The main reasons for this were that the procedure was competency-based including a portfolio instrument, the assessors were trained in the assessment procedure and there was a legal basis for the assessment which would enhance the civil effect of the assessment outcome. The main purpose of the pilot project was to see whether the assessment procedure would give insight into the actual competencies of the foreign-trained teachers, and whether the applicants could re-qualify via a dual, tailor-made study programme. To enhance the civil effect of the assessment centre called *Educom* and use the original assessment procedure as much as possible (cf. Stoas, 2000).

The intended steps in the design process were the following:

- Consultations with different groups of stakeholders involved in the development of the original assessment procedure to discuss whether special adaptations were needed to cope with the special needs of portfolio candidates, like : Stoas research, different teacher training institutes, Ministry of Education, Science and Culture;
- Preparatory meetings with the assessors to discuss the assessment instrument and the adaptations that had to be made;
- Adaptation of materials;
- Selection of foreign-trained teachers;
- Use of the assessment procedure to test it applicability;
- Evaluation of the usefulness of the applied materials together with portfolio assessors and the portfolio candidates;
- Discussion of evaluation outcomes involving different groups of stakeholders (peer educators, international credential evaluators).

Implemented characteristics

The pilot project report show that the 'fidelity perspective' to change was indeed applied. The design steps were planned using the ADDIE model (cf. Plomp 1982; Van den Akker, et al., 1999). This model relates to the systematic design paradigm (cf. Visscher-Voerman et al., 1999). However, the design activities were rather limited. It was decided to adapt the original portfolio format so that it would facilitate the selection of portfolio candidates. The portfolio format was divided into two parts: an application form and a part that contains the self-assessment of the core competencies as well as the portfolio evidence. The developers from Nuffic developed these forms and discussed them with the assessors. Thereafter, they were tested in practice to evaluate the usefulness and effectiveness in direct cooperation with the users (the portfolio candidates and the portfolio assessors). The evaluation outcomes were discussed with a group of peer educators at the annual conference of the Association of Teacher Educators in the Netherlands. The outcomes were also discussed within the ENIC/NARIC network to reflect on the use of a portfolio instrument as a supplement to international credential evaluation. The pilot project was financially supported by the European Commission. As a consequence the development team had to meet certain external deadline for submitting the pilot project results. It seems that the applied design paradigm relates best to the pragmatic design paradigm (cf. Visscher-Voerman et al., 1999).

Implementation process

Intended characteristics

The planning document shows that it was the intention to gather data on the usefulness and acceptability of using a portfolio instrument to enhance the identification, assessment and recognition of the actual competencies of foreign trained teachers. The outcomes of the project could give an impetus to discussion on linking international credential evaluation with PLAR practices at the national and international levels. To enhance the civil effect of the assessment outcomes it was decided to use a national assessment procedure that had been recently implemented by the Ministry of Education (cf. Stoas, 2000). The use of this procedure would limit discussion regarding the quality of the used instruments. The national assessment procedure had been nationally accepted and assessors had already been trained to work with the included instruments. The intended implementations steps were:

- Selection of assessment centre;
- Selection of portfolio candidates;
- Portfolio development by portfolio candidates;
- Assessment of portfolio candidates;
- Evaluation of the usefulness and acceptability of the assessment procedure in general and the portfolio instrument in particular;
- Discussion of the evaluation outcomes with a wider group of stakeholders (peer educators and international credential evaluators at the national and international levels).

Implemented characteristics

The pilot project report gives insight into the implemented characteristics of the implementation process. It shows that the intended steps were further specified and implemented as intended:

- Nuffic cooperated with *Educom;*
- Six portfolio candidates were selected to participate in the project;
- Three portfolio candidates took part in the portfolio assessment and two candidates completed the full assessment;

- The usefulness and effectiveness of the portfolio instrument as well as the other instruments were evaluated with the portfolio assessors (expert meeting) and the portfolio candidates (interview);
- The evaluation outcomes were discussed with peer educators at the annual *VELON* conference in 2001. In addition, they were discussed with international credential evaluators at the international level.

Nuffic used the outcomes of these discussion to further explore the characteristics of the portfolio instrument in other sectors (cf. the medical doctors' case and the refugees' case). Because the pilot project was a one-off experiment, the case study did not contribute to a better understanding of portfolio implementation.

Summary of the characteristics of portfolio design and implementation in the teachers' case (EBB5-1)

Finally, the characteristics of the design and implementation process are briefly described and summarized in a fifth empirical building block for the teachers' case (EBB5-1). This block is presented in Table 6-7. It gives a summary of the intended and implemented characteristics of the design and implementation process. The main aspects are briefly addressed below.

The chosen perspective to change had an influence on the design process. Only limited design activities were needed because it was decided to apply the original procedure as much as possible. The design and implementation activities were structured using the ADDIE model (cf. Plomp, Van den Akker, 1999). The design activities seemed to relate to the pragmatic design paradigm but the data was too limited to conduct a thorough analysis. The pilot project was meant to be a first experiment with a new assessment approach that focuses on the actual competencies of highly-skilled immigrants instead of formal diplomas. To guarantee the quality of the assessment procedure, an existing procedure was used and Nuffic cooperated with an official assessment centre, *Educom.* It was the intention that the evaluation outcomes would give impetus to discussions at the national and institutional level on how the identification, assessment and recognition of the actual competencies of highly-skilled immigrants a new assessment procedure for foreign-trained teachers. As a consequence, the case study does not give information on implementation strategies for portfolio use by highly-skilled immigrants.

Portfolio design and imp	lementation in teachers' case			
Issues of analysis	Intended characteristics	Implemented characteristics	Conclusion	Observations
 Design process: Perspective to change Design paradigm 	Fidelity perspective to change. No specification for design paradigm. It was the intention to use the original procedure as much as possible to enhance the civil effect of the outcome. Consultation with different stakeholders to discuss the usefulness of the existing assessment procedure. Evaluation of applied materials by target users (portfolio assessors and portfolio candidates).	Fidelity perspective to change. The ADDIE model was used to structure the design process. The implemented design activities related to pragmatic design paradigm. The developers adapted some of the materials of the original procedure where after they were tested in practice. Evaluation was done by the target users (portfolio assessors and portfolio candidates.	Fidelity perspective to change (cf. Fullan, 2001). A systematic design model was applied to structure the design and implementation process (ADDIE model, cf. Plomp, 1982; Van den Akker et al., 1999). The implemented design activities related to the pragmatic design paradigm (cf. Visscher-Voerman, et al., 1999).	Portfolio candidates need to take part in an orientation programme to learn the meaning of competency- based standards, practice self-assessment and reflective skills and gather portfolio evidence.
Implementation	No long-term objectives for change.	One-off experiment.	The availability of a national compe-	-
process:	The project was aimed at gathering	Evaluation outcomes have given	tency-based assessment procedure is	
 Actors and factors that influence implementation Support of management Available resources Compliance with assessment culture Training of assessors 	data on the usefulness and accepta- bility of the portfolio instrument to enhance the identification, assessment and recognition of the actual compe- tencies of highly-skilled immigrants. Evaluation outcomes could give impetus to discussions on linking international credential evaluation and PLAR nationally and internationally.	impetus to discussions on linking international credential evaluation and PLAR nationally and internationally. Nuffic used the evaluation outcomes to further explore the characteristics of portfolio use by highly-skilled immigrants. Assessment was carried out by an official assessment centre.	not sufficient to assure the identifi- cation, assessment and recognition of the actual competencies of highly- skilled immigrants. The portfolio candidates need to be properly prepared to take part in the assessment.	

Assessment was competency-based

Portfolio assessors were trained. Portfolio candidates were not properly prepared for the assessment.

and had a legal basis.

 Table 6-7
 Empirical characteristics of portfolio design and implementation in the teachers' case (EBB5-1)

Training of portfolio

candidates

6.1.6 A framework of empirical finding of portfolio use by foreign-trained teachers

The aim of this section is to reflect on the empirical characteristics of the portfolio instrument that were explored in the previous sections. It summarizes these characteristics in an empirical framework for portfolio development for foreign-trained teachers (FTs). This framework is presented in Table 6-8 on page 190. It will be used in Chapter 7 for the cross-case analysis. The most important issues are briefly discussed below. First, attention is given to the context of the case and the portfolio design and implementation process (EBB1-1 and EBB1-5). It was expected that these characteristics might influence the empirical characteristics of the portfolio (respectively EBB2-1, EBB3-1 and EBB4-1).

Context characteristics and the characteristics of the portfolio design and implementation process in the teachers' case

Looking at the evaluation and recognition policy for foreign-trained teachers, it can be concluded that current policy and practice still focuses on the formal competencies measured in years of formal study. International credential evaluation is the main instrument of evaluation applied to this professional group. In this respect, the traditional disciplinary-based evaluation approach is dominant. The introduction of the assessment procedure for prospective primary and secondary school teachers has not had any influence on the evaluation and recognition policy for foreign-trained teachers.

Looking at the nature of the professional sector, it was concluded in Section 6.1.1 that teacher education has embraced a competency-based learning paradigm. The shift from a content-based learning paradigm to a competency-based learning paradigm started in the early nineties when the first teacher profiles where defined (cf. Uhlenbeck, 2002). In 2000, a competency-based assessment procedure was implemented by the Ministry of Education to cope with teacher shortages. A set of core competencies was defined using different teacher profiles (Stoas, 2000). Assessors were trained to work with the following assessment instruments: portfolio, criterion-based interview, simulation and observation. The national assessment procedure was used to see whether the portfolio instrument could enhance the identification, assessment and recognition of the actual competencies of foreign-trained teachers. The participating portfolio assessors had previous experience with students from different cultural backgrounds. This had a positive influence on the course of the pilot project. For the portfolio candidates portfolio development was a new experience. Four of the six candidates had some experience in the Dutch teaching sector. Also, four had passed the highest level of the state exam for Dutch language proficiency. It was concluded that the actual characteristics of the portfolio candidates had an influence on the experienced characteristics of the portfolio instrument, especially with regard to the assessment standards, the portfolio evidence and the support during the process of development.

The teachers' case applied the 'fidelity perspective' to change (cf. Fullan, 2001). It used the national assessment procedure for prospective teachers that had been developed by Stoas (2000) to see whether it could enhance the identification, assessment and recognition of actual competencies of foreign-trained teachers. Only minor adaptations were made to some of the assessment materials. The teachers' case involved a one-off experiment. It did not contribute to an improved understanding of the implementation of change. It was concluded that the availability of a national competency-based assessment procedure with a legal basis is not enough to assure valid assessment of the competencies of highly-skilled immigrants.

Portfolio characteristics in the teachers' case

The intended and implemented function of the portfolio instrument was assessment, but this function was not experienced because:

- the actual characteristics of the portfolio candidates: they were inexperienced in portfolio development, they did not understand the assessment standards, they had too little experience in the Dutch teaching sector, they had little opportunity to gather portfolio evidence that could be submitted as proof of competency development and for some, their Dutch language skills were insufficient; and
- the implemented characteristics of portfolio development: the portfolio candidates did not receive any support during the portfolio development process. They could contact the general assessor for clarification of questions, but none of them did.

The experienced function was information-oriented; it gave information on the prior learning experiences of the portfolio candidates. The immediate outcomes of portfolio development was also different than intended. The portfolio candidates were unfamiliar with cognitive processes like self-assessment and reflective thinking. Moreover, they did not understand the competency definitions. This meant that the completed portfolios were descriptive documents that gave insight into prior learning experiences, but not into the learning that resulted from these experiences.

The implemented structure of the portfolio instrument was well-received; a prescribed structure with different parts that had its own function. However, the part that addressed self-assessment to define competency claims needed far better support. The portfolio assessors commented that self-assessment cannot be learned by reading an instruction form included in a portfolio format. This needs to be practiced in a learning environment. It was therefore suggested that the portfolio candidates should follow an orientation programme before they take part in the assessment procedure. Such an orientation programme should inform the candidate about the Dutch educational system and the required competencies of teachers in the Netherlands. It was questioned however, what the function of the portfolio instrument would be in such an orientation programme:

- A learning tool (to acquire reflective and self-assessment skills)?
- A development tool (to assist the foreign-trained teacher in his orientation process and make him aware of the discrepancy between his actual competencies and the required competencies)? or
- An assessment tool, in the event that the foreign-trained teacher takes part in the national assessment procedure?

Furthermore, it became evident that the roles and responsibilities of the people involved in the process should be more clearly defined. It was suggested that each portfolio candidate should be assigned to a portfolio advisor who would guide him in the portfolio development process. The portfolio candidates had little evidence available, mainly formal diplomas and certificates. It was therefore noted that they should perhaps be given the opportunity to reconstruct evidence or gather new evidence during the development process.

Topic	Issues of analysis	Conclusions	Observations
Context: EBB1-1	Evaluation and recognition policy	Evaluation is focused on formal competencies. International credential evaluation is the main instrument. Evaluation is content-based.	No shift yet towards a competency-based assessment paradigm despite the national assessment procedure for prospective teachers.
	Professional sector	The shift towards competency-based learning and assessment started in the early 90s. A national competency-based assessment procedure for prospective primary and secondary teachers had been implemented to cope with teacher shortages. Core competencies were derived from the professional profiles of primary and secondary school teachers.	The nature of the professional sector had a positive influence on portfolio use by foreign teachers.
	Characteristics of portfolio assessors	Familiar with competency-based learning and assessment. Experience with the assessment procedure for prospective primary and secondary teachers (training). Positive attitude to the use of the assessment procedure to identify the actual competencies of foreign-trained teachers. Experience with foreign student or students from different cultural backgrounds.	The characteristics of the portfolio assessors had a positive influence on portfolio use by FTs. The role of portfolio advisors should have been specifically addressed.
	Characteristics of portfolio candidates	Foreign higher education diploma. Not familiar with competency-based learning and assessment. No experience with portfolio development. Little experience in the Dutch educational sector.	The characteristics of portfolio candidates had a negative influence on portfolio use by foreign teachers.
Portfolio design and implementation: EBB5-1	Design process	Fidelity perspective to change (cf. Fullan, 2001). Systematic design model was used to structure the design and implementation process. The implemented design activities related to the pragmatic design paradigm (cf. Visscher-Voerman, et al., 1999).	Only a few design activities took place because of the fidelity perspective to change; the original procedure was used as much as possible to assure the civil effect of the assessment outcome.
	Implementation process	One-off experiment. The availability of a national competency-based assessment procedure is not sufficient to assure the valid assessment of competencies. The portfolio candidates need to be properly prepared to take part in the assessment.	Support involves: Training in the cognitive processes of portfolio development Explanation of assessment standards Support to gather portfolio evidence Formative feedback from portfolio advisors
Product characteristic: EBB2-1	Main function of portfolio	The main function of the completed portfolio was the identification of competencies; this function was not realized. The completed portfolios were descriptive documents that provided insight into prior learning experiences. Exploration of learning by the foreign teachers did not occur.	More support is needed; see above.
	Immediate outcomes for portfolio assessors	The completed portfolios provided insight into prior learning experiences; the self-assessment did not deliver added value.	-
	Immediate outcome for portfolio candidates	Well-structured overview of prior learning experiences; the self-assessment delivered no added value.	-

Table 6-8 Framework of empirical findings of portfolio use by foreign-trained teachers

Topic	Issues of analysis	Conclusions	Observations
Product characteristic: EBB2-1	Structure of portfolio	Prescribed structure with open questions. Different components each with its own function. The self-assessment, reflection and portfolio evidence need more attention.	Reflection requires a variety of prior learning experiences and a thorough understanding of the assessment standards.
	Content of portfolio	 Application form contained five forms to gather information on: Personal data Formal learning Non-formal learning and training Work experience Experience in the Dutch educational sector 	 Should selection criteria be up-graded, with respect to: Dutch language proficiency Experience in the Dutch educational sector?
	Standards	The set of ten core competencies need more explanation.	Evaluation studies have shown that the assessment standards were also problematic for Dutch portfolio candidates. The foreign teachers did not automatically relate to the Dutch competency definitions.
	Portfolio evidence	Portfolio evidence needs more attention; specific guidelines for the amount and type of evidence that can be submitted.	The foreign teachers had little evidence and need an opportunity to collect and reconstruct materials that prove competence.
Portfolio development: EBB3-1	Steps and strategies in portfolio development	The portfolio format with a prescribed structure guided the foreign teachers through the portfolio development process. The thematic structure was understood. Completion of the forms did not contribute to increasing understanding of the portfolio development process.	Completing forms makes portfolio development a linear process while it should be a cyclic one.
	Measures taken to guide portfolio candidates	The characteristics of the foreign teachers were not suited to independent portfolio development.	Should portfolio development be part of an orientation programme that prepares foreign teachers for their profession in the Dutch context? What is the purpose of portfolio development in such a process: development, instruction?
	Roles and responsibilities	Roles and responsibilities need to be specifically defined. No mixture of guidance and assessment.	The role of a portfolio advisor is just as important as that of a portfolio assessor.
Portfolio assessment: EBB4-1	Main purpose of portfolio assessment	The completed portfolios were descriptive in nature; extra support measures are needed to assure the development of portfolios of qualitatively high standard.	Portfolio advisors must give formative feedback on the quality and content of the portfolio before it is submitted to the portfolio assessors.
	Additional instruments	The portfolio needs to be part of an assessment procedure. The recognition decision is based on a variety of sources (multimodal).	The foreign teachers were not sufficiently prepared for the assessment.
	Quality criteria for portfolio assessment	The portfolio assessors felt that the assessment was invalidated by unfamiliarity with the assessment standards and assessment instruments, despite the measures taken to assure the quality of the assessment process.	High quality support is just as important as a qualitative competency-based assessment procedure.

Table 6-8 Framework of empirical findings of portfolio use by foreign-trained teachers (Continued)

6.2 Exploring the empirical building blocks in the medical doctors' case

The aim of this section is to present the results of the medical doctors' case. The case study analyzed the data from three pilot projects that were initiated by Nuffic to explore the characteristics of portfolio use by foreign-trained medical doctors. The design of the pilot projects was discussed in Section 5.4.1. The data that was available for the case study analysis was presented in Table 5-13 on page 147. The structure of this section is as follows:

- Section 6.2.1 describes the context characteristics and presents the first empirical building block (EBB1-2);
- Section 6.2.2 explores the empirical characteristics of the portfolio product and summarizes its findings in a second empirical building block (EBB2-2);
- Section 6.2.3 presents the empirical characteristics of portfolio development by the foreigntrained medical doctors. The most important characteristics are summarized in a third empirical building block (EBB3-2);
- Section 6.2.4 explores the empirical characteristics of portfolio assessment and summarizes the key characteristics in a fourth empirical building block (EBB4-2);
- Section 6.2.5 focuses on the empirical characteristics of portfolio design and implementation and presents a fifth empirical building block (EBB5-2);
- Section 6.2.6 reflects on the results of the case study and summarizes the main characteristics in a framework of empirical findings for portfolio use by foreign-trained medical doctors. Table 6-9 provides an overview of the empirical building blocks that are developed in this section with references to the pages where these will be presented.

Context	Product characteristics	Portfolio development	Portfolio assessment	Portfolio design and implementation	Framework for portfolio use
EBB1-2	EBB2-2	EBB3-2	EBB4-2	EBB5-2	-
Section 6.2.1,	Section 6.2.2,	Section 6.2.3,	Section 6.2.4,	Section 6.2.5,	Section 6.2.6
Table 6-10,	Table 6-14,	Table 6-19,	Table 6-21,	Table 6-23,	Table 6-24,
page 199	page 210	page 219	page 226	page 231	page 234

Table 6-9 Overview of the empirical building blocks in the medical doctors' case

6.2.1 Exploring the context characteristics of the medical doctors' case

The aim of this section is to analyze the complexity of the change process by exploring the context characteristics of the medical doctors' case. As explained in Section 5.2, the following issues of analysis are addressed:

- the evaluation and recognition policy for foreign-trained medical doctors;
- the professional sector;
- the characteristics of the portfolio assessors; and
- the characteristics of the portfolio candidates.

Evaluation and recognition policy for foreign-trained medical doctors

As in many countries in the world, the profession of medical doctor is legally protected in the Netherlands. The Individual Health Care Professions Act (BIG Act) aims to advance and safeguard the quality of professional practice and to protect patients from incompetent and negligent behaviour by professional practitioners. The BIG Act applies for eight medical and paramedical professions that require registration on a national register. These are: medical doctor, dentist, pharmacist, obstetrician, nurse, physiotherapist, psychotherapist and health care psychologist. Registration can only be received after a person's professional competence has

been recognized. Dutch medical doctors receive recognition automatically after they have completed the Dutch medical science study programme. Foreign-trained medical doctors (FMDs) need to apply for registration at the Ministry of Health, Welfare and Sports. The Ministry compares the level and content of the foreign study programme with the requirements of Dutch medical science programmes. These requirements are listed in the 2001 Framework for Medical Doctors (*Raamplan Basisarts 2001*) and the subsequent appendices (Metz, Verbeek-Weel & Huisjes, 2001), hereafter referred to as the *Framework 2001*.

Until December 2005, the Ministry had used different instruments to take evaluation and recognition decisions (Ministry of Health, Welfare and Sports, 1999):

- 1. The first is a legal instrument, namely the European Sectoral Directive for medical doctors. It applies to FMDs with EU/EEA nationality and EU/EEA qualifications. This Directive ensures that recognition is automatically awarded without any restrictions for this particular target group.
- 2. The second is a list of foreign diplomas that have been recognized by the Ministry over the years. If an FMD has obtained a foreign qualification that is on this list, professional recognition is automatically awarded.
- 3. The third is the evaluation of the foreign qualification on a case-by-case basis. In this case the Ministry makes use of the recommendation of the Bureau of Foreign Degree Holders (*Commissie Buitenlands Gediplomeerden Volksgezondheid, CBGV*) regarding the value of the foreign qualification. *CBGV* can request a recognition recommendation from one of the two expertise centres for international credential evaluation (Nuffic or Colo). In addition to the recommendation regarding the obtained diploma, *CBGV* can ask for referees or call the FMD for an interview. The gathered information helps to take one of the following decisions: recognition, conditional recognition, or no recognition (Ministry of Health, Welfare and Sport, 1999).

The FMDs who receive a negative recognition decision need to enrol in a Dutch medical science programme. In the Netherlands there are eight universities that offer a medical science programme. To centralize the admission process for FMDs, seven of the eight faculties have established a central committee for the enrolment of FMDs (Commissie Instroom Buitenlandse Artsen, CIBA). Only the medical faculty of the Erasmus University in Rotterdam has its own selection procedure. CIBA distributes the candidates across the participating faculties. The FMDs can list two faculties of preference on the application form of CIBA. Every year, 115 positions are available while on average 130-140 applications are received. The participating faculties all have their own study programmes and admission requirements. None of them has a selective enrolment procedure. Common instruments used during the enrolment procedure are international credential and an intake interview. Various parties have argued for more uniformity in the admission requirements of FMDs as well as the study programme that they need to follow. There preference has been for a central examination (cf. Herfs, Yari, Haalboom, & Kruijshoop, 2001, MDW-werkgroep, 2001). As a response to these signals, in 2002, the medical faculties in the Netherlands established a Committee for Streamlining Policy on Foreign Doctors (werkgroep Stroomlijning Beleid Buitenlandse Artsen) to prepare recommendations on the development of a central assessment procedure. The recommendations were published in 2002. The proposed assessment procedure was an exam-based procedure.

It can be concluded that until December 2005 the dominant evaluation and recognition policy was curriculum-based. To judge the competency level of the FMD, the curriculum of the foreign study programme was compared to the curriculum requirements of the Dutch study programme. To speak in terms of Ellström (1998), the evaluation was focused on formal competencies. If *CBGV* had doubts about the formal competencies, the FMD could be invited for an interview to explore competencies that had been developed during work. However, this procedure was not transparent

and the frame of reference that was used was often not clear to the FMD. In 2001, the working group for an Open Market System, Deregulation, and Quality of Legislation (*Marktwerking, Deregulering and Wetgevingskwaliteit, MDW*) pleaded for the introduction of a central exam that would make the deficiencies in the knowledge and skills base of FMDs visible. In response to this report, the Minister asked *CBGV* to investigate the consequence of such a central system of examination. In their recommendations, *CBGV* regued for the integration of international credential evaluation and the recognition of competencies. *CBGV* indicated that the competence level of FMDs should be measured using different assessment instruments (CBGV, 2002). The new procedure for a declaration of professional competence for foreign-trained doctors was announced by The Ministry of Health and was implemented in December 2005. It is an exam-based procedure that comprises five stages (Ministry of Health, Welfare and Sports, 2005):

- 1. Application.
- 2. Examination of basic knowledge and skills:

This exam contains four parts: Dutch language proficiency, English language proficiency, ICT skills and familiarity with the Dutch health service and the health care system in the Netherlands.

- Examination of profession-specific knowledge and skills: This stage contains three exams: an examination of basic medical knowledge, an examination of clinical knowledge and an examination of clinical skills.
- 4. Portfolio:

The Ministry recommends that foreign-trained doctors develop a portfolio to inform the assessment committee about their prior learning experiences. If the FMD chooses to develop a portfolio, he needs to submit it to the Ministry before he enters stage 3 (the examination of professional knowledge and skills).

5. Advisory interview:

The assessment concludes with an advisory interview that is conducted by the assessment committee. The aim of this interview is to supplement the information gathered from the exams and the portfolio. After the interview, a recommendation is made to the Minister concerning the supplementary training of the foreign-medical doctor in order to be eligible for inclusion in the BIG register.

The discussions about the new assessment procedure had a positive influence on the course of the three medical doctors' pilot projects. It increased the relevance and urgency of the exploration of portfolio characteristics. The Ministry showed interest in the outcomes of the pilot projects. The outcomes of the first medical doctors' pilot project were presented during an invitational conference that *CBGV* organized in March 2003. Since then, the project leader responsible for the organization of the new assessment procedure has been kept informed on a regular basis. At the same time, the development of a national assessment procedure had a tempering effect. Some medical faculties had indicated that they did not want to experiment with portfolio use as they expected that the Ministry would soon be implementing a national assessment procedure.

Professional sector

In the medical sector the shift towards competency-based learning started only recently. Schuwirth and Van der Vleuten (2005) explain that problem-based learning had been dominant for many years. They also note that medical expertise is still defined using the traditional construct-oriented model that uses constructs like: 'knowledge', 'skills', 'problem-solving skills' and 'attitudes'. The *Framework 2001* describes the national standards for the Dutch medical science programme (cf. Metz et al, 2001). It addresses the main features of a medical doctor. It explains in general terms what is expected of a medical doctor (e.g. that he has had scientific training, and that he has a broad knowledge and skills base that enables him to take part in further specialized training). The

features are not defined in terms of work roles or competency statements. The *Framework 2001* presents the general objectives of the medical study programmes. These objectives are defined in terms of knowledge and understanding, skills and attitudes. They are related to four aspects of the medical profession, namely: the medical aspect, the scientific aspect, the social community aspect, and the personal aspect. It also specifies the medical problems with which future doctors are likely to be confronted (cf. Metz et al., 2001). Referring to Section 3.2 that compared the competency-based learning paradigm to the content-based learning paradigm, it has to be concluded that neither of these two is the leading paradigm in the medical profession.

The *Framework 2001* takes the 'medical process' as a starting point for the specification of learning outcomes (rather than disciplinary content). It indicates that prospective doctors need to learn a methodology that helps them to cope with the medical problems with which they are likely to be confronted. It includes a list of medical problems that need to be addressed in each medical science programme. To discuss the issue of the assessment of attitudes or professional behaviour in more detail, in 2002 the medical faculties established a project team 'Consilium Abeundi'. This project team focused on the assessment of the general clinical competence of the medical doctor. This project team has defined professional behaviour as 'observable behaviour that gives insight into the norms and values of the medical profession' (Project team 'Consilium Abeundi', 2002). It differentiated between three dimension:

- professional behaviour in relation to medical tasks;
- professional behaviour in relation to other professionals;
- professional behaviour in relation to oneself.

It was emphasized that it is very important for medical students to learn to give feedback, to work in teams and to learn to reflect on the consequences of their behaviour (Project team 'Consilium Abeundi', 2002). The portfolio seems to be a useful instrument to address these aspects. Driessen, Tartwijk, Overeem, Vermunt and Van der Vleuten (2005) state that portfolios can stimulate students' reflective abilities. However, it is important that certain conditions are met, like: students should receive adequate coaching, the structure of the portfolio should enhance reflection, the guidelines for portfolio development should carefully explain what is expected of the students, students should have a variety of prior learning experiences that can form the basis for reflection and the portfolio should be part of a summative assessment (as an incentive for the students to take it seriously). Overeem, Driessen, Van Tartwijk and Van der Vleuten (2003) report on the use of portfolios for undergraduate medical students at the University of Maastricht. They use four work roles for a medical doctor that relate to the four aspects that are addressed in the *Framework 2001*:

- the doctor as a medical expert;
- the doctor as a scientist;
- the doctor as a worker in the health care system; and
- the doctor as a person.

The medical faculty in Maastricht has defined competency standards for each work role. These standards relate to different levels depending on the year of study of the medical student. However, these competency standards are not nationally accepted. The initial experiments with the use of portfolio for FMDs took place at the medical faculty in Utrecht. There were no competency-based standards available at this faculty. This made the introduction of the portfolio rather complex.

Characteristics of the portfolio assessors in the medical doctors' case

The characteristics of the portfolio assessors also influence the complexity of the introduction of portfolio for identification and assessment purposes. The intended and implemented characteristics are described below, addressing the issues of analysis that were specified in Section 5.2. These are:

- The experience with the assessment and training of foreign-trained teachers; and
- The experience with the portfolio instrument.

Table 5-13 on page 147 provides an overview of the data that was available for the exploration of the empirical characteristics.

Ideal characteristics

It was the intention that the portfolio assessors would fit the following profile:

- They should have a direct responsibility in either the assessment or training of FMDs. This
 means that the portfolio assessors should be members of the exam committee or they should
 have a role in teaching or guiding FMDs during their training programme.
- They should be experts in subject matter areas that are important for the assessment and training of FMDs. During the analysis phase of the first medical doctors' pilot project it became clear that the faculties normally use faculty members with different specialities for the intake interview with FMDs, like medical science, Dutch language or communication and culture.
- They should have a positive attitude towards the identification, assessment and recognition of the prior learning experiences of FMDs. This implies that the portfolio assessors should not have a protectionist attitude towards their profession and that they should be open to different viewpoints.

Actual characteristics

In total, twenty portfolio assessors were involved in the pilot projects. The portfolio assessors came from all eight medical faculties. 60% of them had a role in the assessment (enrolment) of FMDs, sometimes in combination with other responsibilities, like education, management, mentorship or guidance during internships. 30% of the portfolio assessors were admissions officers or student counsellors. With regard to their specialities, the data shows that 45% had studied medical science and 20% social science or a language. The latter group was mainly involved in assessing the communication and language skills of the FMDs. Ten portfolio assessors had heard about the portfolio instrument but only two had worked with it in practice (10%).

The questionnaire data shows that 25% of the portfolio assessors had a positive attitude towards the information function of portfolio. They feel that the portfolio could provide a good basis for the intake interview. 50% commented that they think the portfolio could be useful for the identification of competencies as well if certain conditions were met. 15% commented that portfolio development is also important for the FMDs themselves. It could raise the awareness of the importance of certain issues (the Dutch language proficiency, the English language proficiency, independent work and reflective skills). Portfolio development could make the FMD more conscious of the difference between the work roles of a medical doctor in the Netherlands and at home. Only one portfolio assessor was rather sceptic. He commented that the portfolio is too subjective. He did not see any added value in comparison to an interview.

There was no discrepancy between the ideal and actual characteristics of the portfolio assessors. However, none of the portfolio assessors was trained in the new assessment methodology as opposed to the teachers' case. The portfolio assessors had very limited experience with the portfolio and how this instrument can be used for assessment purposes. This made the innovation rather complex.

Characteristics of the portfolio candidates in the medical doctors' case

Finally, attention was given to the intended and implemented characteristics of the portfolio candidates. As indicated in Table 5-13 on page 147 the following issues of analysis were identified:

- The experience with portfolio development;
- The experience in the professional sector in the Netherlands; and
- The Dutch language skills.

Ideal characteristics

The data shows that there were no strict selection criteria for the portfolio candidates. However, the intention of the development team was that the FMDs would be eligible for enrolment in a Dutch medical science programme. This means that they had to be in possession of an NT-2 diploma (highest level). It was also intended to have an equal proportion of FMDs with respect to their educational culture (e.g. country of origin and country of study) and professional background (general medical doctors versus medical specialists).

Actual characteristics

In total, 63 FMDs were enrolled in a portfolio development course, however, only 53 completed the course and developed a portfolio. They came from 12 different countries: Afghanistan (33), Azerbaijan (2), Brazil (1), D.R. Congo (2), Iraq (5), Lebanon (1), Peru (1), Turkey (3), Romania (1), Russia (2), Somalia (1) and the former Yugoslavia (1). Hence, the educational culture of the Middle-East was over-represented. 62% of the FMDs came from Afghanistan. The professional background of the FMDs was more equally distributed; 55% of the FMDs was general medical doctors, while 36% had continued with specialized training. For 9% of the FMDs this information was not available. 87% of the FMDs indicated in their portfolios that they had work experience as a medical doctor abroad. The length of this experience varied from one year to eighteen years. This implies that most of the FMDs were somewhat older:

- 19% was younger than 35;
- 34% falls into the category '35 to 40';
- 30% in the category 40 to 45; and
- 17% was 45 years of age or older.

With respect to gender, 53% of the FMDs were male and 47% female. More than half of the FMDs had some kind of experience in the Dutch health sector, like: a Dutch language internship at a medical organization; voluntary work in a nursing home, a hospital or at the surgery of a Dutch general practitioner (*huisartsenpraktijk*) (68%). Since they were not licensed to practice medicine, these experiences did not involve medical activities. Some of the FMDs commented that they had performed some medical activities under the supervision of a Dutch medical doctor. With respect to Dutch language skills, the data shows that a quarter of the FMDs was in possession of an NT-2 diploma (highest level); 66% was not and for 9% it was not known. Five of them (9%) was also in possession of the diploma awarded after the completion of the module 'Medical Dutch'. A group of 31 FMDs was asked to indicate how they assessed their own Dutch language skills:

- 42% commented that their language skills were sufficient to work as a medical doctor. However, most of them, were not in possession of an NT-2 diploma;
- Another 42% indicated that their language skills were not yet sufficient;
- The others have doubts or they do not know how to assess their own language skills.

Most of the FMDs had been in the Netherlands for quite some time. Only 5% of them had been in the country for less than 2 years. 42% had lived in the Netherlands for 2 to 5 years and 46% for 5 to 7 years. None of the FMDs had previous experience with portfolio development. The FMDs who have participated in second and third medical doctors' pilot project were asked about their motives for participation. In total 45 of them responded. Their expectations of portfolio development were:

- It is useful to have a structured overview of prior learning experiences in the Dutch language (80%);
- It might improve my Dutch language skills (53%); and
- It might result in exemptions (29%).

In summary, it can be said that the actual characteristics of the FMDs made the introduction of portfolio a real challenge. The majority of them had been educated in a culture that values a conserving attitude to knowledge (cf. Ballard & Clanchy, 1992). Many FMDs are especially familiar with reproductive learning strategies and passive teaching strategies. There are used to the transmission of information by a teacher who also gives a demonstration of important skills. This implies that reflection and self-assessment – two important aspects of portfolio development – are very new to them. They need to be trained in these skills, and this is not an easy task. This can best be done by means that are familiar to them (modelling of skills). The reflection process is further complicated by the fact that many of the FMDs had not been able to practice medicine in the Netherlands. The fact that there is no transparent set of competency standards does not make this process easier. Nevertheless, 68% had gained some experience in the Dutch health care sector and most of them had been in the Netherlands for more than two years. This means that they had been confronted with Dutch culture in various ways. Portfolio development puts high demands on the language skills of the portfolio candidate, while many of the FMDs still had problems with the Dutch language.

Summary of the empirical context characteristics (EBB1-2)

The main characteristics of the context of the medical doctors' case are summarized below in a first empirical building block (EBB1-2); see Table 6-10. This Table also presents the conclusions that can be drawn from the previous discussion.

Looking at the evaluation and recognition policy for foreign-trained medical doctors, it can be concluded that for many years the formal diploma was the ultimate proof of competence. This approach started to change at the turn of the century when the Ministry of Health announced the development of a national assessment procedure for highly-skilled immigrants wishing to work in the Dutch health care system, starting with medical doctors. It was the intention that the FMDs would receive a tailor-made study recommendation on the basis of the assessment outcome. With respect to the nature of the professional sector, it was concluded that the medical sector is neither content-based nor competency-based. Schuwirth and Van der Vleuten (2005) note that the problem-based learning paradigm has been dominant for many years. The *Framework 2001* contains learning objectives that are defined in terms of knowledge and understanding, skills and attitudes and are sometimes called professional behaviour (cf. Metz et al., 2001).

50% of the participating assessors (N=20) had heard about the portfolio instrument, but only two of them had worked with it in practice. The assessors were more used to the traditional forms of examination. None of the assessors was trained in the assessment culture. 60% was involved in the enrolment of foreign-trained doctors. The portfolio candidates (N=53) had no previous experience with portfolio development. Half of them had some kind of experience in the Dutch health care system, e.g. in the form of a language internship at a medical institute or voluntary work in a nursing home. About a quarter of the group had passed the highest level of the Dutch language proficiency state exam. The characteristics of both user groups had a complicating effect.

Table 6-10	Empirical context characteristics in the medical doctors' case (EBE	31-2)
------------	---	-------

Empirical context characteristics – teachers' case				
Issues of analysis	Status quo		Conclusion	Observations
 Evaluation and recognition policy: Evaluation approach Evaluation instruments Evaluation standards 	 Evaluation of formal competencies measured in years of formal education. International credential evaluation is the main mode of evaluation. Evaluation is curriculum-based focussing on disciplinary content. <i>Framework 2001</i> forms the (implicit) evaluation standards. Pressure for change to take non-formal and informal learning experiences into account. Change had been announced at the central level (by the Ministry of Health, Welfare and Sports). 		Content-based evaluation paradigm is dominant.	Need for competency-base assessment was been acknowledged.
 Professional sector: Evaluation approach Evaluation instruments Evaluation standards 	Shift from content-based curriculum to competency-based curriculum started only recently.		Content-based learning paradigm is dominant; shift towards competency-based learning started only recently.	Lack of transparent competency-based assessment standards.
 Characteristics of portfolio assessors: Experience with highly-skilled immigrants Experience with the portfolio instrument 	Ideal characteristics	Actual characteristics Experience with FMDs. No experience with portfolio for the purpose of assessment. Positive attitude towards portfolio (to improve communication about prior learning experiences). No specific training in the assessment culture.	Assessors had previous experience with the assessment of FMDs, but they were not familiar with portfolio assessment.	The implemented characteristics of the portfolio candidates made portfolio use complex.
 Characteristics of portfolio candidates: Experience with portfolio instrument Experience in the Dutch professional sector Dutch language skills 	NT-2 exam (highest level)	FMDs were not familiar with reflection and self-assessment. No prior experience with portfolio development. Little experience in the Dutch health care system (not as a medical doctor). Insufficient Dutch language skills.	No experience with portfolio development. Limited experience in the Dutch medical sector. The Dutch language skills of the majority of the candidates were insufficient.	The implemented characteristics of the portfolio candidates made portfolio use more complex.

Legend: FMD = foreign-trained medical doctor.

6.2.2 Exploring the characteristics of the portfolio product in the medical doctors' case

This section explores the characteristics of the portfolio instrument that were used in the medical doctors' case. As discussed in Section 5.2, the following issues of analysis are addressed:

- The main function of portfolio;
- The immediate outcomes for portfolio assessors;
- The immediate outcomes for portfolio candidates;
- The structure of the portfolio;
- The content of the portfolio;
- The standards applied; and
- The evidence accepted as proof of competence.

Table 5-13 on page 147 shows what data was available for the analysis of the empirical characteristics as intended, implemented and experienced. The results of the analysis are discussed below. First, attention is given to the function and the immediate outcome of portfolio use, thereafter the structure and content is discussed.

Function and immediate outcome in the medical doctors' case

Intended characteristics

The pilot project report shows that the intention was to use the portfolio instrument as an information tool. It was expected that it could enhance the communication about prior learning experiences between the FMD and the exam committee (Scholten et al, 2003a, 2003b, 2004). The faculty members had indicated that there is often a lot of confusion about the prior learning experiences of the FMD during the intake interviews. They expected that the portfolio could present information on factual data like: the duration of formal education, the main purpose of a specialization programme, the years of work experience and the type of work experience. This would make it easier to focus the intake interview on the identification of the medical competencies of the FMD. It was stated, however, that the intended function of portfolio was neither assessment nor recognition. The faculty had just implemented a new enrolment procedure for FMDs that contained a multiple-choice examination and an intake interview. The score on the exam would determine the length of study. Some of the faculty members commented that it would be interesting to compare the portfolio content with the exam score and discuss possible discrepancies during the intake interview. But this was not the primary focus. The intended function was information-oriented; portfolio use to enhance communication about prior learning experiences. Elshout-Mohr and Van Daalen-Kapteijns (2003) address the information function of portfolio. However, they state that it is important to clarify for what purpose the information is to be used: assessment or development. The pilot project reports show that it was one of the aims of the pilot projects to explore what function the portfolio could fulfil: identification, assessment, recognition or development.

The intended immediate outcome for the portfolio assessors was that the portfolio instrument would facilitate the intake interview by giving a structured overview of prior learning experiences (factual data). As a consequence, the members of the exam committee could focus the interview on the identification of medical competencies. For the FMDs, it was expected that the immediate outcome of the portfolio instrument would be:

- The possession of a structured overview of prior learning experiences in the Dutch language, which could be helpful during interviews or job applications;
- Improved communication skills about prior learning experiences;
- The identification of actual competencies.

Implemented characteristics

The pilot project reports show that the implemented function of the portfolio instrument corresponds with the intended function. Emphasis was put on the information function during the portfolio development course that had been developed to assist the FMDs with the portfolio development process. The trainers explained that the portfolio instrument could inform the members of the exam committee (the portfolio assessors) about the prior learning experiences of the FMDs before the intake interview. They indicated that it was expected that this would improve the communication between the exam committee and the FMDs and enhance the identification of relevant competencies. However, it was explicitly mentioned that the function of the portfolio instrument was subject to evaluation, and that portfolio development would not automatically lead to exemptions. The duration of study would be determined by the score on the multiple-choice exam. During the third medical doctors' pilot project the intended and implemented function was also tested during the intake interviews. In total ten FMDs used their portfolios in the intake phase at three different faculties: Nijmegen, Rotterdam and Utrecht.

Experienced characteristics

The evaluation data shows what the experienced characteristics of the function and immediate outcomes of the portfolio instruments were according to the portfolio assessors and the FMDs. During first and second medical doctors' pilot project a group of ten portfolio assessors reviewed the portfolio format and a sample portfolio. Based on this reading, they indicated that the portfolio instrument is a useful tool:

- To gain insight into the competencies of the FMD (80%);
- To structure the intake interview held by the exam committee (70%);
- To determine the content and duration of the educational programme that needs to be followed (70%);
- To determine additional assessment instruments (50%).

Two faculty members commented that the portfolio could serve as a development tool. They also commented that portfolio development could raise the awareness of the FMD about what it means to be a medical doctor in the Netherlands. Portfolio development could stimulate the FMD to think about his future prospects and how these could be realized. Hence, it can be concluded that the intended and implemented function corresponds with the experienced function, and that the intended immediate outcome for portfolio assessors was also experienced. The majority indicated that the portfolio provided useful information. The answers show that this information can be used for assessment purposes as well as for development purposes.

The pilot project reports show that the portfolio candidates were a little confused about the function of portfolio. They have wondered if and how the exam committee would use the portfolio, in part because portfolio development was a voluntary activity. The lack of clarity concerning the purpose of portfolio development was an important reason for dropping out during the first medical doctors' pilot project (drop-out rate of 46%). Three of the six drop-outs returned the non-response questionnaire. This data shows that it was not clear to the FMDs what the added value of portfolio development would be. These FMDs indicated that they preferred to spend all their time on preparing for the entrance exam as they knew for certain that the exam score would influence the duration of their future study programme. One of the respondents commented that he did not believe that his work experience would lead to exemptions, therefore he choose to study instead of taking part in the portfolio development course. The notes from the trainers show that some of the FMDs found it confusing to add reflective comments to their portfolio, or to be honest about their future prospects. 'If I say that I want to work in a medical laboratory, they might give my placement to someone who is better motivated' was one of the comments made.

With respect to the experienced outcomes of portfolio development, the questionnaire data shows that the portfolio candidates who completed the course (53 in total) were rather positive. The majority agrees with the statement that it was good preparation for future interviews (74%). Next in line is the related statement that it was useful to have a structured overview of prior learning experiences in the Dutch language (63%). More than half of the FMDs commented that portfolio development has improved their communication skills about their prior learning experiences (57%). In this respect, it is also interesting to look at the evaluation data from the third medical doctors' pilot project that monitored the use of portfolio during the enrolment of ten FMDs. The eight respondents to the questionnaire indicated that portfolio development had improved their communication skills in the Dutch language about their prior learning experiences. They were also positive about the extent to which portfolio development stimulated them to reflect on the relevance of their prior learning experiences, the differences between the Dutch health care system and the one in which they used to work, their prospective plans and how these can be realized. Seven candidates returned the post-interview questionnaire. These responses show that five of them (71%) hold the opinion that the portfolio instrument improved the guality of the intake interview. Not only because it gave the members of the exam committee a better overview of what they had done previously, but also because portfolio development made the FMDs themselves more aware of their experiences. This awareness made it easier to explain their learning experiences to the members of the exam committee. Hence, it seems that portfolio development had an empowering effect.

During the evaluation meeting that took place in December 2004, the function of the portfolio instrument was more thoroughly discussed. Some of the faculty members who were present see the portfolio as an assessment instrument. It could help to identify the medical competencies of the FMD. However, it was noted that the portfolio evidence should get much more attention. Several other stakeholders (faculty members of other universities as well as people from organizations that guide highly-skilled immigrants in their job-seeking process) argued to use the portfolio mainly as a development tool. They feel that portfolio development is especially useful for the FMD because it encourages him to reflect on his experiences and his possibilities in the Netherlands. It may empower him in taking the right career choices.

Structure and content of the portfolio instrument in the doctors' case

The intended, implemented and experienced portfolio characteristics are discussed below, addressing:

- The structure of portfolio;
- The content of portfolio;
- The standards applied for reflection and self-assessment;
- The evidence categories accepted for admission.

Intended characteristics

The faculty members suggested an open, thematic structure for the portfolio. It was the intention that the FMDs would start with a general overview of prior learning experiences. Certain specific issues could be described in more detail further on in the portfolio. The open structure would give the FMDs the opportunity to write their own stories. After all, each FMD has his own background. In the analysis phase it became clear that the study programme standards that are specified in the *Framework 2001* did not form a useful frame of reference for the portfolio content. Therefore, the faculty members suggested to address the following thematic issues:

- The formal educational programme(s) completed by the FMD;
- Experience in scientific research;

- The medical position(s) held by the FMD and a description of his tasks and responsibilities;
- Medical expertise; the types of syndromes and diseases treated;
- Experience in the health care sector in the Netherlands;
- Professional development after completion of initial study programme; how has the FMD kept his medical expertise up-to-date?

These issues do relate to the main features of a medical doctor that are specified in the *Framework 2001* (see also Section 6.2.1).

The faculty members suggested that the FMDs should include descriptions regarding the abovementioned issues in the portfolio. It was not expected that they should formulate competency claims. After all, there were no transparent competency standards available, and the intended function of the portfolio was to give information, not to assess and recognize actual competencies. With respect to the evidence categories, the available data shows that faculty members were ambiguous. They felt that the FMDs should include all relevant evidence, but on the other hand, they were not sure if it was necessary for the intended informative function of the portfolio instrument. Some of them questioned whether they were able to judge the portfolio evidence, for example, foreign diplomas and certificates. It was therefore decided to ask the FMDs to include an overview of the available portfolio evidence and that the relevance of this evidence would be subject to evaluation.

Implemented characteristics

In the first instance, the intended open structure was implemented. The FMDs received four assignments that addressed the issues that were identified as important by the faculty members in the analysis phase. They contained numerous open questions to stimulate the reflection process of the FMD and to identify relevant prior learning experiences. The content of the assignments will be discussed in more detail in Section 6.2.3. In the course of the pilot projects it became evident that both portfolio candidates and the portfolio assessors preferred a prescribed structure with fixed content items and clear guidelines for the amount of information that could be presented. As a consequence, the implemented characteristics were different in the second and third medical doctors' pilot projects. Table 6-11 on the next page shows how these characteristics developed over time. It shows that the development function of portfolio gradually grew in importance. Issues like 'future plans', 'reflection on the differences between the Dutch health care system and the system abroad' and 'self-assessment of Dutch language proficiency' were included in second and third medical doctors' pilot projects. Reflection on future prospects in the Netherlands changed from a sub-item to a main issue in the portfolio format in the third medical doctors' pilot project.

As explained earlier, there were no competency-based assessment standards available. The *Framework 2001* forms an implicit frame of reference for the members of the exam committee. The content items addressed in the implemented portfolio format relate to this framework. However, there were no achievement indicators that showed the level of mastery that needs to be achieved. This complicated the exploration of learning gained from experience. With respect to the portfolio evidence, the implemented portfolio materials showed that the portfolio candidates were asked to make an overview of all available evidence. The prescribed portfolio format contained a cross-reference function to note which evidence related to the given description. This stimulated the FMD to think of evidence for each content issue described. However, as indicated above, the faculty members did not want to put too much weight on the portfolio evidence as the main function of the portfolio was 'enhancing communication' and not 'assessment'.

1 st medical doctors'	nd	rd
pilot project	2 nd medical doctors' pilot project	3 rd doctors' pilot project
Open, thematic structure.	Prescribed, thematic structure.	Prescribed, thematic structure.
Four assignments:	Six parts.	Seven parts.
	1. Curriculum Vitae:	As mentioned under 2 nd medical doctors'
	Personal data	pilot project
	 Education and training 	
	Extra-curricular activitiesWork experience	
	 Voluntary work in NL 	
	 Medical training / courses 	
	 Languages 	
	 Computer skills 	
Formal education.	2. Education and training:	2. Education and training:
	 Formal higher education 	 Formal higher education
	 Courses and training 	 Courses and training, seminars and
	 Seminars, conferences and workshops 	workshops
Work experience: tasks	3. Work experience as medical doctor:	3. Work experience as medical doctor:
and responsibilities,	 Type of organization 	 Employed by hospital / organization
medical field of expertise,	 Position (tasks and responsibilities) 	 Self-employed
three patient reports,	Medical field of expertise	 Medical field of expertise
daily schedule.	Communication	
	Patient report (2)	
Scientific research.	4. Scientific research:Context	4. Scientific research:Short description of research position,
	 Purpose and research questions 	field of study and publications
	 Research design 	neid of study and publications
	 Results and conclusions 	
	 Reflection 	
	 Publications 	
Professional	5. Professional development:	As mentioned under 2 nd medical doctors'
development.	 Activities abroad 	pilot project.
	 Activities in the Netherlands 	
Experience in the Dutch	6. Experience in Dutch medical sector:	6. Experience in Dutch medical sector:
medical sector.	Description of experience	 Description of experience
	Reflection on Dutch medical sector	 Reflection on Dutch medical sector
	 Future prospects 	
		7. Future prospects:
		Plan APlan B
		- FIALI D

Table 6-11Overview of the implemented characteristics of the structure and content in the medical doctors' case

Experienced characteristics

The evaluation data provided insight into how the faculty members and the FMDs experienced the implemented structure and content of the portfolio instrument. The faculty members and the FMDs were asked to reflect on the relevance of the different content issues in the portfolio format. The answers are summarized in Table 6-12. Moreover, the portfolio assessors who used the portfolio during the enrolment of the ten FMDs in the third medical doctors' pilot project were asked to indicate whether the portfolio had provided them with more insight before the interview started. These answers are summarized in Table 6-13 on page 206. The structure of the portfolio format was subject to discussion during the interviews with the faculty members. The main findings are briefly discussed below.

The interview data from the first medical doctors' pilot project showed that all three faculty members had the opinion that the information in the portfolio should be more concise. There was too much variance in content and style, which made objective judgement difficult. If certain issues were not addressed, e.g. research experience or advanced medical training, they wondered

whether the FMD had forgotten it, or if he had no prior learning experience in these areas. Therefore, they suggested to develop a prescribed, thematic portfolio format. This format was introduced during the second medical doctors' pilot project. Furthermore, the faculty members indicated that the developed portfolios were too elaborate to be practical. 'It must not take more than twenty minutes to read it', was one of the comments of a respondent. It was suggested to work with a fixed format that included guidelines for the amount of information that could be given. As indicated earlier, the final format contained seven parts. For an overview of the content issues see Table 6-11. Table 6-13 on page 206 shows that this structure was well-received by the portfolio assessors who used the portfolios for enrolment purposes. They were positive about the following statements:

- The portfolio was well-structured; I could easily find the information I was looking for (92%);
- The portfolio was carefully prepared (lay-out) (92%).

Looking at the different content issues, the following can be said. The portfolio starts with a general overview addressing numerous issues (the Curriculum Vitae). Table 6-12 shows that both the faculty members and the FMDs found this part of the portfolio relevant (respectively 80% and 89%). Some faculty members indicated that they would like to have more differentiated information about the Dutch and English language proficiency of the FMD. Experience at different faculties has shown that both languages are important for the study progress of the FMD. It was noted that portfolio development could make FMDs aware of the importance of these two subjects. By asking which measures they were currently taking to improve their language skills, they might realize that it is their own responsibility to improve their fluency. These comments relate to the development function of the portfolio. The respondents who viewed the portfolio as an assessment tool indicated that all the reflective information on language skills was irrelevant. 'What counts is the examination score in the relevant language exams', was one of their comments.

	Fac	ulty memb 25/10	ers	FMDs 53/46			
	Not			Not		_	
Content issue	relevant	Neutral	Relevant	relevant	Neutral	Relevant	
Curriculum Vitae	0%	0%	80%*	7%	4%	89%	
Formal education and training	0%	0%	100%	4%	0%	96%	
Work experience as a medical doctor abroad	0%	0%	90%*	0%	0%	93%*	
Scientific research	10%	10%	70%*	13%	0%	39%*	
Experience in the Dutch health care system	20%	10%	70%	2%	13%	50%*	
Professional development	0%	10%	80%*	7%	4%	78%*	
Future plan	0%	14%	86%**	7%	2%	67%*	

Table 6-12Experienced relevancy of the implemented content characteristics of the portfolio by both the
faculty members and the FMDs

Notes: * Some respondents commented that this issue was not applicable or they gave no answer' ** This content issue was evaluated by seven faculty members during the second medical doctors' pilot project.

The faculty members were unanimous about the relevance of the issue 'formal education and training'. Some of them suggested to make the distinction between the initial study programme that leads to the degree of Medical Doctor and advanced medical training more explicit. The FMDs who were not specialized in a specific field could leave this part open or indicate 'not applicable'. The information on 'non-formal training programmes', like professional training courses, seminars or workshops was evaluated as less relevant than formal education. To increase the relevance of this subject it was suggested to ask the FMDs to describe the time invested, their motivation for participation and their involvement in the learning process. Most relevant for these issues is whether the FMDs can prove that he learned something during these experience and that he can submit evidence for this (e.g. in the form of 'products of work' such as presentations, articles or assignments).

The content issue 'work experience' was evaluated as relevant by both respondent groups (faculty members 90% and FMDs 93%). One of the portfolio assessors questioned whether work experience as a medical specialist is relevant for enrolment in an initial medical study programme. The others noted that they would find it useful to know about these experiences. All faculty members agreed that the portfolio descriptions that related to work experience could be more specific and to the point. The key issues that need to be addressed are:

- the responsibilities (e.g. the type of medical decisions one could make individually);
- the degree of independent work;
- the type of diseases that had been primarily treated, including complexity;
- the diagnostic skills that had been developed and the facilities that were available;
- the treating skills that had been developed and the facilities that were available.

It was suggested that the portfolio candidates should make a top-ten list of diseases with which they had gained experience. The subjects 'communication' and 'patient reports' were viewed as less relevant or irrelevant, especially because the FMDs could not submit any proof or evidence to support these descriptions. One of the faculty members commented that the development of a patient report in the Dutch language is a useful experience for the FMD but it should be done as part of a training programme. Therefore, these have been excluded from the format during the third medical doctors' pilot project.

Table 6-13 shows that the faculty members who used the portfolio for enrolment purposes are still a bit ambiguous about the extent to which the portfolio descriptions that concern work experience provide insight into the various items (see statements 2 to 8). The interview reports show that the information is informative, but the descriptions could be more precise. As will be discussed in the next section, the FMDs found it very difficult to determine what information was relevant and what not. The lack of a clear transparent set of assessment standards may have caused this problem. Moreover, the level Dutch language proficiency may be a factor as well as lack of experience in the Dutch medical sector.

				Nr	es=13*			
	tement	No	t true	Ne	eutral	Т	True	
The	portfolio give good insight in	Ν	%	Ν	%	Ν	%	
1.	The structure and global content of the medical study programme**	1	8%	1	8%	5	38%	
2.	The tasks and responsibilities of the FMD in his former position(s)**	1	8%	2	15%	4	31%	
3.	The culture and structure of the organization where the FMD was employed**	3	23%	1	8%	3	23%	
4.	The way in which the FMD used to communicate and cooperate with other (medical) personnel**	4	31%	2	15%	1	8%	
5.	The medical equipment with which the FMD has worked**	3	23%	2	15%	2	15%	
6.	The medical field of expertise of the FMD**	0	0%	5	38%	2	15%	
7.	The type of diseases with which the FMD has experience**	1	8%	3	23%	3	23%	
8.	The experience the FMD has had in the Dutch medical sector**	2	15%	2	15%	3	23%	
9.	The Dutch language proficiency of the FMD	8	62%	5	38%	0	0%	
10.	The portfolio contains sufficient pieces of evidence to support the claim of competence**	7	54%	0	0%	4	31%	
11.	The portfolio is well-structured (I could easily find the information I was looking for)	0	0%	1	8%	12	92%	
12.	The portfolio was carefully prepared (lay-out)	0	0%	1	8%	12	92%	

Table 6-13Experienced relevance of the implemented content characteristics of the portfolio by the portfolio
assessors (3rd medical doctors' pilot project)

Notes: * The responses relate to the opinions of 7 portfolio assessors who reviewed the portfolio of 9 FMDs before the interview (Utrecht: 3 assessors, 2 applicants; Nijmegen: 2 assessors, 1 applicant; Rotterdam: 2 assessors, 6 applicants; 1 assessors reviewed 1 portfolio, the other reviewed all six but only with respect to language proficiency); ** Some respondents did not answer all the questions.

Table 6-12 on page 205 shows that the faculty members evaluated the content issue 'scientific research' as relevant. However, the responses given by the FMDs show that for many of them this topic is not relevant as they do not have scientific experience. The faculty members noted that the portfolio description for this content item can be very brief. It should address: the subject of study and whether the research resulted in a common publication. If the portfolio were meant to fulfil assessment purposes, the FMD should make a list of known researchers in the field of study, discuss possible collaboration with foreign institutes and if the research had resulted in a publication, he should include the list of references used in the publication (Scholten et al., 2004). The faculty members were more ambivalent about the relevance of the subject 'experience in the Dutch medical sector'. Table 6-12 shows that 70% finds this relevant, 20% not relevant and 10% is neutral. The faculty members who were less positive, indicated that these experiences do not contribute to the development of the medical competencies as the FMD was not allowed to work as a medical doctor. Inclusion of this topic in the portfolio format could give the FMD the that impression these experiences will enhance recognition, which is not the case. However, the majority of the faculty members was more positive and indicated that these experiences do contribute to a better understanding of the Dutch medical system. They indicated that these experiences may give the FMD a more realistic idea about the relevance of his prior learning experiences and his future prospects. Hence, the issue is relevant for the development function of the portfolio but not the assessment function.

During the third medical doctors' pilot project, the issue 'future prospects' was addressed in a separate part of the portfolio format (see Table 6-11 on page 204). It was evaluated by seven faculty members. They were positive about this particular item (6); one neutral. One of them mentioned that the future goals of the FMD should have a more central place in the portfolio. The targeted objectives of the FMD could form a frame of reference for portfolio development. This would stimulate the FMD to think about the actions that need to be taken to reach these objectives. Another respondent noted that the FMD should also be stimulated to think about a back-up plan if the 'dream-scenario' could not be fulfilled. The experienced value of the content issue 'professional development' was evaluated as relevant by most of the faculty members (80%). This issue relates to lifelong learning competencies that grow in importance. However, one of the faculty members commented that it is probably very difficult for FMDs to find ways to keep their professional development up-to-date if they are not allowed to practice as medical doctors. Others indicated that this issue is particularly relevant to make the FMDs aware of their own responsibility to keep their knowledge up-to-date, and define a realistic future plan. 'If you have not been able to practice for more than five years you can not expect to be recognized as a medical doctor without further training' was one of the remarks made. Hence, the recentness of prior learning experience is quite important. At the evaluation meeting that was organized in December 2004, it was stated that working experience dating back more than five years is not relevant.

This leads to the last topic of discussion, namely the portfolio evidence. The interview data shows that the faculty members find portfolio evidence a complicated issue as they were worried if they could judge its quality and the authenticity of documents like references, contracts and products of learning. As part of the evaluation of the portfolio format in the second medical doctors' pilot project, one the faculty members commented that the portfolio evidence had received too little attention. Regardless of the purpose for which the portfolio is used, the evidence of learning (competency development) is the core of the portfolio instrument. Therefore, the types of evidence that can be used and how these should be evaluated should be set down (preferably at the national level). Important quality criteria seem to be: quality, authenticity and recency. An additional complicating factor concerns the FMDs. They have only limited portfolio evidence available, mainly diplomas, certificates and references, but no artefacts or reproductions.

At the evaluation meeting in December 2004, it was emphasized that assessment and development are two different purposes that put their own specific requirements on the structure and content of the instrument. It was therefore suggested to work with an electronic portfolio that contains a portfolio archive. This archive contains all relevant materials from which extraction can be made for a particular purpose. Figure 6-1, which was adapted from Raanhuis et al. (2003) illustrates this clearly. Elshout-Mohr and Van Daalen-Kapteijn (2003) note that it is difficult for beginning portfolio users to develop a portfolio that is used for both assessment and development purposes. Hence, the development of a portfolio archive might require some specific guidance for foreign-trained portfolio candidates.

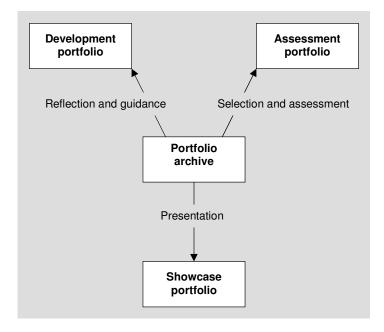


Figure 6-1 Portfolio archive from which information can be selected for different purposes

Summary of the product characteristics in the doctors' case

The main product characteristics of the portfolio instrument in the medical doctors' case are discussed below and summarized in a second empirical building block (EBB2-2); see Table 6-14. It provides an overview of the intended, implemented and experienced product characteristics that were described above. Moreover it gives insight into the conclusions that can be drawn from this data. The most important issues are briefly discussed below.

First of all it can noted that there is little discrepancy between the intended, implemented and experienced function and immediate outcome. The intended function was that the portfolio would serve as an information tool; it could inform the assessors about the prior learning experiences of the FMD. It was one of the aims of the pilot projects to determine for which purposes this information could be used (identification, assessment, recognition or development). Hence, the exact purpose of portfolio development was not determined beforehand. At the start of the pilot project, the faculty members noted that they would like use the results of a first experiment to explore the possible function. The intended function (information) appeared to be realistic and could be implemented. The experienced characteristics show that the portfolio instrument has more potential than only enhancing communication. The faculty members felt that the information could be used for a variety of purposes varying from identification and assessment to development.

Elshout-Mohr and Van Daalen-Kapteijns (2003) refer to the information function of (an assessment) portfolio. They state that the portfolio is a tool that gives information on learning outcomes to the assessors who need to take an assessment decision. They indicate that it is very important for portfolio candidates to know beforehand whether the information presented is to be used for assessment purposes (selection, admission, exemptions) or for development purposes (monitoring, planning, and learning to reflect). This was also observed from the case study. The first portfolio candidates in particular were confused about the function, in part because portfolio development was a voluntary activity. It would have been better if the function had been more clearly communicated at the start of portfolio development. Nevertheless, it was observed from the case study that the experienced immediate outcomes of portfolio development for the FMDs correspond to those intended. They found it useful to have a well-structured overview in the Dutch language, and the development of this overview enhanced their communication skills. In addition it made them more aware of their own experiences.

Looking at the intended, implemented and experienced characteristics of the portfolio structure and content, it can be concluded that there are some discrepancies between the three. It was the intention that the portfolio would have an open, thematic structure so that the portfolio candidates could write their own stories. However, the portfolio assessors felt that the completed portfolio were too different from each other to compare and assess them. The portfolio candidates had great difficulty in structuring the information. They felt insecure about what information to include, in part because of the absence of a clear set of assessment standards. Therefore, a prescribed portfolio format was implemented during the second medical doctors' pilot project. The content issues addressed in this format gradually grew from five to seven. They all relate to the Framework 2001, but there were no standards that provided insight into the level that had to be mastered. The lack of clear standards may have influenced the experienced content characteristics: descriptions were too elaborate, or too vague, or not to-the-point. With respect to the portfolio evidence, it has to be concluded that this topic was given too little attention. The faculty members found this a complicated issue because they felt that they were unable to judge much of the portfolio evidence, like diplomas, certificates and references. The FMDs had only limited evidence available.

Table 6-14 Empirical product characteristics in the medical doctors' case (EBB2-2)

Empirical product characteristics – medical doctors' case									
Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristic	Conclusions	Observations				
Main function of portfolio	Information: to enhance communication about prior learning experiences.	As intended	Information; however, the information could be used for assessment or development purposes.	Information: It should be indicated beforehand if the information is to be used for assessment or development purposes.	The FMDs were confused about the func- tion because portfolio development was a voluntary activity. They also wondered how the portfolio assessors would use their reflections on future prospects.				
Immediate outcomes for portfolio assessor	To gain insight into the prior learning experiences of FMDs before the interview. To focus the interview on the identification of actual competencies. To verify exam score	Not applicable	To gain insight into the prior learning experiences of FMDs before the interview.	To gain insight into the prior learning experiences of FMDs.	The information could be used for assessment purposes if certain conditions were met.				
Immediate outcomes for portfolio candidate	To have a structured overview of prior learning in the Dutch language. Good preparation for intake interviews. Enhance the identification of actual competencies.	Not applicable	To have a structured overview of prior learning in the Dutch language. Good preparation for future interviews. Become aware of own prior learning experiences. Improve Dutch language skills.	To enhance communication about prior learning experience in the Dutch language. Empowerment.	Lack of assessment standards that indicate the level of achievement made self- assessment rather complicated.				
Structure of portfolio	Open thematic structure; from general to specific.	Prescribed thematic structure with open questions; from general to specific.	Prescribed, thematic structure with open questions; from general to specific.	Prescribed structure with open questions that starts with a general overview.	Portfolio assessors and portfolio candidates preferred a prescribed format.				

Table 6-14 Em	pirical product charac	teristics in the medi	ical doctors' case	(EBB2-2) (Continued)
---------------	------------------------	-----------------------	--------------------	----------------------

lssues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristic	Conclusions	Observations
Content of portfolio	Five subjects: Formal education Work experience Scientific research Professional development Experience in the Dutch health care sector	Seven parts in portfolio format that address: Curriculum Vitae Education and training Work experience Scientific research Experience in the Dutch health care system Professional development Future prospects	Portfolio description too elaborate. Information on work experiences should be more to-the-point. Reflection and self- assessment not relevant for assessment purposes.	Portfolio format should contains different parts each with its own function Portfolio descriptions should not be too elaborate. Relevance of content items seems to depend on the function of the portfolio (assessment versus development).	Lack of assessment standards seems to influenced experienced content characteristics
Standards	Framework 2001 not applicable	None	Lack of standards; standards are implicit.	Assessment standards are needed to improve the quality and immediate outcome of portfolio use.	Assessment standards that are currently used are no transparent for outsiders.
Portfolio evidence	FMDs present overviews of available evidence. No further specifications.	FMDs present overviews of available evi- dence. Portfolio format contains a cross- reference function.	Difficult to judge the quality and authenticity of portfolio evidence. FMDs submit limited portfolio evidences.	Portfolio evidence should receive more attention.	FMDs have little evidences available and no opportunity to collect or reconstruct materials that proof competence

Legend: FMD: foreign-trained medical doctor.

6.2.3 Exploring the characteristics of portfolio development in the medical doctors' case

The aim of this section is to explore the characteristics of portfolio development as intended, implemented and experienced in the medical doctors' case. It addresses:

- The steps and strategies applied in the portfolio development process;
- The measures taken to support portfolio candidates;
- The clarity about different roles and responsibilities.

Table 5-13 on page 147 provides an overview of the sources of information that are available for the analysis of the empirical characteristics.

Steps and strategies for portfolio development in the medical doctors' case

Intended characteristics

The pilot project report shows that the intention was to organize the portfolio development process around the following five steps (Scholten, Teuwsen and Mak, 2003):

- 1. Identify prior learning experiences.
- 2. Choose relevant experiences for the targeted objective (enrolment in Dutch medical study programme).
- 3. Explain the chosen experiences by providing more specific information about their context and learning outcomes.
- 4. Collect pieces of evidence for these experiences and learning objectives.
- 5. Compose a well-structured document.

Because there were no assessment standards that could be used for the exploration of learning from experience, one common step was excluded from the process: the comparison of learning against standards. The five steps would be explained during the portfolio development course. In the first instance, it was the intention that a set of portfolio assignment would guide the portfolio candidates through the process of portfolio development. The assignments were replaced by a fixed portfolio format during the second medical doctors' pilot project.

Implemented characteristics

As intended, the portfolio development process was explained during the portfolio development course. In the first instance, four portfolio assignments were developed to guide the portfolio candidates through the five steps. It was explained how each assignment related to a particular step in the process. Table 6-15 shows this relationship. As explained earlier, a fixed portfolio format had been implemented during the second medical doctors' pilot project. The format contained different parts that each had its own function. Together with the format, a portfolio development manual was developed. This manual also contained a general article on portfolio development and the common steps that need to be taken in the process.

Experienced characteristics

There is only limited information on the experienced steps and strategies. The reflection notes from the development team show that the developers felt that the prescribed format meant that the portfolio candidates became less aware of the reflective and cyclic nature of portfolio development. Instead it appeared to be a linear process; filling in the forms. The lack of assessment standards also had an influence on this. If these standards had been available, the portfolio candidates would have been able to compare their learning outcomes with the standards and gather proof for their competency claims.

Table 6-15	Relationship	between	the	steps	in	the	portfolio	development	process	and	the	supporting
assignments used in the second medical doctors' pilot project												

Steps in the portfolio development process	Supporting portfolio assignments			
 Identify prior learning experiences 	Assignment 1	Course of life		
 Choose relevant experiences for the targeted goal 	Assignment 2	Extensive Curriculum Vitae		
 Explain experiences 	Assignment 3	 Explain professional development Explain work experience as a medical doctor Explain experience in scientific research 		
Collect evidence	Assignment 4	Compose a well-structured document		
 Compose a well-structured document 				

Measures taken to guide the portfolio development process in the medical doctors' case

Intended characteristics

The intention was to guide the FMDs in the portfolio process by two means: a) a set of portfolio assignments, and b) a portfolio development course. There is no further information on the intended content of the portfolio assignment. The intended aims of the portfolio development course were as follows:

- To explain the purpose of portfolio development using different means (presentations, handouts, assignments, dissemination of summary reports of group meetings); it was the intention that the information would be transferred orally, visually and in writing;
- To explain the steps in the portfolio development process;
- To discuss the portfolio assignments which were sent to the portfolio candidates as homework;
- To give feedback on the content of each others portfolio; and
- To look ahead to the next steps and assignments in the process.

The pilot project data did not contain detailed design specifications regarding the number and duration of portfolio meetings or the portfolio materials. The pilot project reports from the second and the third medical doctors' pilot project show that the intention was:

- To give the FMDs more structure by developing a prescribed format;
- To practice reflection by developing more reflective group assignments that also explain the purpose of a specific part of the portfolio format; and
- To give the FMDs the opportunity to work on the portfolio during the course (independent work).

Implemented characteristics

The pilot project data provides clear information on the implemented characteristics. In the first instance, the development team developed four assignments. The purpose of these assignments was that the FMD would develop clear descriptions that would cover the issues that were relevant according to the faculty members. Table 6-16 on the next page describes the content of the portfolio assignments used in the first medical doctors' pilot project.

As	signment	Description
1.	Course of life	Provide an overview of the events that influenced your career as a medical doctor. List the experiences in chronological order. Indicate time and place.
2.	Extensive Curriculum Vitae	Write an extensive curriculum vitae addressing issues like: personal data, formal learning, non-formal learning, work experience, language proficiency, computer skills, etc. Provide more information on one of the medical positions addressing: the type of institution, tasks and responsibilities, diseases and syndromes, medical equipment, medicine, etc.
3.	a. Explain professional development	Provide information on professional development after the completion of initial training as a medical doctor (in the home country and in the Netherlands).
	b. Explain work experience as a medical doctor	Provide elaborate background information on the context of work experience: the type of institution worked for, main tasks and responsibilities, communication lines, medical expertise, medical equipment available. Provide an overview of a typical week at work. Make three patient reports. Reflect on the main differences between the Dutch health care system and the system in your own country.
	c. Explain experience with scientific research	Describe the topic of research as well as the context in which the research took place. Provide an overview of the research design. List publications.
4.	Compose a well-structured document	Compose a well-structured document using the earlier descriptions. Address topics in a logical order, refer to evidence where possible, provide links to other parts in the portfolio that provide more detailed information on certain issues, take care of the lay-out.

Table 6-16 Description of the portfolio assignments used in the medical doctors' case

The pilot project reports give insight into the outline of the portfolio development courses that were implemented in each course. Appendix I includes these outlines. Table 6-17 gives a summary of the implemented characteristics of the portfolio development courses. It shows that the number of meetings changed from five to six to five. During the third medical doctors' pilot project all five meetings took place in a computer room. The duration of each meeting was four hours, one hour of which could be spent on independent work. As intended, the Nuffic development team gradually developed more reflective group assignments to stimulate the development of reflective skills of the FMDs (ultimately there were four). Various means of instruction were implemented, including oral presentations, group assignments, reflective assignments, written articles, individual guidance and feedback and independent work. The trainers gave formative feedback on the developed portfolios. During the first project the FMDs sent their portfolio (hard copy or floppy-disk) to the instructors by post. During the second and third doctors' pilots feedback was provided by email.

Торіс	Nuffic pilot project 2	Nuffic pilot project 3	Nuffic pilot project 4
Number of meetings	Five: Four in a lecture hall; One in computer room.	Six: Three in a lecture hall; Three in computer room.	Five: Five in computer room.
Duration of meetings Global set-up	Two hours Presentation. Reflection on homework assignment (in groups of two or three). Plenary discussion.	Three hours Presentation or questions. Group assignment or explanation of next portfolio assignment. Independent work.	Four hours Discussion of previous work. Reflective group assignment to introduce next part. Independent work. Introduction of homework and final questions.
Reflective assignments	 One: Determine important items to address in the CV. 	 Two: Explain added value of portfolio in comparison to CV Dilemmas when working in NL 	 Four: Explain added value of portfolio in comparison to CV Tasks and responsibilities as a medical doctor Dilemmas when working in NL Targeted objectives and realization of future plan
Number of trainers Means of instruction	Two Information leaflet. Invitation letters for next meeting. Summary report of previous meeting. Portfolio assignments. Presentation with sheets as handouts. Group assignments.	Two Information leaflet. Portfolio development guide containing: • portfolio assignments • article on portfolio development • computer manual (Word) Portfolio format. Summary report of previous meeting. Presentation with sheets as handouts. Reflective group assignments. Independent work.	Two Information leaflet. Portfolio development guide containing: • portfolio format (with instruction) • article on portfolio development • sheets (handouts), • computer manual (Word) Presentations. Reflective group assignments. Independent work.
Feedback	In-between by discussing assignments. Formative evaluation before the final meeting.	In-between on request. Formative evaluation before the last meeting.	In between on request. Formative evaluation after meeting 3 and 5 (final meeting).

Table 6-17 Implemented characteristics of the portfolio development courses in the medical doctors' case

Experienced characteristics

The FMD questionnaire provides insight into how the FMDs experienced the different features of the portfolio development process. In general, the FMDs were positive about the number and duration of the portfolio meetings. However, the reflection notes from the trainers show that more time was needed to explain the purpose of portfolio development and to practice reflective thinking. Therefore, they decided to develop more reflective group assignments and reserve more time for this aspect. The notes from the development team also show that many of the FMDs had problems with basic computer skills (Word, Internet, email attachments and so on). Therefore, the instructors decided to give the computer a more central place in the portfolio development course and reserve time for independent work. During that period, the FMDs could ask for support from the trainers or from each other on different aspects of portfolio development (computer-related or content-related).

As indicated earlier, the prescribed portfolio format had been introduced during the second medical doctors' pilot project. In total, 46 FMDs worked with the portfolio format. Forty of them responded to the questionnaire. The response data shows that 93% was positive about the portfolio format. Only two FMDs gave the format a negative rating; one because it had restricted him in presenting his prior learning experiences as he wanted, the other because he had difficulties working with the format on the computer. Table 6-18 shows how the FMDs evaluated the quality of the instruction that was given in either the assignments (first medical doctors' pilot project) or the portfolio development guide (second and third medical doctors' pilot projects). Overall, the FMDs were positive about the quality of the instructions that were given. Some of them had problems understanding the instructions that related to: 'scientific research', 'experience in the Dutch medical sector', 'professional development' and 'future prospects'. The last three items put more demands on the reflective skills of the FMDs and their ability to conduct a self-assessment. Referring to the implemented characteristics of the FMDs, it in not surprising to see that these aspects were more difficult; especially without a clear frame of reference. The evaluation data shows that the FMDs found it difficult:

- to determine the degree of detail that was needed in the portfolio description (57%);
- to determine which information was relevant and useful in the Netherlands (54%);
- to write the descriptions in Dutch (50%);
- to recall memories (24%); and
- to use the computer (12%).

The first two aspects relate to the lack of assessment standards.

Were the instructions clear with respect to	FMDs 53/46							
	Not	clear	Neu	utral	Clear			
	N	%	N	%	N	%		
Curriculum Vitae	1	2%	1	2%	44	96%		
Formal education and training*	0	0%	2	4%	43	93%		
Work experience as medical doctor abroad*	3	7%	2	4%	39	85%		
Scientific research*	5	11%	0	0%	32	70%		
Experience in the Dutch health care system ¹ *	6	13%	4	9%	27	59%		
Professional development*	7	15%	2	4%	36	78%		
Future plan**	4	11%	2	6%	29	83%		

Table 6-18 The experienced quality of the instructions by the FMDs

Notes: ¹ This issue was not addressed during the first medical doctors' pilot project (the total number of respondents was forty); * Some respondents commented that this issue was not applicable or they gave no answer; ** This content issue was evaluated during the third medical doctors' pilot project by thirty-five of the forty FMDs.

The FMDs received formative feedback from the trainers during the portfolio development course. During the second and third medical doctors' pilot projects the feedback was provided by email. The respondents who participated in these portfolio courses were very positive (80%). Those who were less positive, commented that they did not have a computer or had no internet connection. In most cases, the feedback helped to improve the portfolio descriptions (90%). 30% of the FMDs commented that they would rather have had more oral feedback. 18% of the FMDs indicated that they did not always understand the feedback provided. For 13% of them the feedback was too general to improve their portfolio descriptions. The notes from the development team show that the lack of transparent assessment standards also complicated the formative evaluation process. It was sometimes difficult to judge the relevance of certain aspects, especially because the trainers did not have a medical background. It would be better if this were to be done by someone from the medical faculty who is familiar with the (implicit) assessment standards that are also used by the members of the exam committee.

Clarity about roles and responsibilities in the medical doctors' case

Intended characteristics

It was the intention that the roles and responsibilities of those who play a role in portfolio use be clearly separated and transparent for the portfolio candidates. The following roles and responsibilities were foreseen by the development team. At the faculty level there were:

- a. The admissions officers who provided information about the enrolment procedure. Their task was to explain the enrolment procedure to the FMDs including the function of the different instruments that were part of this procedure (entrance exam, portfolio and the intake interview with the exam committee);
- b. The members of the exam committee who would conduct an intake interview with the FMDs after the entrance exam. If the FMD had developed a portfolio, the members of the exam committee would read it in advance to gain more insight into the prior learning experiences of the FMD.

Moreover, there were:

- c. The Nuffic trainers who were responsible for the portfolio development course. Their role was to explain the purpose of portfolio development and assist the FMDs in the portfolio development process. They could give formative feedback to the FMDs before the portfolio was submitted to the members of the exam committee; and
- d. The FMDs who were responsible for the development of the portfolio.

Implemented characteristics

The roles and responsibilities of the four parties were implemented as intended. At the information meeting, the roles and responsibilities of the different parties were communicated to the portfolio candidates. It was explained that Nuffic would guide the candidates in the portfolio development process and that the members of the exam committee would use the developed portfolio during the intake interview. As part of the portfolio development course, the trainers would give formative feedback to the FMDs about the structure and content of the portfolio.

Experienced characteristics

The questionnaire data from the first and the second medical doctors' pilot project shows that most of the FMDs were a little confused about the roles and responsibilities of the different parties (N=11). For about one-

third of them (36%) the division of roles and responsibilities was clear, while 64% had incorrect expectations or did not know what to expect. To a large extent this was due to the fact that the portfolio development was a voluntary activity. Furthermore, it was clear that the instrument was not yet institutionalized at the faculty level yet, e.g. there was no administrative procedure for submitting the portfolio to the exam committee. This had a negative influence on the relevance of the portfolio development. The notes from the development team show that the trainers from Nuffic also did not know which standards the exam committee would use. In some cases it was difficult to give formative feedback about the medical descriptions.

Summary of the characteristics of portfolio development in the medical doctors' case (EBB3-2)

The most important empirical characteristics of portfolio development are discussed below and summarized in a third empirical building block. This block is presented in Table 6-19 on page 219. It provides an overview of the intended, implemented and experienced characteristics of portfolio development that were described above. Moreover, it gives insight into the conclusions that can be drawn from this data and the observations that can be made from the case study. The most important issues are briefly discussed below.

The intended steps and strategies were implemented, but the experience was that the prescribed portfolio format meant that the portfolio development was perceived as a linear process instead of a cyclic one. The portfolio candidates were focused on completing the different parts of the format. To enhance reflection, reflective assignments were added to the portfolio development courses. However, reflection and self-assessment, which are two important processes of portfolio development, require transparent assessment standards that were not available. The implemented characteristics of the portfolio development course were well received. A variety of resources were used: presentations, reflective group assignments, independent work, individual guidance and feedback. With respect to the roles and responsibilities, it can be concluded that it is important for each role to be clearly specified and addressed. The portfolio advisors should know how the portfolio assessor will use the portfolio content. More communication between these two parties is needed to enhance the quality of portfolio use.

Table 6-19	Empirical characteristic	s of portfolio de	evelopment in the r	medical doctors' c	ase (EBB3-2)

Issues of	eristics of portfolio developme	Implemented			
analysis	Intended characteristics	characteristics	Experienced characteristic	Conclusions	Observations
Steps and strategies in portfolio development.	Five common steps; Comparison with standards was excluded. The steps would be explained during the portfolio development course. Portfolio assignments (and later, the portfolio format) would guide candidates through the process.	As intended.	The portfolio candidates were focused on completing the parts of the portfolio format. It was questioned if they were aware of the steps in the process.	Prescribed format does not contributed to understanding the portfolio development process	Completing forms makes portfolio development a linear process while it should be a cyclic one. This was caused in part by the lack of assessment standards.
Measures taken to support portfolio candidates.	Portfolio assignments. Portfolio development course. Trainers for clarifying questions and providing formative feedback.	Portfolio format. Portfolio development course. Portfolio development guide Trainers for clarifying questions and providing formative feedback.	The portfolio format was clear. The portfolio development course was well received The portfolio manual was clear; the parts that addressed reflective thinking were more difficult. Assessment standards are needed to guide portfolio development and formative feedback.	Prescribed portfolio format Portfolio course with different means of instruction (reflective group assignments, oral presentation, individual guidance and feedback, independent work) Need for transparent assessment standards to enhance reflection and formative feedback	The FMDs had little experience with reflective thinking and self-assessment.
The clarity about roles and responsibilities.	Four different parties with separate roles and responsibilities.	Four different parties with separate roles and responsibilities, although these were not yet institutionalised.	The roles and responsibilities were not clear to the portfolio candidate	The roles and responsibilities of the different parties should be clearly specified and communicated	The portfolio advisors (and portfolio candidates) should know which standards the portfolio assessors will apply.

Legend: FMD: foreign-trained medical doctor.

6.2.4 Exploring the characteristics of portfolio assessment in the medical doctors' case

This section explores the intended, implemented and experienced characteristics of portfolio assessment in the medical doctors' case. It gives attention to:

- The function of portfolio assessment;
- The additional instruments used to take an assessment or recognition decision;
- The quality criteria for portfolio assessment.

Table 5-13 on page 147 indicated what information was available for the analysis of these issues. The empirical characteristics are described below.

Function of portfolio assessment in the medical doctors' case

Intended characteristics

The intended function of the portfolio assessment was to inform the exam committee on the prior learning experiences of the FMDs that could enhance the identification of actual competencies (formative assessment). As explained previously, the portfolio was used during the enrolment of ten FMDs in the third medical doctors' pilot project. They were about to enrol in a Dutch medical science programme; six at the Erasmus University Rotterdam, three at the University of Utrecht and one at the University of Nijmegen. The exam committees of the three medical faculties had agreed to use the portfolio in addition to the regular enrolment or selection procedure. In Rotterdam, the selection was based on an interview with three assessors. In Utrecht and Nijmegen, there was no selection, the FMDs know beforehand whether they are to be offered a study place or not. In Utrecht, the enrolment procedure includes a multiple-choice exam and an interview with the exam committee; in Nijmegen, the exam committee only conducts an interview. It was the intention that the members of the exam committees would receive the portfolios before the interviews. They were asked to read it carefully, note remarks and identify competencies that seem to be developed by the FMD. The regular interview could be used to clarify issues and check information. If needed, they could use other additional instruments for the purpose of assessment and recognition (Mak, Scholten and Teuwsen, 2004).

Implemented characteristics

The pilot project report shows that the intended function was also implemented. No extra measures – like the development of an assessment sheet to rate the portfolio evidence, an informative meeting, or a training course on how to use the portfolio during the interviews – were taken to support or prepare the portfolio assessors for portfolio assessment. In total, eight faculty members were involved in portfolio assessment. Seven of them read the portfolios prior to the interviews and completed the pre-interview and post-interview questionnaires. One of the faculty members was more sceptical and did not participate in the review of the portfolio information.

Experienced characteristics

The questionnaire data shows that the faculty members who actively used the portfolio during the interviews were in general positive about the informative function of the portfolio instrument. Five of the eight faculty members commented that the portfolios were a good basis for the interviews. All five came from the medical faculties in either Utrecht or Nijmegen. The evaluation data shows that the members of the exam committees at these two faculties actively used the portfolios before and during the interviews. Before the interviews, they indicated that they expected that the portfolio would improve the quality of the interviews (100%). After the interview, they confirmed that the instrument had been useful. The evaluation data shows that the faculty members agree with the following statements:

- the portfolio gave a good first impression of the FMD (80%);
- the portfolio prevented a lot of time being spent on clarifying factual information (80%);
- the portfolio helped in asking focused questions (100%).

The portfolio assessors from Utrecht and Nijmegen were especially positive about the extent to which the portfolio provided insight into:

- the structure and global content of the formal study programme followed by the FMD;
- the tasks and responsibilities of the FMD in his former medical position;
- the culture and structure of the organization where the FMD was employed;
- the type of diseases with which the FMD dealt;
- the type of experience of the FMD with the Dutch health care system.

The evaluated portfolios were less clear about:

- the type of medical equipment that was available;
- the field of medical expertise;
- the communication and cooperation with other medical or paramedical personnel;
- Dutch language proficiency.

All the portfolio assessors agreed that the portfolio in combination with the interview provided good insight into the background and attitude of the FMD. They therefore evaluated the instrument as a valuable additional tool. However, they agreed on the fact that the portfolio cannot affect the duration or content of the study programme. The main reason for this is that at most faculties there is a fixed specialized study programme that has been developed for FMDs. Only if the FMD performs extraordinarily well during this programme will individual adaptations be considered. One of the faculty members stated that it is not feasible to offer every FMD a tailor-made study programme. This might be possible in the specialization phase but not in the phase that prepares for a general medical degree. The faculty members also agreed on the fact that portfolios should always be used in combination with an interview, and when possible other assessment instruments. They had doubts about the extent to which the portfolio could help to determine what additional assessment instruments were needed for the assessment and recognition of the actual competencies of FMDs.

In Rotterdam, the faculty members were less positive about the portfolio instrument. At this faculty the interview is a 'high-stakes' event. It determines whether the FMD is offered a study place in a specialized study programme for FMDs or not. The three assessors were rather sceptical about the added value of the portfolio instrument. Two of them agreed to read the portfolios beforehand. The evaluation data shows that they did not actively used the portfolios before or during the interviews. The most important reasons for this were the following:

- I did not have time to read them; the portfolios were too elaborate and I received them too late;
- I want to focus on the listening and speaking skills of the FMDs;
- I want to follow the normal structure of the interview;
- I only want to address any contradictions I find.

The Rotterdam committee found the portfolios too elaborate. They mentioned that most of the portfolios included irrelevant information. With respect to the Dutch language proficiency, for example, one faculty member stated that it is not relevant for the purpose of selection to gain insight into the self-assessment score of the FMD. For this purpose, it is more important to review the exam scores on the different aspects of the language exam (listening, speaking, writing and reading). Perceived from the perspective of assessment, the Rotterdam committee was also not interested in the reflections of the FMD on the relevance of his work experiences. They were of the opinion that an interview is needed to get a good impression of the FMD. They felt that the portfolio can be misleading, for example, with respect to the Dutch language skills, the portfolio might give the impression that the writing skills are sufficient – although one never knows who has helped the FMD –

but for the medical profession it is much more important to assess the listening and speaking skills. The faculty members found some discrepancies between the apparent fluency in writing on the one hand, and listening and speaking on the other. This confirmed their impression that the portfolio does not deliver any added value in the selection phase. However, two of the three portfolio assessors stated that the portfolio could be used in the pre-selection phase. They stated that the portfolios do give insight into the recency and nature of the work experience. During the interviews it appeared that two of the six FMDs were actually not eligible for enrolling in a specialized FMD training programme. One of the FMDs had not been able to practice medicine since 1992. As a consequence, he could become qualified only by enrolling in a regular five-year medical study programme. One of the selection criteria for enrolling in a specialized FMD training programme is that the FMDs have practiced medicine during the last five years. For another FMD, the portfolio made clear that he was specialized in epidemiology. His work experience was research-oriented and related to the prevention of diseases. He did not have practical experience in treating patients. This also makes it difficult to enrol in a specialized FMD programme. If the Rotterdam committee would have had this information in the pre-selection phase, both FMDs would have been given different study advice. They would not have been invited for the selection interview.

Furthermore, the portfolio candidates were asked to reflect on the role of the portfolio instrument for the purpose of enrolment. The data shows that they did not have a clear opinion. They felt that portfolio development should be part of an assessment procedure; after all, it gives them a chance to present their prior learning experiences to the exam committee. However,, they were neutral about whether the interview should be based on the portfolio, or whether both instruments should become part of a wider assessment procedure. More than half of the portfolio candidates thought that both the portfolio and the interview were subjective and that more objective instruments are needed to assess and recognize their medical competencies, for example, an exam. As discussed earlier in the section, most of the portfolio candidates were educated in an educational culture that relates to the more traditional content-based learning paradigm. They are more used to traditional evaluation instruments and are not familiar with the assessment culture.

Additional assessment instruments in the medical doctors' case

Intended characteristics

It was the intention of the Nuffic development team that the portfolio would be used in combination with a portfolio interview and, when required, additional assessment instruments. During the third medical doctors' pilot project, it was planned that the exam committees would use the portfolio in addition to their normal assessment instruments. It was expected that the portfolio would improve the quality of the interview because the exam committee good gain an impression of the FMD before the interview.

Implemented characteristics

The implemented characteristics show that in Rotterdam two of the three faculty members reviewed the portfolio in addition to the interview. They stated that the instrument did not contain adequate information on which an assessment decision could be based. The faculty members did not use other assessment instruments apart from the interview. Three of the six FMDs were offered a study place; one could enrol in the specialized study programme for FMDs, two others needed to take some extra modules before they could start this programme. In Utrecht and Nijmegen, the FMDs were already certain of a study place. The pilot project reports show that the faculties do not have many instruments at their disposal to assess and recognize the actual competencies of the FMDs. The group is too small to develop an assessment centre for this specific target group. For this reason, some of the faculty members commented that the portfolio should become part of a central assessment procedure, like the one under development by the Ministry of Health, Welfare and Sports.

Experienced characteristics

Looking at the experienced characteristics, the evaluation data shows that the faculty members from Utrecht and Nijmegen would have liked to have conducted a further assessment using:

- A theoretical exam that covers the general medical field;
- A practical assessment of pre-clinical and clinical skills;
- A practical assessment of communication skills and attitudes; and
- A language exam.

In addition, the responses of the faculty members who took part in the first and second medical doctors' pilot projects show that there the general opinion is that the portfolio instrument should be part of a wider assessment instrument. 90% of the faculty members agree that the portfolio should be used in combination with more objective assessment instruments like the examination of medical knowledge and practical skills. Table 6-20 shows how the faculty members evaluated the various assessment instruments that should be used in combination with the portfolio to assess and recognize actual competencies. It shows that in general one would like to combine the instrument with more objective instruments like the examination of medical knowledge and the assessment of medical skills. Only a few faculty members indicated that they would like to use a self-assessment in addition (30%). Various respondents referred to the national assessment procedure for FMDs that had been announced by the Ministry of Health. They noted that the portfolio in combination with an interview could form part of this procedure. It was also suggested to improve the quality of portfolio use by the development of a transparent set of competency standards or work roles. These standards could help to structure portfolio content and improve the reflections and self-assessments of the FMDs. In addition, it could enhance the discussion on the acceptance of portfolio evidence; what evidence is required for which competency standard (Mak et al, 2004). It is important that the FMDs know what evidence is accepted as proof for certain competence regardless of the purpose of portfolio development (assessment or development). Another faculty member commented that the FMDs should work under supervision for a certain amount of time and gather competency evidence during this period.

	1 st project 8/3		2 nd project 17/7		Total 25/10	
Response items	N	%	Ν	%	Ν	%
More detailed description in the portfolio	2	67%	2	29%	4	40%
Additional subjects in the portfolio	3	100%	1	14%	4	40%
Self-assessment with the help of a checklist or competency standards	1	33%	2	29%	3	30%
Interview	3	100%	2	29%	5	50%
Examination of medical knowledge	3	100%	6	86%	9	90%
Assessment of medical skills		100%	6	86%	9	90%
Combined assessment of knowledge and skills (e.g. with the help of paper cases)	2	67%	4	57%	6	60%

 Table 6-20
 Overview of the additional assessment instruments for the assessment and recognition of the actual competencies of FMDs in the opinion of the faculty members

Quality criteria for portfolio assessment in the medical doctors' case

Intended characteristics

The available pilot project data did not contain much information on the intended quality criteria for portfolio assessment. The notes from the development team show that the intention was to meet the following quality criteria (see Section 6.2.1; the intended characteristics of portfolio assessors):

- Portfolio review by two or more assessors;
- Portfolio assessors have a positive attitude towards the assessment culture (and development assessment). This means that consensus about the assessment decision is obtained by means of critical dialogue among assessors, and discrepancies between assessments do not invalidate the assessment but require additional evidence; and
- Portfolio assessors are experts in the field; they are familiar with the assessment standards and have experience with the assessment and/or training of FMDs.

Implemented characteristics

The pilot project reports show that the Nuffic development team did not take extra supportive measures – like the organization of information meetings or the development of an assessment sheet to rate the quality of the portfolio content and the portfolio evidence – to guide the faculty members in the portfolio assessment process during the third medical doctors' pilot project. The portfolio instrument was used as an addition to the regular enrolment instruments. As such it became subject to the quality criteria that normally apply to safeguard the enrolment process. None of the three participating faculties had specific quality standards for the identification, assessment and recognition of prior learning experiences. In Utrecht and Nijmegen, the procedure is not selective; it is not a 'high-stakes' event. The FMDs who were assigned to these faculties by CIBA are certain of a study place once they pass the NT-2 exam at the highest level. The faculty members at these faculties viewed the portfolio instrument as an information tool, not as an assessment instrument. In Rotterdam, the function of the interview is selection. The exam committee at this faculty evaluated the portfolio from this perspective (assessment tool). The following quality criteria were implemented by all three faculties:

- (Portfolio) assessment by two or more assessors; the exam committee contained at least three faculty members;
- All members were experts in the field; two medical specialists and one Dutch language teacher;
- All members had longstanding experience with the assessment and/or training of FMDs;
- The faculty members used an implicit set of assessment standards which was derived from the Framework Medical Doctors 2001. This set is not communicated to the FMDs. This makes the process not transparent for the FMDs.
- The interview data shows that the portfolio evidence was judged using quality criteria like 'authenticity' and 'recency'. With respect to authenticity, it should be noted that it is difficult to verify the authenticity of the portfolio evidence. With respect to the recency of the portfolio evidence, the faculty members from Rotterdam stated that FMDs only had to submit evidence of work experience for the past five years.

Experienced characteristics

The quality criteria of portfolio assessment were subject to evaluation during the first medical doctors' pilot project. All three faculty members agreed that the quality could be improved if there were an official assessment committee at faculty level. Two of them indicated that a set of competency standards had to be developed nationally which could guide portfolio development and portfolio assessment. It was also stated that it would be useful if agreement could be reached at the national level regarding the quality criteria for portfolio evidence.

The quality issue was also the subject of discussion during the evaluation meeting that took place in December 2004. The data shows that the participants agreed that the quality of portfolio assessment could be improved if the purposes of portfolio development were more clearly specified; assessment versus development. It was therefore suggested to work with an electronic portfolio that contains a portfolio archive in which the FMDs could include all relevant portfolio evidence (see Figure 6-1 on page 208). The content requirements – including the requirements for the accepted portfolio evidence – are different for a development portfolio than for an assessment portfolio. The structure and content of the portfolios that could be extracted from the portfolio archive should be adapted to the purpose; e.g. including reflective thoughts and a personal development plan in a development portfolio, while the assessment portfolio would contain factual information and evidence of best practice. The data shows that preferably, the portfolio should be structured on the basis of a national set of competency standards, but since these are not available, the current thematic structure developed by Nuffic was considered to be a good alternative (Mak, et al, 2005). Some of the participants commented that the portfolio could play a role in the national assessment procedure that is to be implemented by the Ministry of Health. If this were the case, the function of the portfolio would be (high-stakes) assessment. This implies that official guidelines for portfolio assessment need to be developed, like in the national assessment procedure for prospective primary and secondary teachers (see Section 6.1).

Summary of the characteristics of portfolio assessment in the medical doctors' case (EBB4-2)

At the end of this section, the empirical characteristics of portfolio assessment are briefly described and summarized in a fourth empirical building block (EBB4-2), see Table 6-21 on the next page. Table 6-21 provides an overview of the intended, implemented and experienced characteristics of portfolio assessment and presents the conclusions that can be drawn from the data was presented above. Next, the most important aspects are briefly addressed.

First of all, it is important to refer to the function of the portfolio instrument that was discussed in Section 6.2.2 and summarized in Table 6-14 on page 210; an information tool. The faculty members in Utrecht indicated that they wanted to use portfolio as an addition to their common instruments to gain more insight into the prior learning experiences of the FMDs. They expected that the portfolio would enhance the communication between the members of the exam committee and the FMD about his medical competencies. Hence, the intended function of portfolio assessment can be described as 'gaining information that could improve the identification of competencies' (formative assessment). Seven of the eight medical faculties do not have a selective enrolment procedure; the Erasmus University in Rotterdam is an exception in this respect. The exam committee at this faculty evaluated the portfolio as a (high-stakes) assessment instrument. They reviewed it for the purpose of selection. As a consequence, there was a discrepancy between the intended and the implemented characteristics of portfolio assessment when focusing on this faculty. For Utrecht and Nijmegen, there was no discrepancy between the two. The experienced characteristics show that at these two faculties the portfolios did give insight into the prior learning experiences of the FMDs, but relevant medical competencies remained difficult to identify. The faculty members agreed that if the portfolio were to be used for formative assessment it should become part of a wider assessment procedure than that currently implemented at the faculty level. The portfolio assessors from Rotterdam indicated that the included information was not relevant for assessment purposes. However, the portfolio could play a role in the pre-selection phase in which FMDs are selected for an interview. After all, it does give insight into the recency of work experience. The case study data shows that most of the faculty members would like to combine the portfolio with assessment instruments that address medical knowledge and skills, as well as instruments that focus on communication skills and attitudes. In addition, the quality criteria for assessment should receive more attention, starting with the development of a clear set of assessment standards. At present, the assessment standards used during the interviews are implicit and therefore not clear for the FMDs. This threatens the validity and reliability of the assessment. It can therefore be concluded that if portfolio is going to play a role in the assessment and recognition of actual competencies, the development of a transparent set of (competency) standards becomes a prerequisite. This would also improve the quality of a development portfolio that could be used to plan and monitor professional growth.

Table 6-21Empirical characteristics of portfolio assessment in the medical doctors' case (EBB4-2)

Empirical characteristics of portfolio assessment- teachers' case							
Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristic	Conclusion	Observations		
Main purpose of portfolio assessment	To gain information that enhances the identification of actual competencies.	Utrecht/Nijmegen: As intended Rotterdam Selection of FMDs (assessment)	Utrecht/Nijmegen: To gain information about prior learning experiences (the identification of medical competencies remains difficult). Rotterdam No added value for selection; useful in pre- selection phase.	Information about prior learning experiences of FMDs	The appreciation of content seems to depend on the perspective from which the portfolio assessors reviewed the portfolio characteristics (assessment versus development).		
Additional instruments to take assessment decisions	Portfolio assessment in addition to the regular assessment instruments.	Utrecht: Portfolio in addition to inter- view and medical exam (multiple choice). Nijmegen Portfolio in addition to inter- views. Rotterdam: Portfolio in addition to inter- views.	Utrecht/Nijmegen: Extra instruments are needed, like: Practical assessment of pre-clinical and clinical skills Practical assessment of communication skills and attitudes Rotterdam:	If information is used for assessment purposes, the portfolio should be part of a wider assessment procedure. Additional instruments should address: • medical knowledge and skills, and • communication skills and attitudes.	The FMDs view portfolios and interviews as subjective instruments. However, they welcomed the chance to present their work experience to the exam committee.		
Quality criteria for portfolio assessment	Two assessors or more. Positive attitude towards the assessment culture. Experts in the fields relevant for the assessment of FMDs.	Two assessors or more, who are experts in the field. The assessment standards are implicit and not transparent for FMD.	Assessment committee Transparent set of assessment standards. Agreement on accepted portfolio evidence.	For assessment purposes the quality criteria should gain more attention. Transparent set of assess- ment standards becomes a prerequisite	An assessment protocol is needed to safeguard transparency regarding assessment purposes.		

Legend: FMD: foreign-trained medical doctor.

6.2.5 Exploring the characteristics of portfolio design and implementation in the medical doctors' case

The aim of this section is to explore the intended and implemented characteristics of the design, development and implementation process. As discussed in Section 5.2, the following issues of analysis were identified with respect to the design process:

- The applied perspective of change;
- The applied design paradigm.

For the exploration of the characteristics of the implementation process, attention is given to:

- The actors and factors that influence implementation;
- Support of management;
- Available resources;
- Compliance with assessment culture at institutional level;
- Training of assessors;
- Training of portfolio candidates.

As indicated in Table 5-13 on page 147 the intended characteristics were explored using the pilot project proposals and the notes from the development team. There was hardly data on the intended implementation process. The implemented characteristics were analyzed using the pilot project reports and the notes from the development team.

Design process

Intended characteristics

The pilot project proposal shows that the intention was to explore the characteristics of portfolio use in direct cooperation with the target users, i.e. the portfolio assessors and the portfolio candidates. Hence, an 'evolutionary perspective' to change was intended (cf. Fullan, 2001). The project proposal structured the design activities using the ADDIE-model (cf. Plomp, 1982; Van den Akker, 1999). This model comprises the following phases: analysis, design, development, implementation and evaluation. It was intended to focus the analysis, design and development activities on the development of shared meaning (Fullan, 2001) and external consistency (Kessels, 1993). The following activities were planned:

- Establish a group of experts that consists of a variety of people with different responsibilities in the current enrolment process of FMDs;
- Plan different group meetings to clarify problems and needs, to identify wishes, exchange ideas and opinions on possible solutions and to determine the way forward;
- Design prototypes of products using an evolutionary approach so that the members of the expert group would have the opportunity to evaluate the draft versions;
- Conduct formative evaluations of draft versions (individually and in group meetings; and
- Revise the materials until the general opinion of the group would allow testing of the prototype models (which then would be the test versions).

These activities relate to the communicative design paradigm (cf. Visscher-Voerman, 1999).

Implemented characteristics

The pilot project report shows that the intended perspective to change was also applied (the evolutionary perspective). The ADDIE model was implemented to structure the design process of the three pilot projects reviewed in the medical doctors' case. The available data shows that it was not feasible to plan different group meetings to establish a shared meaning of what portfolio use entails. The time frame of the pilot projects was too tight and the timetables of the faculty members involved were too full to discuss the intended portfolio characteristics together. It was therefore decided to speak with the faculty members individually (N=3). These preparatory meetings took place in August, while it was planned that the portfolio candidates would be selected in September from the group of medical doctors' who had been assigned to the medical faculty in Utrecht. It was therefore

decided that the developers from Nuffic would develop a first set of materials using the outcomes of the individual meetings with faculty members. There was only little time to discuss the developed materials with the faculty members before implementation. It was decided to test their usefulness and effectiveness in practice using the portfolio candidates and the faculty members as two important sources of information. The outcomes of the evaluation were used to adapt the design specifications and test the new adapted materials in a next pilot project. Hence, the future users (portfolio candidates and faculty members) had an important influence on the portfolio characteristics; they determined the quality of the instrument. Reflecting on these characteristics, it can be concluded that the implemented design model corresponds with the characteristics of the pragmatic design paradigm (cf. Visscher-Voerman, et al., 1999).

Implementation process

Intended characteristics

The available data on the intended implementation process is very limited. However, from the intended design paradigm it can be derived that the intention was that the future users would have an active role in the implementation process. The project proposal shows that the president of the exam committee supported the objectives of the pilot project. It was therefore expected to have a good combination of pressure and support.

Implemented characteristics

The data reveals the following characteristics of the implemented implementation process. With respect to the actors and factors that had an influence on the implementation process it can be noted that the there was a need for change at the institutional level at the start of the first pilot project. At the national level, various actors argued for a competency-based assessment procedure for foreign-trained medical doctors. The faculty had just implemented a new exambased procedure and was willing to explore the role of portfolio in gaining more insight into the prior learning experiences of the enrolling doctors. However, there were no competency-based standards available, there was no institutional commitment to introduce an PLAR procedure to improve the enrolment of students and there were no resources to remunerate staff who took part in the pilot projects. The following parties played an active role in the implementation process:

- The admissions officers who explained the enrolment procedure to the doctors' who
 participated in the pilot projects including the role of portfolio. Moreover, they handled all
 practical arrangements (inviting the portfolio candidates, arranging facilities for the portfolio
 workshops, arranging the meetings with the portfolio assessors (the faculty members).
- The faculty members (portfolio assessors) who took part in the preparatory meetings and the evaluation of the example portfolios. In total 20 portfolio assessors were involved in the case study. Their role was to think about the requirements of portfolio use, reflect on the implemented portfolio format and the role that portfolio could play to enhance the enrolment of foreign-trained medical doctors. Some of the assessors used the portfolio during the intake or selection interview.
- The trainers of Nuffic, who were responsible for the development of the portfolio materials and conducting the portfolio development course. They served as external change agents and facilitated the implementation of change.
- The portfolio candidates who were responsible for the development of the portfolio and played an active role in the evaluation of the portfolio development course including the portfolio format.

In the course of the pilot project, the faculties referred to the national assessment procedure that was being developed by the Ministry of Health. If there were to be a central assessment procedure, there would be no need to change the enrolment procedure at the institutional level. It was suggested that the portfolio instrument should be a part of the national procedure instead. However, the development of the national assessment procedure did not contributed to the definition of

national competency standards that could enhance the assessment and recognition of prior learning. The dominant content-based learning paradigm is used to define medical expertise using constructs like 'knowledge', 'skills', 'problem-based skills' and 'attitudes'. The implemented procedure is exam-based using different instrument that relate to a particular construct. The portfolio is intended to gain insight into the prior learning experiences of the candidate (Ministry of Health, Welfare and Sports, 2005). No frame of reference is given and it is not explained how the portfolio is assessed and how the outcome of this assessment relates to the outcomes of the other parts of the procedure.

In the first instance, there was support for portfolio use from the president of the exam committee. During the course of the pilot project, the faculty director too supported the aims and objectives of the pilot projects. This resulted in the involvement of all faculties in the evaluation of the second version of the portfolio format. The Ministry of Health was also interested in the outcomes of the pilot project, but this support did not result in extra resources. At the national and institutionally level there was no compliance with the assessment culture and this made portfolio use rather complex. The assessors were not trained in the assessment culture and only two of them had prior experience with portfolio assessment. As noted by Beijaard et al. (2002) it is important that portfolio use is linked to a larger innovation at the institutional level to guarantee proper support and resources. It is important to realize that foreign-trained doctors form only a small percentage of the students that enrol at the faculty level. Portfolio use should be implemented for a larger student group than only foreign-trained students to assure proper resources. Table 6-22 gives a summary of the status quo of the factors that had a positive or negative influence on the implementation process. The factors were derived from Fullan (2001) and were briefly discussed in Section 4.4.1.

Factor	Posi	tive or negative influence on change
Aims and objectives comply with the needs of the institution that is implementing the change	+/-	There was a need for a new enrolment procedure. There was a desire to give more attention to the prior learning experiences of FMDs. There was no institutional commitment for portfolio or the identification, assessment and recognition of prior learning.
Need for change has priority	-	FMDs are a minority in the student population in Utrecht. A new enrolment procedure had just been implemented and a central assessment procedure had been announced at the national level. No extra time or money had been reserved for its implementation.
There is a shared meaning of change within the institution	-	All faculty members agreed on the intended purpose of the portfolio instrument, however, there was little time to deliberate and discuss the consequences of the change together.
Change is not too complex	-	Change is very complex (multi-dimensional and multi-level). Portfolio is a competency-based assessment instrument. The current enrolment procedure is exam-based. The curriculum is not yet competency-based. Faculty members are not trained in assessment culture. FMDs are not used to portfolio.
Change is considered to be of a high-quality and practical	-/+	Portfolio requirements are still being developed together with the future users. The ideal portfolio format has not been determined yet:
Change complies with sources, events and developments at the global level	-/+	At the international level there is a policy that encourages the development of assessment and recognition procedures to take account of all forms of learning.
Change complies with sources, events and developments at the national level	-/+	The Ministry of Health had announced the introduction of a national assessment procedure for highly-skilled immigrants. However, this procedure is not competency-based but exam-based.
Change complies with sources, events and developments at the institutional level	-/+	The exam committee had a positive attitude towards the portfolio instrument. How- ever, no extra measures were taken to safeguard the quality of portfolio assessment. (with respect to standards, assessment protocol, training of assessors).
Change complies with sources, events and developments at the level of the individual portfolio assessor	-	There were no support measure for individual staff members; no remuneration for time spent, no training or staff development courses.

Table 6-22 Status quo of the factors that influenced implementation of change in the medical doctors' case

Summary of the characteristics of portfolio design and implementation in the medical doctors' case (EBB5-2)

Finally, the empirical characteristics of the design and implementation process are briefly described and summarized in a fifth empirical building block (EBB5-2), which is presented in Table 6-23. This Table provides an overview of the intended and implemented characteristics of both processes and shows the conclusions that were drawn from the data. The most important aspects of EBB5-2 are briefly discussed below.

First, it should be noted that the intended design paradigm was different to the implemented design paradigm. The intended design specifications comply with the communicative design paradigm, while the implemented characteristics comply with the pragmatic design paradigm. The discrepancy between the two can be explained by the need for what Fullan (2001) calls 'active initiation' (see also Section 4.4.2). In practice it proved unfeasible to organize group meetings to clarify the problems and needs for change. To keep the faculty members interested in participating it seemed necessary to get started quickly. Therefore, a first set of materials was developed on the basis of the apparent agreement on the intended function of the portfolio instrument. It was suggested to base future discussions on the outcomes of the first experiment.

The following comments can be made with respect to the implementation process. Although the introduction of portfolio was supported by staff at the faculty level (the exam committee and the admissions officers), there was little opportunity to discuss the intended objectives and its future implementation. Nuffic acted as an external change agent and invested most of its time in developing materials and conducting the portfolio development courses. The members of the exam committee were involved in the analysis phase and the evaluation phase but their role in the implementation phase was limited. This may have resulted in what Fullan (2001) calls 'false clarity' of change. As argued earlier, the introduction of portfolio is a multi-dimensional and multilevel change. It does not only involve the introduction of new materials (a portfolio) but it asks for a new assessment approach and attitudes (the assessment culture). To realize this, it is important that the future users play an active role during the implementation phase and get an opportunity to practice portfolio assessment. Eight portfolio assessors used the portfolio during intake and selection interviews in the fourth Nuffic pilot project. However, they were neither trained nor prepared for this. The development of a national assessment procedure meant that no further action were taken at the faculty level to implement the portfolio instrument or develop a competency-based assessment procedure.

Table 6.23	Empirical characteristics o	portfolio design and implementation in the med	lical doctors' case (EBB5-2)

Issues of analysis	Intended characteristics	Implemented characteristics	Conclusions	Observations
· · ·	tion in the medical doctors' case Intended characteristics Evolutionary perspective to change. Communicative design paradigm. Support from the president of exam committee and admission officers. Different group meetings were foreseen to deliberate and dis- cuss the aims and requirements of change. Active involvement of future users (portfolio assessors and portfolio candidates).	Implemented characteristicsEvolutionary perspective to change.Pragmatic design paradigm.Little time (priority) for group meetings to discuss the aims and requirements of the change; active initiation instead.Future portfolio assessors were not actively involved in the implementation of change; this was limited to the analysis and evaluation phases).Support at the central level but not in the form of resources.Nuffic invested most of its time in the development of materials and	ConclusionsEvolutionary perspective to change.Pragmatic design paradigm.Evolutionary approach to change.Implementation process was focussed on initiation of change; a first quick start.Involvement of future portfolio assessors was too limited to assure future implementation.More practice with portfolio assessment is needed to change behaviour and beliefs; this requires training and further staff development activities.	Observations There is a possibility of 'false clarity' (cf. Fullan, 2001) because portfolio use did not comply with the implemented evaluation paradigm. The implementation of change was limited to one dimension; new materials 'Active initiation' (cf. Fullan, 2001) has to be combined with oppor- tunities for the development of a shared meaning of portfolio use. The development of a national assessment procedure reduced the need for the implementation of a new enrolment procedure at the institutional level.
		giving the portfolio development courses. Portfolio use did not comply with the implemented evaluation paradigm at the institutional level. There were no competency- based standards and the assessors were not familiar with the assessment culture. The portfolio candidates took part in a portfolio development course.		

6.2.6 A framework of empirical finding of portfolio use by foreign-trained medical doctors

The aim of this section is to reflect on the empirical characteristics of the portfolio instrument that were explored in the previous sections. It summarizes these characteristics in an empirical framework of portfolio use by foreign-trained medical doctors (FMDs); see Table 6-24 on page 234. This framework will be used in Chapter 7 for the cross-case analysis. As in the teachers' case, the characteristics of the context and the characteristics of the portfolio design and implementation process (EBB1-2 and EBB5-2 respectively) are discussed first followed by a summary of the portfolio characteristics (EBB2-2, EBB3-2 and EBB4-2).

Context characteristics and the characteristics of the portfolio design and implementation process in the medical doctors' case

Looking at the evaluation and recognition policy for foreign-trained doctors (FMDs) it can be concluded that the curriculum-based evaluation paradigm that focuses on the disciplinary content was dominant at the time the exploration of the portfolio characteristics for FMDs started. Until December 2005, FMDs from non-EU/EEA countries had to submit a recognition request for their professional competence to the Ministry of Health, Welfare and Sports. The evaluation that would follow was an international credential evaluation addressing the formal diplomas that had been earned. The foreign medical study programme would be compared to Dutch medical study programmes to determine if there were any substantial differences. There were hardly any means to take working experience into account. In 2002, the introduction of a national assessment procedure for FMDs was announced by the Ministry of Health. It was intended that the national assessment procedure would focus on the actual competencies of the FMDs instead of on their formal competencies (cf. *CBGV*, 2002). This increased the relevance of the pilot projects but it did not make the introduction of the portfolio less complex.

Looking at the nature of the professional sector, it was concluded that the dominant learning paradigm was neither a content-based paradigm nor a competency-based paradigm. The Framework 2001 contains learning objectives defined in terms of knowledge and understanding, skills and attitudes (that relate to the traditional content-based paradigm). However, it takes the 'medical process' rather than disciplinary content as the starting point for the definition of learning outcomes. Moreover, the Framework 2001 contains a detailed overview of the medical problems with which a medical doctors are likely to be confronted. The dominant learning paradigm seems to be problem-based learning (cf. Schuwirth and Van der Vleuten, 2005). Half of the participating portfolio assessors (N=20) had heard about the portfolio instrument but only two of them had worked with it in practice. None of the assessors were trained in the assessment culture. The portfolio candidates (N=53) had no previous experience with portfolio development. Half of them had some kind of experience in the Dutch health care system and about a guarter of the group had passed the highest level of the Dutch language state exam. The context characteristics had an influence on the design and implementation process. There was no experience with portfolio assessment. The medical faculty of the University of Utrecht had just implemented a new enrolment procedure for foreign-trained doctors that was exam-based. Different parties had argued for better notice to be taken of the work experience of foreign-trained medical doctors (cf. MDW-working group, 2001) and therefore the faculty agreed to explore the role that the portfolio instrument could play in addition to an exam. In this case the 'evolutionary perspective' to change was applied (cf. Fullan, 2001). To enhance the development of a shared meaning of portfolio use, various group meetings were foreseen to discuss the aims and requirements of the portfolio instrument. However, the faculty members were in favour of a quick start and suggested to base further discussions on the results of a first experiment. It was therefore argued in Section 6.2.5 that the pragmatic design paradigm should be implemented (cf. Visscher-Voerman et al., 1999). It was observed from the case study that the future users were mainly involved in the analysis and evaluation phases but not during the implementation of the developed materials. This increased the danger of 'false clarity' (cf. Fullan, 2001). As indicated earlier, the implementation of a portfolio instrument is a multi-dimensional change, but the implementation process was mainly focused on the use of new materials. For the change of beliefs and behaviour it is essential that the future users practice the implemented materials.

Portfolio characteristics in the medical doctors' case

In the first instance, the portfolio was introduced as an information tool that could enhance the communication about prior learning experiences between the faculty (recognition body) and the FMDs. It was not determined whether the information would be used for assessment purposes (the identification, assessment and recognition of competencies) or the development purposes (planning and monitoring development). One of the objectives of the pilot projects was to explore which functions the portfolio instrument could fulfil. It was concluded that the information could be used for both assessment and development purposes; however, the function influences the characteristics of the content and the assessment process. The fact that the purpose was not clearly specified in advance caused some confusion and this may have had an influence on the experienced characteristics. Nevertheless, the completed portfolios gave the portfolio development enhanced their communication skills about prior learning experiences in the Dutch language. The comments show that the immediate outcomes could be improved if there were a clear set of competencies that could be used as a frame of reference and clear guidelines for the portfolio evidence that could be used to prove that the competencies had been developed.

With respect to the structure and content, the portfolio characteristics changed from an open structure addressing different thematic issues, to a prescribed, thematic format. It was concluded that inexperienced users benefited from a prescribed format. Each part of the format had its own function that related to a specific step in the portfolio development process. However, there was a chance that the portfolio candidates were focused on completing the forms without becoming aware of the strategies and processes behind portfolio development. The portfolio development became a linear process instead of a cyclic one. The appreciation of the content issues was determined by the perspective of the portfolio assessor (assessment versus development). A portfolio development course was developed to guide the FMDs in portfolio development. The key elements of this course were: reflective group assignments, presentations, individual guidance and feedback and independent work. It was noticed from the case study that it is important that there is a clear distinction between portfolio assessors and portfolio advisors. The portfolio advisors should be well informed about the assessment process. Portfolio assessment received too little attention in part because the intended and implemented function was information-oriented. The portfolio assessors agreed that if the portfolio was used as an assessment instrument it should be part of a wider assessment procedure. In addition, more attention should be given to the quality criteria of assessment. Most important seems to be the definition of a transparent set of assessment standards.

The case study showed that the portfolio was well-received as an information tool. The information can be used for both development and assessment purposes. It was therefore suggested to work with an electronic portfolio archive in which the FMDs can collect all relevant materials. The development function puts different demands on the structure and content of the portfolio than the assessment function. The portfolios that are extracted from the archive should adhere to the requirements of the function for which it is used. The implemented characteristics of the portfolio format in this case study were a mixture of the two functions. Table 6-24 provides a summary of each issue of analysis

Торіс	Issues of analysis	Conclusions	Observations
Context: EBB1-1	Evaluation and recognition policy	The content-based evaluation paradigm is dominant. A shift towards a competency-based assessment paradigm was announced.	Exploring the characteristics of portfolio use complies with the developments at the national and international level aimed at changing the evaluation and recognition policy for FMDs
	Professional sector	The <i>Framework 2001</i> is disciplinary-oriented, addressing learning objectives in terms of knowledge and understanding and skills and attitudes. A shift towards a competency-based paradigm started only recently.	The nature of the professional sector had a negative influence on portfolio use by FMDs; the shift towards competency-based assessment had not yet been made. As a consequence, some important preconditions were not yet met, like competency-based standards or trained assessors.
	Characteristics of portfolio assessors	Positive attitude towards initial experiments. Portfolio was seen as an instrument that could enhance commu- nication about prior learning experiences. Little experience with competency-based assessment. No specific training in assessment culture. Experience with foreign-trained medical doctors (assessment, guidance or training).	The implemented characteristics had a neutral influence on the complexity of portfolio use by FMDs. They were not trained in the assessment culture nor in portfolio assessment.
	Characteristics of portfolio candidates	Not familiar with competency-based learning and assessment. No experience with portfolio development. Little experience in the Dutch medical sector.	The implemented characteristics had a negative influence on the complexity of portfolio use by FMDs.
Portfolio design and implemen-	Design process	Evolutionary perspective to change. Pragmatic design paradigm.	There is chance of 'false clarity' (cf. Fullan, 2001) because the portfolio use did not comply with the implemented evaluation
tation: EBB5-1	Implementation process	Evolutionary approach to change. The implementation process was focused on the initiation of change; a quick start. The involvement of future portfolio assessors was too limited to assure future implementation. More practice with portfolio assessment is needed to change behaviour and beliefs; this requires training and further staff development activities.	paradigm. The implementation of change was limited to one dimension; new materials. 'active initiation' (cf. Fullan, 2001) has to be combined with opportunities for the development of a shared meaning of portfolio use. The development of a national assessment procedure reduced the need for the implementation of a new enrolment procedure at the institutional level.
Product characteristic: EBB2-1	Main function of portfolio	Information; however it should be indicated beforehand whether the information is to be used for assessment or development purposes.	The remaining product characteristics were influenced by the perspective from which the portfolio instrument was reviewed, especially the content issues and the type of evidence.
	Immediate outcomes for portfolio assessors	To gain insight into the prior learning experiences of FMDs.	The immediate outcome could be improved if there were transpa-
	Immediate outcome for portfolio candidates	To enhance communication about prior learning experiences in the Dutch language. Empowerment	rent assessment standards to explore learning from experience.

Table 6-24 Framework of empirical findings of portfolio use by foreign-trained medical doctors

Торіс	Issues of analysis	Conclusions	Observations
Product characteristic:	Structure	A prescribed structure with open questions that starts with a general overview.	Inexperienced users seem to prefer a prescribed structure.
EBB2-1	Content	The portfolio format should contains different parts each with its own function. Portfolio descriptions should not be too elaborate. The relevance of content items seems to depend on the function of the portfolio (assessment versus development).	The appreciation of content items depends on the perspective from which the portfolio was reviewed (assessment or development).
	Standards	Assessment standards are needed to improve the quality and immediate outcome of portfolio use.	The assessment standards that are currently used are not transparent for outsiders.
	Portfolio evidence	Portfolio evidence should be paid more attention.	The FMDs had little evidence available and no opportunity to collect or reconstruct materials that prove competence.
Portfolio development: EBB3-1	Steps and strategies	The prescribed format did not contribute to understanding the portfolio development process.	Completing forms makes portfolio development a linear process while it should be a cyclic one. This was also caused by the lack of assessment standards.
	Measures taken to guide portfolio candidates	Prescribed portfolio format. Portfolio course with different means of instruction (reflective group assignments, oral presentations, individual guidance and feed- back, independent work). Need for transparent assessment standards to enhance reflection and formative feedback.	The FMDs had little experience with reflective thinking and self- assessment.
	Clarity about different roles and responsibi- lities	The roles and responsibilities of the different parties should be clearly specified and communicated.	The portfolio advisors (and portfolio candidates) should know which standards the portfolio assessors apply.
Portfolio assessment: EBB4-1	Main purpose of portfolio assessment	Information about the prior learning experiences of FMDs.	The appreciation of content seems to depend on the perspective from which the portfolio assessors reviewed the portfolio characteristics (assessment versus development).
	Additional instruments used to take assessment decisions	If information is used for assessment purposes, the portfolio should be part of a wider assessment procedure. Additional instruments should address: medical knowledge and skills, and communication skills and attitudes.	The FMDs viewed portfolio and interviews as subjective instru- ments. However, they welcomed the chance to present their work experience to the exam committee.
	Quality criteria for portfolio assessment	For assessment purposes the quality criteria should receive more attention. A transparent set of assessment standards becomes a prerequisite.	For assessment purposes an assessment protocol is needed to safeguard transparency.

Table 6-24 Framework of empirical findings of portfolio use by foreign-trained medical doctors (Continued)

Legend: FMD: foreign-trained medical doctor.

6.3 Exploring the empirical building blocks in the refugees' case

The aim of this section is to present the results of the refugees' case. The case study analyzed the data from a pilot project in which Nuffic participated to study whether portfolio use could improve the integration process of refugees. The design of the pilot project was discussed in Section 5.5.1. The data that was available for the case study analysis was presented in Table 5-17 on page 158. The structure of this section is as follows:

- Section 6.3.1 describes the context characteristics and summarizes the characteristics in a first empirical building block (EBB1-3);
- Section 6.3.2 explores the empirical characteristics of the portfolio product and summarizes the findings in a second empirical building block (EBB2-3);
- Section 6.3.3 presents the empirical characteristics of portfolio development by refugees and summarizes the most important characteristics in a third empirical building block (EBB3-3);
- Section 6.3.4 explores the empirical characteristics of portfolio assessment. The key characteristics are presented in a fourth empirical building block (EBB4-3);
- Section 6.3.5 focuses on the empirical characteristics of portfolio design and implementation and presents a fifth empirical building block (EBB5-3);
- Section 6.3.6 reflects on the results of the case study and summarizes the main characteristics in a framework of empirical findings for portfolio use by refugees. This framework will be used in Chapter 7 for the cross-case analysis. Table 6-25 provides an overview of the empirical building blocks that were developed in this section with references to pages on which these were presented.

Context	Product characteristics	Portfolio development	Portfolio assessment	Portfolio design and implementation	Framework for portfolio use
EBB1-3	EBB2-3	EBB3-3	EBB4-3	EBB5-3	-
Section 6.3.1, Table 6-27, page 241	Section 6.3.2, Table 6-29, page 248	Section 6.3.3, Table 6-33, page 255	Section 6.3.4, Table 6-36, page 259	Section 6.3.5, Table 6-38, page 264	Section 6.3.6 Table 6-39, page 267

6.3.1 Exploring the context characteristics of the refugees' case

The aim of this section is to analyze the complexity of the change process by exploring the aim of this section is to analyze the complexity of the change process by exploring the context characteristics of the third case study. As indicated in Section 5.2, the following issues of analysis are addressed:

- the evaluation and recognition policy for refugees and asylum seekers who have recently arrived in the Netherlands;
- the characteristics of the professional sector;
- the characteristics of the portfolio assessors; and
- the characteristics of the portfolio candidates.

Evaluation and recognition policy for refugees and asylum seekers

To enhance the labour market chances of refugees it was suggested that refugees' credentials should be evaluated as soon as possible as this could help to estimate at what level the refugee could study or work (Mak et al., 2003, Ministry of Social Affairs and Employment, 2002; Scholten & Teuwsen, 2002). Since January 2003, international credential evaluation has become an official part of the integration process. The refugees' counsellors can ask for a credential

evaluation via *CWI*. The evaluation is free of charge. The foreign diploma is evaluated by Colo or Nuffic depending on the level of education. As noted earlier, credential evaluators use different criteria to estimate the level of foreign diplomas. These criteria relate mainly to the input and process of education. The focus is on the analysis of substantial differences in curricula (comparing the foreign curriculum with a Dutch curriculum).

Professional sector

In 2001, a steering group of four ministries and numerous other stakeholders published the 'Plan van Aanpak Arbeidsmarktpositie Hoger Opgeleide Vluchtelingen'. This policy initiative resulted in four specific initiatives aimed at enhancing the labour market participation of highly-skilled refugees. These were: portfolio use by refugees, international credential evaluation, PLAR and dual language programmes (König, 2004). To enhance labour market orientation during the official integration process, *Cinop* developed a portfolio instrument that could be used by the *ROCs* (Cinop, 2001). For a period of eight to twelve weeks, the portfolio candidate works on portfolio development to give an overview of his actual competencies and to define a personal development plan. Van Dam (2003) gives an overview of the PLAR practices that relate to integration purposes of immigrants who have recently come to the Netherlands. This overview shows that the expectations are rather high but that practical initiatives are still limited. Some ROCs have started using portfolios mainly for immigrants with basic and secondary vocational diplomas (Nieuwhof, 2002). The portfolio instrument was also introduced for Dutch language training (BVE-raad, 2002). This language portfolio was derived from the European language portfolio developed by the European Commission. At a later time, various competency-based portfolios were developed focusing on important issues that could enhance the integration process of refugees. These are:

- Portfolio for Opvoeders (Cito, 2003);
- Portfolio Language and Work (Cito, 2005); and
- Portfolio *Wonen & De Buurt* (Cito, 2005).

These initiatives focus on the development of general competencies needed to live in the Netherlands. They do not address the specific needs of highly-skilled immigrants who wish to take up their previous professions. *UAF* Job Support has also introduced the portfolio instrument to activate refugees with a higher education diploma and enhance their labour market perspectives (*UAF*, 2002). Hence, it seems that 'portfolio thinking' has gradually become a part of the counselling of refugees to enhance their integration into Dutch society. It is used by different organizations to activate and empower refugees. However, to enhance assessment and recognition, various obstacles still have to be overcome. Klaver and Odé (2003) conclude that the use of PLAR procedures for foreign-trained applicants is still in its infancy. One of the major obstacles relates to the Dutch professional profiles that form the frame of reference for the assessment of the actual competencies of refugees. These profile are very strict and nationally oriented, which makes it almost impossible for a highly-skilled immigrant to prove that he meets the standards (cf. König, 2004). Since the refugees have different professional backgrounds, the availability of adequate standards and procedures will depend on the professional sector concerned. As became clear in sections 6.1.1 and 6.2.1 the nature of the teaching profession is different than that of the medical profession.

Characteristics of the portfolio assessors

The characteristics of the portfolio assessors also influence the complexity of the introduction of the portfolio instrument. The intended and implemented characteristics are described below, addressing the issues of analysis that were specified in Section 5.2:

- The experience with assessment and counselling of refugees; and
- The experience with the portfolio instrument.

Table 5-17 on page 158 shows the information sources that were available for analysis.

Ideal characteristics

The data shows that the ideal characteristics of portfolio assessors were not specifically addressed in the project plans. The intention was to collaborate with project partners that play a role in the process 'from AZC to the labour market'. This implies that the portfolio assessors are professionals in counselling refugees; that is their regular job. It was also planned that the portfolio instrument would be used in addition to regular counselling procedures. Hence, it was important that the counsellors who served as portfolio assessors would have a positive attitude towards using the instrument as it requires an extra investment of time. It was also planned that the refugees' counsellors would be supported by project partners like *CWI*, *UAF* and Nuffic.

Actual characteristics

The data shows that a total of thirteen portfolio assessors participated in the pilot project. Three came from *COA* Utrecht, four from *COA* Flevoland and six from *SVA*. All thirteen were professionals in counselling refugees but none of the portfolio assessors had previous experience with portfolio assessment. The 13 portfolio assessors reviewed 28 portfolios; 14 from portfolio candidates in phase 1, and 14 from portfolio candidates in 'phase 2 or 3'. In addition to the refugees' counsellors, there was one 'external' portfolio assessor, who was as an educator who guides students during their internships. No further information is available on the characteristics of this person. As the intended characteristics were not specifically addressed, it is difficult to draw conclusions regarding any discrepancies between the intended and implemented characteristics.

Characteristics of the portfolio candidates

Finally, attention is given to the intended and implemented characteristics of the refugees. As indicated in Section 5.2 the following issues of analysis were identified:

- The experience with portfolio development;
- The experience in the professional sector in the Netherlands; and
- The Dutch language skills.

Table 5-17 on page 158 shows what information was available to explore the empirical characteristics of these issues of analysis. As discussed in Section 5.5.1, in total one hundred and ten refugees were selected to start portfolio development. Seventy-four of them completed the process and developed a portfolio of prior learning experiences (67%), see Figure 5-4 on page 153 for a distribution of the participants across the three phases. Thirty-seven of them completed a questionnaire that gave insight into the entry characteristics (see Table 5-16 on page 154 for an overview of the evaluation instrument used in the pilot project).

Ideal characteristics

The following general selection criteria were defined as guidelines for the selection of refugees in the regions:

- The refugees had completed higher education in the country of origin (or were enrolled in a higher education study programme at the time they fled his country);
- The refugees have had several years working experience.

In addition to these general selection criteria, the following specific selection criteria were foreseen for the refugees in each of the three phases. For the portfolio candidates in phase one (arrival at an AZC) it was intended that the refugees would have knowledge of English (speaking and writing. For the refugees in phase 2 (arrival in a municipality, start of official integration programme) the intended characteristics were:

- The refugees have knowledge of the English language (speaking an writing);
- The refugees have not yet started the educative part of the official integration programme. Theintention was that the information in the portfolio would help to develop an integration programme that matched the needs and competencies of the refugees.

For the refugees in phase 3 (end of integration programme, start of orientation on the labour market) it was intended that:

- The refugees would have knowledge of the Dutch language (NT2 level 3);
- The refugees would not yet have started a follow-up programme (which is sometimes offered after the integration programme ends to enhance the labour market chances of the refugees).
 The intention was that the information in the portfolio would help to determine which follow-up programme would best serve the needs and competencies of the refugees.

The project proposal shows that the intended distribution of portfolio candidates across the three phases was respectively 40, 20, 20.

Actual characteristics

Figure 5-4 on page 153 gives an overview of the portfolio candidates across the three phases as implemented. It shows that the distribution was different than intended, respectively 71, 11 and 25 at the start of the process. For 3 of the refugees the data was not specific. Table 6-26 provides an overview of the intended and implemented number of portfolio candidates for each phase. The characteristics were explored using the data from the entry questionnaire (N=37).Twenty-two of the portfolio candidates who responded were in phase 1 (59%) and fifteen in phase 2 or 3 (41%). The most important issues are briefly listed below to give an impression of the actual characteristics of the portfolio candidates.

Nineteen (51%) of the portfolio candidates were in possession of a Curriculum Vitae, but only five of them stated that their Curriculum Vitae was up-to-date. Twenty-five (68%) of the portfolio candidates had already spoken to their counsellor from either COA (15) or SVA (10) before they started in the portfolio development group. Most of them had also been in touch with other organizations like: UAF (9), a study adviser at a ROC (7), a study adviser at a higher education institute (6) or the counsellor of the integration programme (6). The Dutch language proficiency of the portfolio candidates varied from level 0 (lowest level) to a pass for the NT-2 exam (highest level; level 5). The majority of the respondents indicated that they had mastered the Dutch language at level 1 (7), level 2 (9) or level 3 (13). Twenty-two (59%) of the portfolio candidates were enrolled in an educational programme at the time they started portfolio development. The courses that had been followed were: a computer course (10), a Dutch language course (9), integration programme (7), or other (4).

Phase	Intended	Implemented at the start of the process	Implemented at the end of the process
1	40	71	46
2	20	11	
3	20	25	28
unknown	-	3	
Total	80	110	74

Table 6-26 Overview of the intended and implemented number of portfolio candidates in the refugees' case

The main motives for participating in portfolio development were:

- The portfolio can inform others about my prior learning experiences (70%);
- It seems valuable to have an overview of prior learning experiences in the Dutch language (65%);
- I would like to find out what kind of work I am able to perform in the Netherlands (62%);
- I would like to improve my Dutch language skills (54%);
- I expect that the portfolio will make it easier to find a job or a placement in a study programme (43%);
- The course seemed valuable, but I had no concrete expectations (27%).

The expectations of the portfolio candidates in phase 1 were more short-term oriented than the portfolio candidates in phases 2 and 3. The outcomes listed included: develop a Curriculum Vita, develop a portfolio, improve computer skills and improve language skills. The portfolio candidates in phases 2 and 3 expected to improve their presentation skills, prepare for a job interview and determine their future prospects.

The questionnaire that was handed out at the end of the portfolio development process also asked for the motivation of the portfolio candidates to participate in the process. Similar responses to those described above were given (N=64):

- The portfolio can inform others about my prior learning experiences (69%);
- It seems valuable to have an overview of prior learning experiences in the Dutch language (64%);
- I would like to improve my Dutch language skills (30%).

The implemented characteristics were different than intended but it is difficult to indicate whether this made portfolio use more or less complex. The data shows that many of refugees had already started their orientation process; they had had contact with different organizations and some were enrolled in a study programme. This made portfolio use more difficult to explain (relevance), and, on the other hand, the prior experiences could enhance reflective thinking and enable the specification of a personal development plan (PDP); what do I really want and how do my current activities help me in realizing these goals?

Summary of the empirical context characteristics (EBB1-3)

The key features of the context of the third exploratory case study are summarized below in a first empirical building block (EBB1-3) for this case; see 6-27. This block gives insight into the complexity of the change process. The most important issues are briefly discussed below.

Looking at the evaluation and recognition practice it can be concluded that international credential evaluation is the main evaluation instrument used. Since January 2003, an international credential evaluation has become an official part of the integration process in the Dutch society. To make better use of the actual competencies of highly-skilled immigrants, various parties have argued to linking the practice of international credential evaluation and PLAR. The portfolio instrument was identified as a useful instrument that could empower and activate immigrants including refugees. As a consequence various counselling organization started to experiment with portfolio. The portfolio assessors that participated in this case study had no previous experience with portfolio assessment; neither the portfolio candidates. Table 6-27 gives a more detailed overview of the context characteristics in the refugees' case.

Table 6-27 Empirical context characteristics in the refugees' case (EBB1-3)

Empirical context character	Empirical context characteristics – refugees' case									
Issues of analysis	Status quo		Conclusion	Observations						
Evaluation and recognition policy:Evaluation approachEvaluation instrumentsEvaluation standards	Evaluation of formal competencies me International credential evaluation is m Evaluation is curriculum-based focussi	ain mode of evaluation	Content-based evaluation paradigm is dominant.	Various parties have argued for linking international credential evaluation with PLAR to enhance the identification, assessment and recognition of competencies.						
Professional sector:At the turn of the century counselling organizations started experimenting• Evaluation approachwith portfolio use to empower and to activate immigrants including refugees.		There is an awareness of using portfolio as a development tool among refugees' counsellors.	There are still various obstacles hindering the use of portfolio as an assessment instrument.							
	Ideal characteristics	Actual characteristics								
 Characteristics of portfolio assessors: Experience with highly- skilled immigrants Experience with portfolio instrument 	Professional counsellors of refugees Positive attitude toward portfolio use.	Professional counsellors of refugees. No experience with portfolio assess- ment, but they were willing to use it in addition to regular procedures One 'external' assessor (applications for internships).	The assessors were professionals in the counselling of refugees; they had no experience with the portfolio instrument.	The implemented characteristics of the portfolio assessors had a neutral influence on the complexity of portfolio use by refugees.						
 Characteristics of portfolio candidates: Experience with portfolio instrument Experience in the Dutch professional sector Dutch language skills 	Foreign higher education diploma. Work experience abroad. Knowledge of English in phases 1 and 2; knowledge of Dutch in phase 3. The refugees were about to start the orientation process (phase 2) or follow-up programme (phase 3).	Most of the refugees had already started with activities that would contribute to the orientation and integration process. Knowledge of Dutch language varied from level 0 to level 5 (highest level).	The portfolio candidates had no experience with the portfolio instrument. The Dutch language proficiency varied from no knowledge to a pass in the NT-2 exam (highest level)	The implemented characteristics of the portfolio candidates made portfolio use more complex.						

6.3.2 Exploring the characteristics of the portfolio product in the refugees' case

This section explores the characteristics of the portfolio instrument that was used in the refugees' case. As discussed in Section 5.2, the following issues of analysis were addressed:

- The main function of portfolio;
- The immediate outcomes for portfolio assessors;
- The immediate outcomes for portfolio candidates;
- The structure of the portfolio;
- The content of the portfolio;
- The standards applied; and
- The evidence accepted as proof of competence.

Table 5-17 on page 158 shows which sources of information were available to explore the empirical characteristics of these issues. First, attention is given to the function and impact of the portfolio instrument. Second, the structure and content of the portfolio instrument is described.

Function and immediate outcome of the portfolio instrument in the refugees' case

Intended characteristics

The project proposal shows that the intended function and immediate outcome of the portfolio instrument were different for each of the three phases in the process 'from AZC to the labour market'. For refugees and asylum seekers in phase 1 (arrival at an *AZC*) the intended function concerned the provision of information about prior learning experiences for mainly development purposes. It was the intention that the refugees would start portfolio development as soon as the request for a residence permit had been taken under consideration. The portfolio should inform the portfolio assessors (in this respect counsellors of *COA*) about the prior learning experiences of the refugee, addressing formal education, working experience and the future prospects. The immediate outcomes that were foreseen were:

- Inform the counsellor in this phase about the prior learning experiences and future prospects
 of the refugee to steer and monitor development in this phase of the process;
- Inform the counsellor in the next phase about the prior learning experiences and future prospects, and as such enhance and improve the refugee's orientation process regarding Dutch society (steer the development process);
- Empower the refugee by developing an overview of prior learning experiences; and
- Empower the refugee by improving his communication abilities about his actual competencies.

The intended function of the portfolio instrument in phase 2 corresponded with the function in phase 1; information for development purposes. The portfolio should inform the organizations that play a role in the orientation process about the targeted objectives of the refugee so that the orientation process can contribute to these objectives. In phase 2 the organizations were usually: the municipality, *CWI* and an educational institution. In this phase, prior learning experiences should be compared to the Dutch requirements in order to define any discrepancies between the actual competencies and the competencies required to reach these objectives. The intended immediate outcomes of portfolio development in this phase were

- Inform the counsellors in this phase about the prior learning experiences and future prospects
 of the refugee so that the activities of the orientation process can contribute to the targeted
 objectives (steer and monitor development);
- Empower the refugee by matching the actual competencies to the required competencies and defining a personal development plan; and
- Empower the refugee by improving his communication abilities about the actual competencies and the personal development plan.

The intended function of the portfolio instrument in phase 3 (orientation at the labour market) was assessment oriented. In this stage, the intention was that the refugees would include more elaborate information on prior learning experiences to enhance the identification, assessment and possible recognition of competencies. Depending on the targeted objective of the refugee, the portfolio assessor could be:

- a. an educational institution if the refugee wishes to enrol in a Dutch study programme;
- b. an employer if the refugee wishes to apply for a job; or
- c. a competent authority if the refugee wishes permission to start working in a regulated profession, e.g. as a medical doctor, teacher or architect.

The intended immediate outcome of the portfolio in this phase of the process was 'formal recognition' or 'social recognition'. The portfolio would provide insight into the actual competencies of the refugee, which would make it easier to find a job that relates to these competencies or a study programme that improves his labour market chances in a given professional sector. Hence, the intended immediate outcomes were:

- Inform future portfolio assessors about actual competencies for the purposes of assessment and recognition;
- · Find a job that relates to the actual competencies of the refugee; or
- Enrol in a tailor-made study programme that results in a Dutch diploma.

Implemented characteristics

The pilot project report shows that the implemented function of the portfolio instrument in phase 1 and phase 2 corresponded with the intended functions as described above: information tool for development purposes. However, the implemented function of the portfolio instrument in phase 3 was slightly different than intended. As explained in Section 5.6.1, the time frame of the pilot project was too short to monitor the refugees from one phase to the next (see Section 6.3.4 below that describes portfolio assessment). In addition, it appeared to be difficult to find project partners that could assess the portfolios for the purposes of formal or social recognition. It was therefore decided to put the emphasis on the information function and the development function of the portfolio instrument. Hence, the implemented function of the portfolio was the same in all three phases; information tool for development purposes (to inform future portfolio assessors and empower the refugees in their job seeking process).

Experienced characteristics

The evaluation data provides insight into the experienced function of the portfolio; 13 portfolio assessors reviewed 28 portfolios. The data shows that they were positive about the information function of the portfolio. In the majority of cases, the portfolio contributed to getting a better overview of:

- The prior learning experiences (68%);
- The education level (68%); and
- The type of work the refugee would like to perform (39%).

This was particularly true of the refugees in phase 1. The portfolio assessors from *COA* who reviewed 14 portfolios indicated that the portfolios informed them on the above mentioned aspects in 93%, 93% and 71% of the cases respectively. The counsellors of *SVA* had already been informed on these aspects via other means, but they experienced that portfolio contributed to a better understanding of the prior learning experiences of their clients in most of the cases (43%).

The portfolio assessors were also asked to reflect on the effect of portfolio development on the refugees (immediate outcome). The data from the questionnaire shows that all the portfolio assessors experienced a positive change in the behaviour and attitude of the refugees. In the majority of the cases the portfolio contributed to the communication skills of the refugees:

- They can better present their prior learning experiences (54%);
- They can better communicate in the Dutch language about their prior learning experiences (43%);
- They have a more focused idea about their future prospects (50%); and
- They are more aware of their own needs (36%).

These percentages are higher for the refugees in phase 1, 64%, 57%, 71% and 57% respectively. The effect on the refugees in phases 2 and 3 was less but this can be explained by the fact that 70% of the refugees in this phase had already started their orientation process. Of the refugees in phase 1, only 30% had concrete plans for future activities. Nevertheless, the portfolio assessors from *SVA* noticed that the refugees were more aware of their needs and therefore more involved in the orientation process (43%). There was a positive change in the presentation skills of a similar sized group.

The data from the questionnaire for the portfolio candidates shows how the refugees experienced portfolio development. In total, 74 refugees completed the portfolio development process and 64 returned the questionnaire. The experienced outcomes were as follows:

- empowerment by being more aware of the targeted objectives (78%);
- empowerment by improving communication about prior learning experiences (69%); and
- being in possession of a well-structured overview of prior learning experiences in the Dutch language (69%).

The portfolio candidates in phases 2 and 3 particularly valued the analysis of their targeted objectives (85%). In phases 2 and 3 of the process, the orientation and integration process starts and the refugees have to become aware of their future plans. Portfolio development can help them in this process by analysing any discrepancies between the actual and required competencies and thinking about how this gap can be bridged. It was a pity that 70% of the refugees in this phase had already started the orientation process (see Section 6.3.4 that addresses portfolio assessment).

Structure and content of the portfolio instrument in the refugees' case

Intended characteristics

The project proposal shows that it was the intention to structure the portfolio instrument differently in the three phases of the process 'from AZC to the labour market'. In the first phase (arrival at an AZC) the portfolio would aim to give an extensive overview of prior learning experiences without further judgement. The portfolio should have an open structure so that each refugee can include his own story. The refugee would be responsible for the development of the overview; he 'owns' it and would determine what is included. These characteristics relate to what Smith and Tillema (2003) call a 'personal development portfolio'. The portfolio can be developed in the native language of the refugee if his proficiency in Dutch is insufficient. The following content issues were mentioned in the project proposal:

- Formal education;
- Working experience;
- Future prospects if residence permit is denied;
- Future prospects if residence permit is granted;
- Portfolio evidence from the past as well as current evidence, e.g. copies of counselling meetings.

The type of portfolio used in the second phase of the process 'from *AZC* to the labour market' relates to what Smith and Tillema (2003) call a 'training portfolio'. The project proposal states the following intended characteristics for the portfolio instrument that was used in this phase:

- It is an open portfolio;
- It can be developed in the native language;
- The targeted objective of the refugee determines the structure and content of the portfolio;
- It contains reflective thoughts about how the developed competencies can be used in Dutch society and the labour market;

- It contains an analysis of any discrepancies between the actual competencies and the competencies needed to achieve the targeted objectives of the refugee;
- It contains a personal action plan that indicates how the targeted objectives can be achieved;
- It contains portfolio evidence that relates to prior experiences and current experiences gained during the orientation process.

Referring to the intended function of the portfolio in the final phase of the process, it seems that it is equivalent to what Smith and Tillema (2003) call a 'dossier portfolio'. The project proposal mentioned the following intended product characteristics. It was noted that the previous inventory of prior learning experiences should be further elaborated with more detailed portfolio descriptions in the Dutch language. These descriptions should contain information on:

- Contextual information about previous working experience;
- The type of organization where the refugee had been employed;
- The tasks and responsibilities in the previous position(s);
- The communication culture between colleagues;
- Professional development (e.g. how is professional expertise kept up-to-date);
- Experiences in Dutch society.

It was the intention to structure portfolio using the Dutch qualification structure as a starting point. The previous experiences would be compared to the required standards to analyse any discrepancies and determine the personal action plan.

Implemented characteristics

After the selection of the regions in which the portfolio instrument was going to be tested, a twoday workshop was organized with all the project partners to define the design specification of the portfolio instrument. The available data shows that the following design principles were defined:

- The portfolio should consist of several parts to serve the different functions of the portfolio instrument in each phase;
- The portfolio should be a flexible instrument that could be easily elaborated if knowledge about Dutch society and proficiency in the Dutch language increases and future prospects become more concrete.

It was suggested that the portfolio should contain four parts: an overview of personal data and prior learning experiences, a reflective part containing a personal development plan, portfolio evidence and a kind of address book or log to take note of contacts with organizations and people.

After the workshop, developers from Nuffic and *UAF* developed a portfolio format using the design specifications given above as a starting point. The implemented characteristics are briefly discussed below and summarized in Table 6-28 on the next page. The implemented portfolio format has a prescribed structure containing four parts and an appendix:

- Part 1 contains the basic overview of factual data;
- Part 2 contains the elaborate portfolio description that can be prepared by portfolio candidates who have more knowledge of the Dutch language and Dutch society;
- Part 3 contains the personal development plan;
- Part 4 contains the overview of available portfolio evidence;
- The appendix contains a logbook and a personal address book to visualize the network.

The portfolio format was accompanied by a portfolio development manual that explained how the portfolio format should be completed. The manual also gave examples of possible portfolio evidence. The manual and the digital format will be discussed in more detail in Section 6.3.3 as these were developed to support the portfolio development process. The assessment standards were in the first instance derived from the targeted objectives (internally defined). If the future

prospects were clear, the refugees could compare his prior learning experience with the relevant standards that related to the 'targeted objective', e.g. derived from a job advertisement or the national qualification structure. With respect to the portfolio evidence, the refugees were asked to make an overview of all the evidence they had available to support their portfolio descriptions.

Issues of	
analysis	Description
Structure	Prescribed, thematic structure Four parts Appendix
Content	 Part 1: Basic data: Short inventory of prior learning experiences (factual data). Working experience (abroad and in the Netherlands) Working experience (abroad and in the Netherlands / paid and voluntary) Leisure activities Language skills Computer skills
	 Part 2: Portfolio descriptions More detailed description of post- secondary education and working experience. Structure and content of the study programme Internship / practical assignments / thesis Non-formal education Responsibilities and tasks in working positions Collaboration with colleagues / other professions (Working) experience in the Netherlands including feedback or performance
	Part 3: Personal development plan • My possibilities for work Reflective part to analyse personal qualities, targeted objectives and how these can be reached. • My wishes for work • What kind of work do I want? • What should I do to practice my desired work?
	Part 4: Portfolio evidences Inventory of available portfolio evidence to support the portfolio descriptions and possible competency claims.
	Appendix: Logbook and network cards
Standards	In the first instance, internally defined by targeted objectives. Second, national / institutional competency standards (if available).
Portfolio evidence	Various examples of possible portfolio evidence were given in the manual for portfolio development.

Table 6-28 Overview of the implemented product characteristics addressing the structure and content

Experienced characteristics

The portfolio assessors were asked to review the information value of the completed portfolio; 13 portfolio assessors reviewed 28 portfolios. As became clear in Section 6.3.2, the information function of the portfolio instrument in particular was experienced by the counsellors from *COA* (phase 1). However, the questionnaire data shows that most of the information was 'partly new'. The content items with the most news value were:

- background information about the employer (partly new for 29% of the group as a whole, new for 43% of the refugees in phase 1);
- the main tasks and responsibilities in the former position (partly new for 36% of the group as a whole and for 50% of the group in phase 1; while the information was completely new for 36% of the cases in phase 1);
- personal strengths (partly new for 50% of the group as a whole, new for 57% of the refugee in phase 1 and for 43% of the refugees in phases 2 and phase 3;
- the future prospects and how these could be reached, however, were new only for the refugees in phase 1 (in 57% of the cases the information was partly new).

The portfolio format was also subject to discussion during the evaluation meetings that were organized at the end of the project. The suggestions for improvement were summarized in the pilot project report. It was decided to revise the format as follows into three parts:

- Part one, which contains the portfolio description on the prior learning experiences and personal qualities;
- Part two: the Curriculum Vitae, which uses the format of the European CV to summarize all relevant information for the counsellors in the next phase of the process; and
- Part three: the Personal Development Plan.

The revised format was used in a next pilot project initiated by *COA* to make portfolio development an integral part of their counselling process for all refugees regardless of their educational background (Empowerment Centre EVC, 2003).

Summary of the product characteristics in the refugees' case (EBB2-3)

The product characteristics are summarized below in an empirical building block for the product characteristics of the portfolio instrument in the refugees' case (EBB2-3). It is presented in Table 6-29 on the next page. This Table shows the intended, implemented and experienced product characteristics and draws a conclusion for each issue of analysis. The most important aspects are briefly discussed below.

With respect to the function and immediate outcome of the portfolio instrument it is important to note that the intended differentiated function of portfolio instrument for each phase of the process 'from AZC to the labour market' was not implemented, because it could not be realized within the time frame of the project. This implies that the assessment function that was foreseen in phase 3 was not implemented. The intended and implemented function were the same in all three phases: information tool for development purposes. The experienced characteristics show the information was particularly valuable for the counsellors in phase 1. They could use it during the counselling meetings to steer the orientation process and select activities that contribute to the targeted objectives of the refugee, or help to determine a realistic Personal Development Plan (PDP). For the counsellors of refugees in phases 2 and 3, the information function was less evident, because most of the selected refugees where already in the middle of the counselling process. However, all the portfolio assessors experienced that portfolio development had an empowering and activating effect on the refugees. The majority could better present their prior learning experiences and they were more aware of their future needs. Moreover, the portfolio candidates experienced a positive outcome. The majority stated that portfolio development had made them more aware of their future prospects and targeted objectives. Furthermore it had improved their communication skills about their prior learning experiences. They felt that it was important to have a well-structured overview of their prior learning experiences in the Dutch language.

There was also a discrepancy between the intended and implemented structure and content of the portfolio. It was intended that the portfolio structure would be different in each of the three phases of the process. However, one uniform format was developed containing four different parts that each had its own specific function: parts 1 and 2 relate primarily to the information function (overview of prior learning experiences), part 3 to the development function (PDP) and part 4 contains the portfolio evidence. The evaluation data shows that the implemented structure was well-received by the portfolio assessors. It can therefore be concluded that the format seemed to address the relevant content items. For the portfolio assessors in phase 1, the portfolio contained a lot of (partly) new information. The newness value was less for the portfolio assessors from *SVA* (phases 2 and 3) because they knew most of the refugees already. Hence, this was also a consequence of the set-up of the pilot project. The assessment standards and the portfolio evidence received little attention during the implementation and evaluation of the product characteristics.

Table 6-29 Empirical product characteristics for the refugees' case (EBB2-3)

Empirical pro	duct characteristics – refugees	s' case			
Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristic	Conclusions	Observations
Main function of portfolio	Information tool (Ph1, 2) Assessment tool (Ph3)	Information tool for all phases.	Information tool for development purposes.	 The portfolio as an information tool for development purposes: To inform counsellors and to steer and monitor the development process To empower refugees 	The assessment function requires the involvement of recognition bodies (e.g. employers, higher education institutions).
Immediate outcomes for portfolio assessor	To gain insight into prior learning experiences and future prospects (Ph1, 2). To steer the orientation process towards targeted objective (Ph1, 2). To enhance the assessment and recognition of actual competencies for the purpose of work or study (Ph3).		As intended (Ph1). Empowerment of refugee (more activated and involved); most of the information was already known (Ph2, 3).	The portfolio provided insight into prior learning experiences and future prospects, which made it possible to steer and monitor development. The refugees seemed more aware of their future needs and were therefore more actively involved.	The set up of the pilot project meant that the experienced outcomes for the portfolio assessors in Ph2 and Ph3 were different than intended; they knew the refugees already; 70% of the portfolio candidates had a predetermined plan at the start of portfolio development.
Immediate outcomes for portfolio candidate	Empowerment (Ph1, 2). The identification, assessment and recognition of actual competencies for the purposes of work or study (Ph3).		Empowerment (all phases). Having a well-structured overview of prior learning experiences in the Dutch language (all phases).	Empowerment of refugees: They were more aware of their future prospects. They could better communicate about prior learning experiences, and They liked having a well- structured overview of their prior learning experiences in the Dutch language.	To enhance future recognition the targeted objectives should be linked to external standards.
Structure of portfolio	Different for each phase	Uniform portfolio format with a thematic, prescribed structure containing four parts and an appendix.	Portfolio format was well- received by portfolio candidates.	Prescribed structure containing different parts that address different functions.	The revised format was implemented by <i>COA</i> in a different project.

Table 6-29	Empirical product characteristics	for the refugees' case (EBB2-3) (Continued)
------------	-----------------------------------	---

Empirical pro	Empirical product characteristics – refugees' case									
lssues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristic	Conclusions	Observations					
Content of portfolio	Different content items for each phase.	Part 1: short inventory of basic factual data. Part 2: elaborate portfolio descriptions addressing post- secondary education and working experience. Part 3: personal qualities and PDP. Part 4: portfolio evidence . Log and network cards.	Well-received. To enhance practicality it was suggested to combine part 1 and 2.	 The portfolio seems to address the relevant issues. To enhance practicality, the revised format contained three parts: Portfolio descriptions Curriculum Vitae (European CV) PDP 	The information value for the counsellors in phase 2 and 3 was less because the counselling process had already started before the portfolio had been developed and discussed.					
Standards	Internal standards derived from targeted objectives (Ph1). Comparison with external standards if available (Ph2). External standards like job profiles, educational study programmes or Dutch qualification structure (Ph3).	Standards were derived from PDP.	Not specifically addressed.	Standards were derived from PDP; this issue was not specifically addressed during the implementation and evaluation of the product characteristics.	To enhance future recognition the standards should receive more attention					
Portfolio evidence	Inventory of available evidence (all phases).	As intended.	Not specifically addressed.	Portfolio candidates were asked to make an overview of available evidence; this issue was not specifically addressed during the implementation and evaluation of the product characteristics	To enhance future recognition the portfolio evidence should receive more attention. The refugees had limited evidence; sometimes not even diplomas.					

Legend: Ph1: phase1; Ph2: phase 2; Ph3: phase 3; PDP: Personal Development Plan.

6.3.3 Exploring the characteristics of portfolio development in the refugees' case

The aim of this section is to explore the characteristics of portfolio development as intended, implemented and experienced in the refugees' case. It addresses:

- The steps and strategies applied in the portfolio development process;
- The measures taken to support portfolio candidates;
- The clarity about different roles and responsibilities.

Table 5-17 on page 158 provides an overview of the sources of information that are available for the analysis of the empirical characteristics. All three issues of analysis are discussed simultaneously below.

Intended characteristics

The pilot project proposal shows that it was intended that the portfolio instrument would be added to the instruments that are normally used to support and guide refugees in the process 'from *AZC* to the labour market'. In both phases it was intended that the refugees' counsellors would support the refugees in the portfolio development together with a portfolio advisor from *UAF* or Nuffic. The following roles and responsibilities were foreseen:

- a. The refugee, who is responsible for portfolio development. If his Dutch or English languages skills are insufficient for portfolio development, the refugee is allowed to make an overview of prior learning experiences in his native language. In such cases, an interpreter is present during the counselling meetings and he will translate the information in the portfolio for the counsellor and portfolio adviser. The refugee owns the portfolio and determines which information is included and presented to the 'portfolio assessor' in the next phase of the process;
- b. The counsellor has the task of using the portfolio in the counselling sessions that were foreseen in the regular process. Moreover, he stimulates the orientation process and activates reflection and analysis. In addition, he adds copies of the counselling meetings to the portfolio as evidence to inform the counsellors in the next phase about the agreements that were made and the issues were discussed;
- c. The portfolio adviser from UAF or Nuffic informs the refugee and the counsellor about the purpose of portfolio development and supports them in the process. It was intended that the portfolio adviser would be present during important meetings (where decisions were made). The project proposal does not mention any concrete support measures that were going to be used or developed.

In phase 3 (orientation to the labour market) the intended purposes of portfolio development was to prepare a well-structured overview of prior learning experiences that would enhance the identification, assessment and recognition of competencies. The project proposal shows that it was intended that the refugees would participate in a portfolio development workshop. They would receive guidance from two portfolio advisors. The portfolio advisors would use reflective assignments to enhance an analysis of the differences in work roles between their former positions and comparable jobs in the Netherlands. The assignments would guide the refugees through the steps that are normally taken to develop a portfolio. It was planned that the portfolio candidates would receive formative feedback via email as well as in person during the portfolio workshops (Empowerment Centre EVC, 2003).

Implemented characteristics

The pilot project report shows that the implemented characteristics of portfolio development were different than intended. No differentiation between the different groups of portfolio candidates was applied. During the analysis phase of the project it was decided to develop a portfolio development learning line that consisted of the following materials:

Different portfolio development workshops that are offered in groups;

- Reflective group assignments to stimulate analysis and reflection and steer the portfolio development process;
- Individual support from counsellors during regular counselling meetings;
- Individual feedback from portfolio advisors during workshops;
- A digital portfolio format to structure portfolio development and facilitate the easy addition, removal or changing of information during the process;
- A manual to support portfolio development containing a general explanation of what a portfolio is, how it should be developed, a completed format as an example, and computer instructions explaining different functions of Microsoft Word that are relevant for the process.

Portfolio development was a new experience for all portfolio candidates. The general purpose of the portfolio instrument needed to be explained to all portfolio candidates. The applied to the steps that needed to be taken during the process, Therefore, it was decided to offer portfolio development workshops in all three phases. Both Nuffic and *UAF* had positive experiences with portfolio development workshops in groups. The participants were activated by each other, they learned from each others experiences and they found it useful to meet other refugees. In the first instance, the plan was to use the same set-up as had been developed for the foreign-trained medical doctors (see Section 6.2.3); five workshops of four hours each. However, during the first portfolio development group it became evident that an extra workshop would be needed to complete both the overview of prior learning experiences and the personal development plan. Many of the portfolio candidates did not have a computer at home and therefore more time was needed for independent work on the computer. Table 6-30 on the next page gives an overview of the implemented characteristics of the portfolio workshops. An outline is given in Appendix I.

Experienced characteristics

The evaluation data provided insight into how the portfolio candidates experienced the portfolio development process. In total, 74 portfolio candidates completed the process and 64 responded to the questionnaire. The questionnaire addresses the portfolio format that was developed, the portfolio manual and the portfolio workshops (Table 5-18 on page 160 shows the relationship between the questions and the issues of analysis in more detail). The most important finding are briefly described below.

The prescribed portfolio format was well-received by the portfolio candidates. The format enabled the portfolio candidates to concentrate on the content of the portfolio descriptions (70%); they did not have to worry about how to structure the information (66%). Only 11% of the portfolio candidates found it difficult to work with the format that had been developed in Microsoft Word. However, for only 3% this was a reason to give the form a negative rating in terms of the format. 61% indicated that they improved their skills in using Microsoft Word during the workshops. This was an unforeseen added value. A portfolio development manual had been developed to support the portfolio candidates in completing the format. The data shows that the portfolio candidates were positive about the instructions. The portfolio format was also addressed during the portfolio development workshops. Reflecting on the number and duration of the workshops, the response data shows that the majority was positive about both aspects (86%). It is interesting to note that the portfolio candidates who indicated that the number of workshops was too few (14% of the whole group) were all in phase 1; 20% of the participants were in the Utrecht region and 27% in the Flevoland region.

Number of workshops	Six
Duration of workshops	Four hours
Global set-up	Reflection on previous part (plenary) Presentation Reflective group assignment Independent work
Reflective assignments	 Five reflective group assignments, used during workshops 1, 2, 4, 5, 6: Identify added value of portfolio (in comparison to CV) In-depth questions about prior learning experiences (what is essential and important) Game to identify personal qualities Game that stimulates thinking about the actions required to achieve targeted objectives Use of portfolio during future interviews
Number of trainers	Тwo
Means of instruction	Manual to explain the use of the portfolio format Presentations (oral and visual) Group assignments to stimulate reflection Individual questions Independent work
Feedback	Individually by portfolio assessors during independent work Individually by counsellors during regular counselling meetings

Table 6-30 Overview of the implemented characteristics of the portfolio development workshops in the refugees' case

With respect to the content and set-up of the portfolio development workshops, the response data shows that the portfolio candidates were positive about the following aspects (see Table 6-31):

- The explanations given by the trainers (88%);
- The collaboration with other portfolio candidates (80%); 63% stated that they would have liked to have had even more opportunities to work together. The numbers of refugees who listed this as a suggestion for improvement was a little lower at 47% (see Table 6-32);
- About three quarters of the portfolio candidates were positive about the reflective group assignments. They indicated that these were a good preparation for portfolio development (73%). Furthermore, the assignments made the workshops interesting (78%). 45% stated that the portfolio development workshops could be improved by adding more assignments that support further reflection about personal qualities;
- 44% of the portfolio candidates would have liked it if the portfolio advisors would have had more time for individual guidance and support. In the implemented set-up there was time for individual support during the period of independent work and during the regular counselling meetings. Apparently, a large group of participants would have liked to have had more individual attention. 34% listed this as a suggestion for improvement;
- About a third of the portfolio candidates indicated that they would have preferred to develop the portfolio at home, independently. However, a larger group (42%) disagreed with this statement. Apparently, more differentiation in guidance and support is needed, depending on the personal characteristics of the participants.

Statements concerning the set-up and content of the portfolio workshops		N_Total 74/64						
worksnops	Not	true	Neutral		True			
	N	%	N	%	N	%		
I have learnt a lot about how to develop a portfolio	0	0%	3	5%	61	95%		
The manual contained useful information about portfolio	0	0%	6	9%	51	80%		
development								
The trainers provided clear explanations	0	0%	1	2%	56	88%		
I enjoyed working with other portfolio candidates	0	0%	5	8%	51	80%		
I would have liked to collaborate more with the other participants	2	3%	13	20%	40	63%		
I would have preferred to develop the portfolio at home independently	27	42%	12	19%	22	34%		
I would have liked to receive more individual guidance and support	14	22%	16	25%	28	44%		
The time for independent work at the computer was sufficient	12	19%	15	23%	34	53%		
The reflective assignments were good preparation for portfolio development	2	3%	9	14%	47	73%		
The reflective assignments were not useful; I did not learn much from them	50	78%	3	5%	4	6%		
The reflective assignments made the workshops interesting	2	3%	7	11%	50	78%		

Table 6-31Experienced characteristics of the set-up and content of the portfolio development workshops in the
refugees' case

Table 6-32 gives an overview of the suggestions that were given for improvement of the portfolio development workshops. It shows that there were some differences in the wishes and needs of the three groups. The portfolio candidates in phase 1 indicated that the future workshops should include more assignments for the identification of personal qualities, in Utrecht 73% and in Flevoland 41%. The portfolio candidates in phases 2 and 3 suggested increasing the opportunities to practice the presentation of their qualities (63%). These suggestions related to the specific needs of the portfolio candidates in the three different phases. In phase 1 the emphasis was on the identification of personal strengths, in part to determine future prospects. Key questions were: *Who am 1*? and *What do 1 want*? For the participants in phase 3, it had become essential that they learn to present themselves during job interviews. All groups were in favour of increasing the opportunities to work together with other participants. However, it was the second choice for all three groups.

How could the portfolio development workshops be improved?		Phase 1			Phase 2 and 3			_
		_Ut 4/15	N_FI N_Am 22/22 28/27		Total 74/64			
	Ν	%	Ν	%	N	%	Ν	%
More collaboration with other participants	10	67%	8	36%	12	44%	30	47%
More time for individual guidance and support	7	47%	7	32%	8	30%	22	34%
More assignments to identify personal qualities	11	73%	9	41%	9	33%	29	45%
More practice in presenting myself and my qualities	6	40%	5	23%	17	63%	28	44%

 Table 6-32
 Suggestions for improvements to the portfolio development workshops by the different groups of portfolio candidates in the refugees' case

Summary of the characteristics of portfolio development in the refugees' case (EBB3-3)

The empirical characteristics of portfolio development are summarized in a third empirical building block for portfolio development for refugees (EBB3-3) that is presented in Table 6-33 on page 255. This Table shows the intended, implemented and experienced characteristics of portfolio development by refugees and draws a conclusion for each issue of analysis. The most important aspects are briefly described below.

It was foreseen in the project proposal that the portfolio development process would be different for the portfolio candidates in phases 1 and 2, on the one hand, and phase 3 on the other. However, during the analysis phase, the support measures were further discussed and it was decided that all refugees would benefit from a portfolio development learning line that contained a prescribed portfolio format, a portfolio development manual, different workshops, reflective group assignments and individual guidance and support during the workshops as well as the regular counselling procedure. All the portfolio candidates were positive about the different aspects of the portfolio development learning line. The suggestions for improvement related mainly to:

- More collaboration with other portfolio candidates;
- More reflective assignments to identify personal qualities;
- More assignments to practice the presentation of personal qualities to others;
- More time for individual guidance and support.

The evaluation data shows that more differentiation in the support mechanisms may be needed depending on the individual characteristics of the portfolio candidates. Some of the refugees in phase 1 indicated that they would have liked to have had more workshops. Some other refugees indicated that they would have liked to develop the portfolio independently at home. However, there was also a need for more collaboration and the majority was very positive about the reflective group assignments. The value of these assignments disappears if refugees develop their portfolios on an individual basis.

Table 6-33 Empirical characteristics of portfolio development in the refugees' case (EBB3-3)

Issues of analysis	Intended characteristics	Implemented characteristics	Experienced characteristic	Conclusions	Observations
Steps and strategies in portfolio development.	Phase 1 and 2:Linked to regular counselling process (no further specifications)Phase 3:Linked to assignments that structure the process (no further specifications)	Phase 1, 2 and 3: Linked to portfolio structure: Part 1: Broad inventory of learning experiences Part 2: Detailed description of impor- tant experiences Part 3: Analysis of personal strengths, targeted objectives, and specification of PDP Part 4: Proof of learning	Not specifically addressed.	Linked to portfolio structure (each part has its own function).	Completing forms makes portfolio development a linear process while it should be a cyclic one.
Measures taken to support portfolio candidates.	 Phase 1 and 2: Individual process linked to the regular counselling process Phase 3: Portfolio development workshops Reflective group assignments Individual assignments to structure portfolio development Formative feedback 	 Portfolio development learning line for all phases: Six portfolio development workshops of 4 hours each Reflective group assignments Digital portfolio format Manual for portfolio development Individual guidance by course leaders during workshops Individual guidance by counsellors during regular counselling meetings 	 Well-received Suggestions for improvement: More collaborative activities More reflective assignments to identify strengths More practice of portfolio presentation More individual guidance More differentiation in support 	Portfolio development learning line: • Workshops • Reflective group assignments • Digital, prescribed portfolio format • Manual • Portfolio presentation • Differentiation in support	
The clarity about roles and responsibilities.	Four different parties: portfolio candidates, course leaders, portfolio advisors, portfolio assessors	As intended: the refugees' counsellors were both portfolio advisors and portfolio assessors; there was one external portfolio assessor.	Not specifically addressed.	Roles and responsibilities need to be more clearly addressed.	Who should be the portfolio advisor if portfolio aims to enhance formal recognition?

6.3.4 Exploring the characteristics of portfolio assessment in the refugees' case

This section explores the intended, implemented and experienced characteristics of portfolio assessment in the refugees' case. It gives attention to:

- The function of portfolio assessment;
- The additional instruments used to take assessment or recognition decisions;
- The quality criteria for portfolio assessment.

Table 5-17 on page 158 showed what information was available for the analysis of these issues. The empirical characteristics are described.

Intended characteristics

It was intended that portfolio use would enhance the orientation process of refugees by:

- 1. Informing the organizations that meet with the refugees in the next phase about the prior learning experiences of the refugee and his targeted objectives;
- Adapting the orientation process of the refugee to his targeted objectives. Moreover, the intention was that the regular counsellors would use the portfolio during regular counselling meetings to steer and monitor the orientation process so that it contributed to the targeted objectives of the refugee.

Both purposes relate to formative evaluation (development-oriented).

For refugees in phase 3 of the process, the intended purpose of portfolio assessment was summative assessment. It was intended that the portfolio would contribute to either paid employment or a Dutch qualification (Empowerment Centre *EVC*, 2003). The project proposal did not specify any supportive measures to guarantee that the instrument was used as intended. Neither did it mention any quality criteria for portfolio evidence or the assessment process.

Implemented characteristics

The pilot project report shows that the formative function of portfolio assessment was implemented and tested. In total, thirteen portfolio assessors (refugees' counsellors) used the portfolio during regular counselling meetings with twenty-eight portfolio candidates. Half of the portfolio candidates were in phase 1 of the process and half in phases 2 or 3. The time frame of the project was too short to monitor the portfolio candidates from one phase to the next. One portfolio candidate used the portfolio during a meeting with a work experience officer to discuss the possibilities of an internship in a nursing home.

The counsellors were asked to indicate how they used the portfolio instrument during the counselling meetings. Table 6-34 gives an overview of the answers. Looking at the group as a whole, the counsellors provided formative feedback to the refugee in 46% of the cases. In 39% of the cases the counsellors asked clarifying questions. These questions can also help to improve the quality of the portfolio. Again, the percentages for the counsellors from *COA* and *SVA* differ. The counsellors from *COA* provided formative feedback in 79% of the cases and they asked clarifying questions to half of the portfolio candidates. Moreover, Table 6-34 shows that the refugees took the initiative to discuss the portfolio in 43% of the cases; 64% for the refugees in phase 1. In 18% of the cases the counsellor took the initiative. In phase 1, this percentage was a little lower, namely 14%. Finally, Table 6-34 shows that only in a very few cases was the PDP discussed. Various counsellors stated that the portfolio had not yet been completed.

Table 6-34	The use of the portfolio instrument as implemented in practice
------------	--

	Ph	ase 1	Phase 2 and 3			
How did you use the portfolio during the meetings?		N_as <i>COA</i> /npa 7/14		N_as <i>SVA</i> /npa 6/14		otal 3/28
	N	%	Ν	%	Ν	%
The refugee took the initiative to discuss the portfolio during the counselling meeting	9	64%	З	21%	12	43%
I took the initiative to discuss the portfolio during the counselling meeting; the refugee was passive in this respect	2	14%	3	21%	5	18%
I asked the refugee some clarifying questions	7	50%	4	29%	11	39%
I provided the refugee with feedback on the content of the portfolio (formative feedback)	11	79%	2	14%	13	46%
I discussed the PDP with the refugee and the possibilities to adapt the orientation process to the targeted objectives	1	7%	1	7%	2	7%
Other	1	7%	2	14%	3	11%

Legend: $N_asCOA/npa = Number assessors COA / number of portfolios that were reviewed; <math>N_asSVA/npa = Number assessors SVA / number of portfolios that were reviewed$

Experienced characteristics

The evaluation data provided information on how the regular counsellors experienced the intended and implemented function of portfolio assessment. Table 6-35 on page 258 shows that in half of the cases portfolio assessment contributed to the quality of the counselling process. This was especially true in the case for refugees in phase 1. Formative portfolio assessment had the following benefits for the counsellors from *COA*:

- The portfolio provided the counsellor with information that is important for the counselling process (86%);
- It saved time during the counselling meetings because it presented factual data in a wellstructured overview (93%);
- It made it easier to ask more in-depth questions during the counselling meetings (64%); and
- It made it easier to develop an action plan because the refugee had thought about his targeted objectives (57%).

For the counsellors from *SVA*, the experienced outcomes of portfolio assessment were less apparent because they already knew most of the refugees. 71% of the refugees who were counselled had already started an orientation programme. The counsellors from *SVA* stated that it was not easy to adapt this programme. In 21% of the cases, adaptation of the programme may be possible but in at least 36% of the cases this could not be done. The action plan for the refugees in phase 1 still had to be determined in most of the cases (71%). The counsellors from *COA* indicated that portfolio development made it easier to specify a programme that related to the future targeted objectives of the refugee. However, in 93% of the cases, the counsellor foresaw legal or financial obstacles in reaching the targeted objectives. For 79% of the refugees in phase 1 the possibilities were limited because they did not have a residence permit yet or because their residence permit was only temporary.

		Phase 1		Phase 2 and 3			
Does the portfolio instrument contribute to the quality of the counselling process?		N_as <i>COA</i> /npa 7/14		N_as <i>SVA</i> /npa 6/14		Total 13/28	
	Ν	%	Ν	%	Ν	%	
Yes, the portfolio contains information about the prior learning experiences of the refugee and his targeted objectives; this is important for the counselling process.	12	86%	2	14%	14	50%	
Yes, the portfolio contains a lot of factual information, which saves time during counselling meeting(s).	13	93%	0	0%	13	46%	
Yes, the information in the portfolio makes it possible to ask more in-depth questions during the counselling meeting(s).	9	64%	5	36%	14	50%	
Yes, it is easier to develop an action plan if the refugee has already thought about his targeted objectives.	8	57%	2	14%	10	36%	
Don't know, the portfolio was not completed during the counselling meeting.	1	7%	1	7%	2	7%	
Don't know, more counselling meetings are needed to pass judgement.	0	0%	1	7%	1	4%	
No, the portfolio did not contain the adequate information.	0	0%	0	0%	0	0%	
Other	2	14%	1	7%	3	11%	

Table 6-35 Portfolio assessment as experienced by the different groups of counsellors

Legend: $N_asCOA/npa = Number$ assessors COA / number of portfolios that were reviewed; $N_asSVA/npa = Number$ assessors SVA / number of portfolios that were reviewed

Summary of the characteristics of portfolio assessment in the refugees' case (EBB4-3)

The empirical characteristics are summarized in an empirical building block for portfolio assessment for refugees (EBB4-3). This building block is presented in Table 6-36. This Table shows the intended, implemented and experienced characteristics of portfolio assessment and draws conclusions about the different issues of analysis. EBB4-3 will be used in Section 6.3.6 to develop an empirical framework of portfolio of portfolio use by refugees. The most important aspects are briefly described below.

The intended function of portfolio assessment was only partially implemented. For the refugees in phases 1 and 2, the intended function was formative portfolio assessment. For the refugees in phase 3, the intended function was summative portfolio assessment but the 'recognition bodies' were not directly involved in the pilot project. Depending on the purpose of the assessment (finding paid employment or enrolment in a Dutch study programme) the (external) portfolio assessors would be employers or an exam committee of an educational institution. The portfolio assessors were the regular counsellors. Thirteen counsellors reviewed twenty-eight portfolios. The counsellors of the refugees in phase 1 in particular were able to use the outcome of this review to steer the development process of the refugee. For the majority of the refugees in this phase the orientation programme still had to be determined. The information that was presented in the portfolio could contribute to this, although there may be legal or financial obstacles that would make it difficult to reach the targeted objectives in the PDP of the refugee. The experienced value of formative portfolio assessment was less for the counsellors from SVA because they knew most of the refugees already. The time frame of the pilot project was been too short to monitor the refugees from one phase to the next. Only one refugee used the portfolio for a selection interview for an internship at a nursing home. The external portfolio assessor was very positive about the information presented. It gave him a good impression of the refugee.

Empirical characteristics of portfolio assessment – refugees' case						
Issues	Intended	Implemented	Experienced			
of analysis	characteristics	characteristics	characteristic	Conclusion	Observations	
Main	Phase 1 and 2:	Phase 1, 2 and 3:	Phase 1, 2 and 3	Formative	There might be	
purpose of	Formative	Formative	Formative	portfolio	legal or financial	
portfolio	assessment	portfolio	portfolio	assessment	obstacles that	
assessment	(development oriented) <i>Phase 3:</i> Summative assessment (contributes to paid employment or Dutch diploma)	assessment	assessment contributed to the quality of the counselling process especially in phase 1	contributed to the quality of the counselling process when the counsellor did not already know the refugee	could make it difficult to reach the targeted objectives of the refugee	
Additional instruments to take assessment decisions	The portfolio was used in addition to regular coun- selling procedures	As intended	Not addressed	The portfolio was used in addition to regular coun- selling procedures	To enhance future recognition, port- folio advisors should be infor- med about possible, relevant standards	
Quality criteria for portfolio assessment	Not addressed	Not addressed	Not addressed. Portfolio evidence received too little attention	To enhance future recognition, portfolio evidence should receive more attention	Recognition bodies should be involved to specify requirements	

Table 6-36 Empirical characteristics of portfolio assessment in refugees' case (EBB4-3)

6.3.5 Exploring the characteristics of portfolio design and implementation in the refugees' case

The aim of this section is to explore the intended and implemented characteristics of the design, development and implementation process. The aim of this section is to discuss the intended and implemented characteristics of portfolio design and implementation in the refugees' case. As discussed in Section 5.2, the following issues of analysis were identified with respect to the design process:

- Perspective of change;
- Design paradigm.

For the exploration of the characteristics of the implementation process attention was given to:

- Actors and factors that influence implementation;
- Support of management;
- Available resources;
- Compliance with assessment culture at the institutional level;
- Training of assessors;
- Training of portfolio candidates.

As indicated in Table 5-13 on page 147 the intended characteristics were explored using the pilot project proposals and the notes from the development team. The implemented characteristics were analyzed using the pilot project reports and the notes from the development team.

Design process

Intended characteristics

From the pilot project proposal it can be derived that it was the intention to apply a mixture of the 'fidelity perspective' and the 'evolutionary perspective' to change (cf. Fullan, 2001). After the selection of the pilot project regions, it was the intention to review existing portfolio materials to

see whether they related to the information needs of the participating project partners. The pilot project proposal mentioned the following phases and activities in the design process:

- Selection of regions in which the portfolio instrument is tested;
- Selection of refugees, by the selected project partners in the regions, who would develop a
 portfolio on voluntary basis;
- Analysis of the information needs of the organizations that play a role in the process 'from AZC to the labour market' together with the project partners in the regions;
- Design and development of the portfolio instrument on the basis of a thorough analysis of existing portfolios. It was the intention that the development of the portfolio would take place in direct consultation with the project partners in the regions. It is important that the portfolio instrument would match the information needs and the regular counselling procedure of COA, CWI and the municipalities;
- Implementation of the portfolio instrument in order to test its use in the three phases of the process 'from AZC to the labour market'. If needed, the portfolio would be adapted to the needs of the organizations that were going to use the instrument;
- Evaluation.

These phases relate to the phases in the ADDIE model (cf. Plomp, 1982, Van den Akker, 1999). It seems that the intended design paradigm contained elements of the systematic design paradigm and the communicative design paradigm (cf. Visscher-Voerman et al., 1999).

Implemented characteristics

The pilot project report shows that the intended perspective to change was also implemented; a mixture of the 'fidelity perspective' and the 'evolutionary perspective' to change (cf. Fullan, 2001). The phases in the design process that were implemented also comply with those that were foreseen. First, the project partners in the regions were selected. However, this was more complicated than foreseen. A first complicating factor was that *COA* was in the middle of a reorganization. As a consequence, various different *AZCs* were going to close. The steering group of the project wanted to be sure that the *AZCs* that were going to participate in the pilot project would stay open until the end of the project. Second, it appeared to be difficult to find a project partner that could monitor the refugee from one phase to another because *COA* did not know beforehand in which municipality a refugee will be placed once he receives a residence permit. For practical reasons, it was therefore decided to cooperate with two organizations: *COA* and *SVA*. *COA* would implement and test the use of the portfolio instrument for refugees who had recently arrived at an asylum seeker centre (*AZC*) (phase 1), and *SVA* would implement and test portfolio use for refugees who had been transferred to a municipality and were about to start the official integration process (phase 2) and those who had finished their official integration process and were about to start looking for a job (phase 3).

After the selection of the project partners, the intended activities were also implemented, namely:

- Analysis of the information needs of the project partners;
- Review of existing materials during a two-day workshops for all project partners;
- Specification of design principles for the portfolio format and the portfolio development workshops;
- Development of the portfolio format and a portfolio development learning line by Nuffic and UAF;
- Implementation of the portfolio in the selected regions;
- Evaluation.

As indicated above, these phases relate to the ADDIE model (cf. Plomp, 1982, Van den Akker, 1999). After the two-day workshop, a development team from Nuffic and *UAF* developed a first prototype version of the portfolio format. There was no time to discuss this in detail with all the project partners. The materials were reviewed by a few project partners and a few revisions were then implemented. The portfolio format and the outline of the portfolio development workshops

were presented to the project partners in the regions at the start of the project in the regions. It was decided to implement them and adapt certain issues during the implementation process if needed. After the first series of workshops in the first region, a few adaptations were by the development team, e.g. the number of workshops was increased and more reflective group assignments were developed. It seems that the implemented design paradigm has characteristics of the systematic design paradigm and the pragmatic design paradigm (cf. Visscher-Voerman, et al., 1999).

Implementation process

Intended characteristics

The available data provided limited information on the intended implementation process. The pilot project proposal shows that it was the intention to select two regions in which portfolio use could be tested and refugees could be monitored from one phase to the next. This implies that different organizations that play a role in the process from '*AZC* to labour market' had to participate, like *COA*, municipalities, *CWI*, and an educational institution. Furthermore it was foreseen that the project partners would have an active role in the specifications of the portfolio requirements and the use of the portfolio instrument during the counselling process.

Implemented characteristics

Looking at the data that relates to the implemented process, the following becomes clear. With respect to the actors and factors that generally have an influence on the implementation process of change, it can be noted that the pilot project objectives complied with national initiatives to improve the labour market chances of highly-skilled refugees. As discussed in Section 6.3.1, different initiative had already been taken to enhance the identification of refugees' competencies, like the use of the portfolio instrument, enhancing access to international credential evaluation and the use of PLAR procedures when possible (cf. König, 2004). The pilot project itself was financed by the Ministry of Social Affairs and Employment to improve and facilitate the process from 'AZC to the labour market' by means of portfolio use. Hence, there was support at the central level and there were financial resources to compensate for time investments at the institutional level. The organizations that participated in the project (COA and SVA) cooperated on a voluntary basis. Both organizations wanted to gain experience with the portfolio instrument in the counselling process. At the end of the pilot project, COA decided to integrate portfolio use into its counselling process for all refugees with a residence permit. As part of the project 'Inburgeren in de centrale opvang' about twenty counsellors were trained in portfolio use. They followed a train-the-trainer course for the portfolio development learning line that had been developed in this pilot project.

The pilot project emphasised the development function of portfolio. To enhance assessment and recognition, other stakeholders had to participate, like employers and educational institutions. To reach the long-term objective of the project (increased access to the labour market in professions that relate to actual competencies) the portfolio should also serve as an assessment instrument. Focusing on the development function made the innovation less complex. Both organizations (*COA* and *SVA*) played an active role in the implementation process. They took part in the two-day workshop to specify the requirements for the portfolio materials. The counsellors were also active in the implementation process. They selected the portfolio candidates and explained the meaning of portfolio use to them. The portfolio was added as an extra instrument to the regular counselling process, which means that the counsellors would discuss the portfolio content with the refugees during their regular meetings. In addition to these individual meetings, the portfolio candidates took part in workshops that were given by *CWI*, *UAF* and Nuffic. The counsellors from *COA* and *SVA* reviewed the portfolio content to see whether they could steer the orientation process towards the targeted objectives of the refugee as defined in their personal development

plan. The counsellors were supported by the project partners during the process. Various meetings were organized to discuss the experiences gained in practice. If needed, changes were made during the implementation phase. Table 6-37 below gives a summary of the status quo of the factors that had an influence on the implementation process. The factors were derived from Fullan (2001) and were briefly discussed in Section 4.4.1. Table 6-37 also indicates whether the influence was positive or negative.

Summary of the characteristics of portfolio design and implementation in the refugees' case (EBB5-3)

Finally, the characteristics of portfolio design and the implementation process are briefly described and summarized in a fifth empirical building block for the refugees' case (EBB5-3), which is presented in Table 6.38 on page 264. This Table provides an overview of the intended and implemented characteristics of both processes (design and implementation) and shows the conclusions that were drawn from this data. The most important aspects are briefly summarized below.

Factor	Pos	sitive or negative influence on change
Aims and objectives comply with the needs of the insti- tution that is implementing the change.	+	COA and SVA cooperated on a voluntary basis because they wanted to gain experience with portfolio use in their counselling process. During the project, COA decided to implement the portfolio nationally. Train-the-trainer courses were organized at the end of 2004 and the beginning of 2005.
The need for change has priority	+	Portfolio use was given priority within the participating organizations.
There is a shared meaning of change within the institution.	+/-	All project partners took part in the two-day workshop to specify the requirements of the portfolio format and the portfolio development learning line. This contribu- ted to the development of a shared meaning. There was too little time to discuss the first set of portfolio materials with all project partners. It was therefore decided to start using them in practice and discuss the experiences with each other during evaluation meetings.
Change is not too complex.	+/-	Change is complex (multi-dimensional and multi-level). To monitor refugees in the whole process from 'AZC to the labour market' all the organizations that play a role should use the portfolio instrument. Only a few of them took part in this project. The organizations that could enhance assessment and recognition were absent (employers and educational institutions). The emphasis was on the development function. The counselling organizations were familiar with the term portfolio, but they had not yet worked with it in practice. The refugees had no prior experience with portfolio development
Change is considered to be of high-quality and practical.	+/-	The portfolio requirements were specified in direct consultation with the coun- selling organizations (the future portfolio assessors).
Change complies with sour- ces, events and develop- ments at the international level.	+	At the international level, the development of assessment and recognition procedures to take account of all forms of learning is encouraged (European Commission, 200).
Change complies with sour- ces, events and develop- ments at the national level.	+	At the national level, there are different policy measures that support the use of portfolio to enhance the integration process of refugees (cf. highly-skilled refugees steering group, 2001).
Change complies with sour- ces, events and develop- ments at the institutional level.	+	Both <i>SVA</i> and <i>COA</i> wanted to gain experience with portfolio use to enhance the integration process of refugees. <i>COA</i> took further initiatives to implement the portfolio instrument in their counselling procedures.
Change complies with sour- ces, events and develop- ments at the individual level.	+	The participating counsellors were supported by the project partners. The portfolio instrument was added to their regular counselling process. This demanded an extra investment in time.

Table 6-37 Status quo of the factors that influenced the implementation of change in the refugees' case

Looking at the characteristics of portfolio design, it can be observed that there is no discrepancy between the intended and implemented perspective of change. Various existing portfolio materials were reviewed to define the specifications for the portfolio materials that were going to be used by the participating organizations. It can be observed that the pragmatic design paradigm was again implemented. The project deadline meant that there was no time to discuss the prototype first materials with all the project partners including the counsellors that were going to use them. A great deal of time was spent on the selection of the participating organizations and there was a need to get started. Since the counsellors had no prior experience with portfolio assessment it would also be difficult to reflect on the developed materials.

Looking at the process of portfolio implementation, it has to be concluded that the complexity of the innovation was limited by focusing on one function of the portfolio instrument, namely the development function. It was not feasible to monitor the refugees through all three phases of the process 'from AZC to the labour market' in the time frame of the pilot project (one year). The emphasis was on the development function. Two organizations were selected to use the portfolio in addition to their regular counselling processes. The counsellors were actively involved in the specification of the portfolio requirements, the implementation process, and the evaluation of the project outcomes. The counsellors have received support during the project from different project partners. The portfolio candidates were trained in the portfolio processes by *CWI*, *UAF* and Nuffic. *COA* decided during the project to implement the portfolio in their regular counselling process for all refugees with a residence permit. To assure future use, twenty counsellors took part in a train-the-trainer course to become familiar with the portfolio development learning line.

Portfolio design and implementation in the refugees' case						
Issues of analysis	Intended characteristics	Implemented characteristics	Conclusions	Observations		
 Design process: Perspective to change Design paradigm 	 Mixture of the 'fidelity perspective' and the 'evolutionary perspective' to change (cf. Fullan, 2001). Mixture of the systematic design paradigm and the communicative design paradigm (cf. Visscher- Voerman et al., 1999). 	 Mixture of the 'fidelity perspective' and the 'evolutionary perspective' to change (cf. Fullan, 2001). Mixture of systematic design para- digm and the pragmatic design paradigm (cf. Visscher-Voerman et al., 1999). 	 Mixture of the 'fidelity perspective' and the 'evolutionary perspective' to change (cf. Fullan, 2001). Mixture of systematic design paradigm and the pragmatic design paradigm (cf. Visscher- Voerman et al., 1999). 	The implementation of a portfolio as a develop- ment tool seems to be less complex than the implementation of a portfolio as an assessment tool.		
 Implementation process: Actors and factors that influence implemen- tation Support of management Available resources Compliance with assessment culture Training of assessors Training of portfolio candidates 	 Selection of two regions in which portfolio use could be tested moni- toring refugees from one phase to another. Active involvement of project partners to specify the portfolio requirements. Active use of the portfolio instrument during the counselling process. 	 The pilot project objectives complied with developments at the international, national and institutional levels. Financial support from the Ministry of Social Affairs. The emphasis was on the development function of portfolio (to plan and steer the orientation process). The portfolio assessors were familiar with the portfolio instrument but had not worked with it in practice. They received support from the project. The portfolio candidates were trained in the portfolio processes. 	 Implementation was focused on portfolio as a development tool. To enhance assessment and recognition of actual competen- cies, other stakeholders need to participate, e.g. employers and educational institutions. The availability of adequate assessment standards and assessment instruments will depend on the professional sector concerned. 			

 Table 6.38
 Empirical characteristics of the design and implementation process in the refugees' case (EBB5-3)

 Description
 Description

6.3.6 A framework of empirical finding of portfolio use by refugees

This section reflects on the empirical characteristics of the portfolio instrument that were explored in the previous sections. It summarizes these characteristics in an empirical framework for portfolio development for refugees (see Table 6.39). This framework will be used in Chapter 7 for the cross-case analysis. As in the previous cases, attention is first given to the context characteristics and those of the design and implementation process (respectively EBB3-1 and EBB3-5). The empirical portfolio characteristics are then briefly reviewed (EBB3-2, EBB3-3 and EBB3-4).

Context, design and implementation process in the refugees' case

Since January 2003, CWI, Colo and Nuffic have been cooperating in the Dutch international credential evaluation structure. The international credential evaluation has become an official part of the integration process. It can help to give an impression of the level to which refugees have been educated. The foreign diploma is compared with a Dutch diploma through a comparison of the respective curricula. Various parties have argued to link the practice of international credential evaluation and PLAR to increase the labour market chances of refugees (Mak et al., 2003; Ministry of Social Affairs and Employment, 2002; Scholten & Teuwsen, 2002; SER, 2002). The combination of practices could give better insight into the actual competencies which would make it easier to find a job that relates to the refugee's previous field of expertise. Various counselling organizations has started using portfolios to activate and empower refugees. Cinop (2001) developed a portfolio format that could be used by the ROCs during the integration process. However, to enhance the recognition of actual competencies, more instruments are needed than a portfolio on its own. PLAR procedures for foreign-trained candidates are still in their infancy (Klaver & Odé, 2003). König (2004) points out that many of the assessment standards are very strict and nationally oriented which forms an obstacle for the assessment and recognition of the actual competencies of highly-skilled immigrants. The thirteen portfolio assessors who participated in the pilot project had no previous experience with portfolio assessment. The portfolio candidates (110 at the start, 74 at the end) had no experience with the portfolio instrument. Their Dutch language skills varied from no knowledge of the Dutch language to a pass in the NT-2 state exam (highest level).

The applied perspective to change was a mixture of the 'fidelity approach' and the 'evolutionary approach'. Existing portfolio materials for refugees and other immigrants were reviewed and analyzed during a two-day workshop. The outcome of this process was a set of design specifications for a portfolio format and a portfolio development learning line. These specifications were worked out by a development team from Nuffic and UAF. To meet the project deadlines, it was decided to test these materials in practice and revise certain elements during the implementation phase if needed. The evaluation of the portfolio materials took place in direct cooperation with the portfolio assessors (the refugees' counsellors) and the portfolio candidates. The phases in the design process relate to the ADDIE model (cf. Plomp, 1982, Van den Akker, 1999). It was therefore argued in Section 6.3.5 that the implemented design paradigm was a mixture of the 'systematic design paradigm' and the 'pragmatic design paradigm' (cf. Visscher-Voerman et al., 1999). The implementation process of the portfolio instrument was simplified by focusing on the development function. The refugees' counsellors were actively involved in the implementation process. They received support from the trainers from UAF or Nuffic and they actively used the portfolio instrument during counselling meetings with the participating refugees. COA was so enthusiastic about the portfolio instrument that it decided to integrate it into their counselling procedures for all refugees. In 2005, train-the-trainer workshops were organized for COA counsellors. The portfolio candidates (the refugees) were trained in the portfolio development processes by trainers from CWI, UAF or Nuffic.

Portfolio characteristics in the refugees' case

Looking at the empirical portfolio characteristics, it should be mentioned that it was intended that the portfolio would serve as an information tool for both development and assessment purposes; also depending on the phase in which the refugees were. The implemented and experienced characteristics show that the main emphasis was put on the development purpose; to inform the counsellor about the prior learning experiences of the refugee in order to steer and monitor the orientation and integration process into Dutch society; and to empower the refugee by developing a well-documented overview of prior learning experiences and specifying a personal development plan (PDP). The implemented structure and content matches this purpose. The portfolio format that was used contained four parts and an appendix, each with its own specific purpose: inventory of experiences (Curriculum Vitae), detailed portfolio descriptions, PDP and portfolio evidence.

As a consequence of the implemented function, the assessment standards and the portfolio evidence received little attention. The assessment standards used were mainly derived from the targeted objectives of the refugees. As part of the development of the PDP, the portfolio candidates were asked to review the competency requirements mentioned in job advertisements for positions they found interesting. Next, they were asked to reflect on the extent to which they possessed these competencies, and if not, how they could master them. However, the refugees were not stimulated to conduct a thorough self-assessment and define competency claims that could lead to formal recognition. One of the reasons for this was that no recognition partners cooperated in the project. For many professions it is difficult to choose which assessment standards need to be used for self-assessment.

With respect to the characteristics of the portfolio development process, it should be mentioned that the implemented characteristics were well received. The mixture of portfolio development groups and individual guidance during the regular counselling sessions was positively evaluated by both the counsellors from *COA* and *SVA* and the refugees. In 2005, *COA* initiated a number of train-the-trainer workshops so that the counsellors of *COA* could give the portfolio workshops themselves. The characteristics of portfolio assessment showed that the portfolio was mainly used as a formative assessment instrument to steer, adapt (if possible) and monitor the orientation process. To enhance future recognition, the use of national assessment standards needs further attention, as does the submission of adequate portfolio evidence. Table 6-39 provides a summary of the issues discussed above.

Торіс	Issues of analysis	Conclusions	Observations
Context: EBB1-1	Evaluation and recognition policy	International credential evaluation focuses on formal competen- ces; various parties have argued to link international credential evaluation with PLAR to gain insight into actual competencies.	PLAR procedures for foreign-trained applicants are still in their infancy (Klaver & Odé, 2003). Assessment standards are very strict and nationally oriented (König, 2004).
	Professional sector	At the turn of the century, counselling organizations started using portfolios to activate and empower refugees (development function	There are still various obstacles hindering the use of the portfolio as an assessment instrument (see also above).
	Characteristics of portfolio assessors	The portfolio assessors had heard about the portfolio instrument but they had no experience with portfolio use	The implemented characteristics had a neutral influence on the complexity of portfolio use by refugees.
	Characteristics of portfolio candidates	The portfolio candidates had no experience with the portfolio instrument. The Dutch language proficiency varied from no knowledge to a pass in the NT-2 exam (highest level).	The implemented characteristics of the portfolio candidates made portfolio use more complex.
Portfolio design	Design process	Mixture of the systematic and pragmatic design paradigm.	
and implementation: EBB5-1	Implementation process	Mixture of the fidelity approach to change and the evolutio-nary approach to change. Existing materials were reviewed in direct collaboration with future users. The design specifications were derived from these materials and the information needs of the organizations that play a role in the counselling process. A first set of materials was developed and tested in practice. The evaluation outcomes were used to revise the materials and test them again.	<i>COA</i> further implemented the portfolio format in 2005. They used the evaluation outcomes to adapt the portfolio format that had been implemented and tested Train-the-trainer workshops were conducted so that the counsellors from <i>COA</i> could instruct the portfolio development groups themselves.
Product characteristic: EBB2-1	Main function of portfolio	 The portfolio as an information tool for development purposes: To inform counsellors to steer and monitor the development process To empower refugees 	The assessment function requires the involvement of recognition bodies (e.g. employers, higher education institutions).
	Immediate outcomes for portfolio assessors	The portfolio provides insight into prior learning experiences and future prospects, which makes it possible to steer and monitor development. The refugees seemed more aware of their future needs and were therefore more actively involved.	The set-up of the pilot project meant that the experienced outcomes for the portfolio assessors in Ph2 and Ph3 were different than intended; they knew the refugees already; 70% of the portfolio candidates had a predetermined plan at the start of portfolio development.
	Immediate outcome for portfolio candidate	Empowerment of refugee: They were more aware of their future prospects. They could better communicate about their prior learning experiences, and They liked having a well-structured overview of their prior learning experiences in the Dutch language.	To enhance future recognition the targeted objectives should be linked to external standards.

Table 6.39 Framework of empirical findings of portfolio use by refugees

Торіс	Issues of analysis	Conclusions	Observations
Product characteristic:	Structure	Prescribed structure containing different parts that address different functions	A revised format was implemented by COA in a different project.
EBB2-1 (Content	 The portfolio seemed to address the relevant issues. To enhance practicality, the revised format contained three parts: Portfolio descriptions Curriculum Vitae (European CV) PDP 	The information value for the counsellors in phases 2 and 3 was less because the counselling process had already started before the portfolio was developed and discussed.
	Standards	The standards were derived from the PDP; the issue was not specifically addressed during the implementation and evaluation.	To enhance future recognition the standards should receive more attention.
	Portfolio evidence	The portfolio candidates were asked to make an overview of available evidence; the issue was not specifically addressed during the implementation and evaluation.	To enhance future recognition the portfolio evidence should receive more attention. The refugees had limited evidence; sometimes not even diplomas.
Portfolio development:	Steps and strategies	Linked to portfolio structure (each part has its own function).	Completing forms makes portfolio development a linear process while it should be a cyclic one.
EBB3-1	Measures taken to guide portfolio candidates	Portfolio development learning line: • Workshops • Reflective group assignments • Digital, prescribed portfolio format • Manual • Portfolio presentation • Differentiation in support	
	Clarity about different roles and responsibilities	Roles and responsibilities need to be more clearly addressed.	Who should be the portfolio advisor if the portfolio aims to enhance formal recognition?
Portfolio assessment: EBB4-1	Main purpose of portfolio assessment	Formative portfolio assessment contributed to the quality of the counelling process when the counsellor did not yet know the refugee.	There might be legal or financial obstacles that make it difficult to reach the targeted objectives of the refugee.
	Additional instruments used to take assessment decisions	The portfolio was used in addition to regular counselling procedures.	To enhance future recognition, portfolio advisors should be informed about possible, relevant standards.
	Quality criteria for portfolio assessment	Not specifically addressed; to enhance future recognition, portfolio evidence should receive more attention.	Recognition bodies should be involved to specify requirements.

Table 6.39 Framework of empirical findings of portfolio use by refugees (Continued)

Legend: EBB: Empirical Building Block, PDP: Personal Development plan.

6.4 Further use of the empirical building blocks and the frameworks of empirical findings

This section reflects briefly on the three exploratory case studies that were presented in the previous sections. Each case study resulted in five empirical building blocks that were combined in a framework of empirical finding for portfolio use by foreign-trained teachers (see Section 6.1.6), foreign-trained medical doctors (see Section 6.2.6) and refugees (see Section 6.3.6). It is important to realize that the nature and focus of the Nuffic pilot projects have influenced on the characteristics found in the three case studies. Section 5.6 explained the 'targeted objectives' of the highly-skilled immigrants in each of the Nuffic pilot projects (teachers, medical doctors and refugees). A distinction was made between: 'de jure' professional recognition, academic recognition and orientation on the Dutch society. The 'targeted objectives' of the highly-skilled immigrants combined with the context characteristics have influenced the function of portfolio use:

- In the teachers' case the targeted objective of the foreign-trained teachers was 'de jure' professional recognition (gaining access to a regulated profession). A competency-based assessment instrument was available. The intended and implemented function of the portfolio instrument was 'assessment-oriented';
- In the medical doctors' case the targeted objective of the portfolio candidates was 'academic recognition' (gaining exemption in the Dutch medical science programme on basis of prior learning). However, the medical faculty had no prior experience with competency-based assessment procedures for enrolment of foreign-trained medical doctors and wanted to use the portfolio as an 'information tool'. Hence, the intended and implemented function was information-oriented instead of assessment-oriented;
- In the refugees' case the targeted objective was 'orientation'. The counselling organizations
 that participated had heard about the portfolio instrument and were willing to test its use in
 addition to the regular counselling procedures. The intended and implemented function was
 development-oriented.

The context of each case was different:

- In the teachers' case the context was classified as competency-based; a set of competencybased assessment standards was available just as a competency-based assessment procedure;
- In the medical doctors' case the context was neither content-based nor competency-based. Schuwirth and Van der Vleuten (2005) defined the dominant learning paradigm as 'problembased learning. With respect to the evaluation instruments, it was concluded that the traditional content-based examinations addressing knowledge, skills and atiitudes separately still dominant;
- In the refugees' case it was concluded that the availability of competency-based assessment standards and instruments to enhance the identification, assessment and recognition of actual competencies of refugees would depend on the professional sector. However, it was concluded that in the higher education sector the availability of PLAR procedures is still limited;
- In all three cases the portfolio candidates had no experience with portfolio development or competency-based assessment.

Figure 6-2 on the next page visualizes the complexity of change in each case using the complexity matrix presented in Chapter 3.

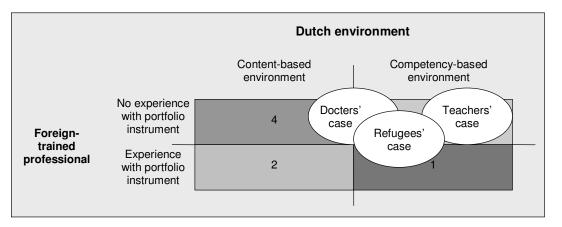


Figure 6-2 Overview of the complexity of portfolio implementation in the three cse studies

In Chapter 7, the characteristics of each case are compared with each other (cross-case analysis). Since the context characteristics have an influence on the portfolio design and implementation process, and both aspects are likely to have an influence on the portfolio characteristics the order of discussion will change.

Chapter 7

Towards design building blocks for portfolio use by highly-skilled immigrants: A cross-case analysis

This chapter uses the results from theory and practice to answer the two research questions that were presented in Section 1.3. The research question are:

- 1. What are the characteristics of the portfolio instrument and its use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?
- 2. What are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice?

The first research question is answered by the results of the cross-case analysis with respect to:

- a. The product characteristics of the portfolio instrument addressing its function, immediate outcomes, structure, content, standards and types of evidence;
- b. The characteristics of portfolio development by the portfolio candidate; and
- c. The characteristics of portfolio assessment by the portfolio assessor.

The second research question is answered using the cross-case analysis with respect to:

- d. The context characteristics; and
- e. The characteristics of portfolio design and implementation; a process that is carried out by the initiator of change, the development team and the implementers of change.

The structure of this chapter is as follows: Section 7.1 discusses the results of the cross-case analysis and explores the congruence between practice and theory. The cross-case analysis uses the frameworks of empirical findings for each case study that were presented in Table 6-8 on page 190 (the teachers' case), Table 6-24 on page 234 (the medical doctors' case), and Table 6-39 on page 267 (the refugees' case). These empirical findings were compared with each other and with the theoretical building blocks that were developed in Chapters 3 and 4. Section 7.2 answers the first research question. It links the portfolio characteristics to the targeted objectives of the highlyskilled immigrants and presents an adapted conceptual framework of portfolio characteristics for highly-skilled immigrants that could assist others in making conceptual choices during the process of portfolio design. Section 7.3 addresses the second research question. It approaches the conceptual framework from a practical perspective and distils ten key components for effective portfolio use. All ten components should be considered during portfolio design and implementation. To show their interdependence they are presented in a 'portfolio spider web' (cf. Van den Akker, 2003). Moreover, Section 7.3 develops two design building blocks for portfolio that could be used by others who wish to design and implement a portfolio instrument. Section 7.4 reflects on the previous discussions and refers back to the main research questions. It summarizes the answers that are based on theory and the empirical findings from the case studies.

7.1 Exploring the congruence between theory and practice across the three case studies

This section presents the results of the cross-case analysis and explores the congruence between theory and the empirical findings. Section 7.1.1 addresses the second research question and discusses the results of the cross-case analysis with respect to the context characteristics and the characteristics of portfolio design and implementation. The findings are summarized in Table 7-2 on page 276. Section 7.1.2 relates to the first research question and describes the results of the cross-case analysis of the portfolio product characteristics, the portfolio development process and portfolio assessment. These findings are summarized in Table 7-5 on page 289.

7.1.1 Cross-case analysis of the context characteristics and portfolio design and implementation

In this section, the context characteristics of the three case studies are compared first, and thereafter the results of the cross-case analysis of portfolio design and implementation are discussed. The cross-case analysis uses the frameworks of the empirical findings for portfolio use that were presented at the end of each case study in Chapter 6. If required, reference is made to the empirical and theoretical building blocks that were previously presented. Table 7-1 offers an overview of the building blocks and references to the sections in which these were presented.

	Taaabara' aaaa	Medical doctors'	Defurees' sees	Theoretical
	Teachers' case	case	Refugees' case	building blocks
Framework of	Table 6-8, page 190,	Table 6-24, page	Table 6-39, page	-
empirical findings	Section 6.1.6	234, Section 6.2.6	267, Section 6.3.6	
Context	EBB1-1: Table 6-2,	EBB1-2: Table 6-10,	EBB1-3: Table 6-27,	TBB1: Table 3-6,
characteristics	page 168, Section	page 199, Section	page 241, Section	page 66, Section
	6.1.1	6.2.1	6.3.1	3.3
Portfolio design and	EBB5-1: Table 6-7,	EBB5-2: Table 6-23,	EBB5-3 : Table 6-	TBB5: Table 4-
implementation	page 187, Section	page 231, Section	38, page 264,	15, page 108,
	6.1.5	6.2.5	Section 6.3.5	Section 4.4.4

 Table 7-1
 Overview of the empirical and theoretical buildings blocks that were used for the cross-case analysis of the context characteristics and portfolio design and implementation

Cross-case analysis of the context characteristics

All three cases show that the evaluation and recognition practice of highly-skilled immigrants focuses on their formal diplomas issued abroad. The main evaluation instrument used is international credential evaluation that traditionally applies a disciplinary-based evaluation approach. The evaluation focuses on the analysis of substantial differences in curricula, which relate to the learning outcomes of the study programme, access to further activities, core elements of the study programme and its quality. However, a change of practice was announced in the health care sector. The Ministry of Health had the intention to develop and implement a national assessment procedure for foreign-trained doctors, with other professions in the health care sector to follow. The new procedure for medical doctors came into effect in December 2005. The implemented assessment procedure is exam-based instead of competency-based. Thus far, the health care sector is the only sector that has introduced an examination for highly-skilled immigrants. In other sectors, international credential evaluation remains the main instrument applied. However, different parties at the national level and international level (cf. Zgaga, 2007) still argue for a linking the practice of international credential evaluation and PLAR.

With respect to the nature of the professional sector, the following observations can be made across the three cases. The educational sector had most experience with competency-based learning and competency-based assessment. The shift from a content-based learning paradigm to a competency-based learning paradigm had started in the early nineties when the first teacher profiles where defined (cf. Uhlenbeck, 2002). In 2000, a competency-based assessment procedure was implemented to cope with teacher shortages. In the medical sector, the shift towards competency-based learning had only recently started. Schuwirth and Van der Vleuten (2005) note that medical expertise is still defined in terms of 'knowledge, 'skills' and 'attitudes', which relate to the more traditional content-based learning paradigm. As a consequence, there is a tendency to use different evaluation instrument that evaluate each construct separately, e.g. a multiple choice exam to examine knowledge, a skills-lab to examine medical skills and a simulation to examine problem-solving skills and attitudes. Since the shift towards competency-

based learning, more integrated forms of assessment are now being studied (Schuwirth & Van der Vleuten, 2005). The portfolio instrument is one of them (cf. Driessen et al., 2005; Overeem, et al., 2003). The context of the refugees' case was again different. Since the turn of the century, different parties have argued for linking the practice of international credential evaluation with PLAR to increase the labour market chances of refugees (cf. König, 2004; Mak et al., 2003; Ministry of Social Affairs and Employment, 2002; Scholten & Teuwsen, 2002; SER, 2002). The *Taskforce Inburgering* [Integration Taskforce] has noted that PLAR should be used to gain insight into the prior learning experiences of the immigrants so that the refugees' counsellors could adapt the integration programme to the targeted objectives of the immigrant concerned. The portfolio was regarded as an important instrument in this respect because it activates refugees and makes them aware of their own responsibilities in finding employment. As a consequence of these developments different organizations like the *ROCs*, *CWI* and *UAF* Job Support have started experimenting with portfolio use to improve their counselling procedures. Hence, the introduction of portfolio use for refugees was not totally new.

The context characteristics are summarized in Table 7-2 on page 276. As became clear above, the context in the teachers' case can be characterized as 'competency-based', while the context in the medical doctors' case is neither content-based nor competency-based, but 'problem-based' (cf. Schuwirth & Van der Vleuten, 2005). The context in the refugees' case is more difficult to characterize because it relates to multiple professional sectors. As became clear, many of the organizations that play a role in the counselling of refugees have started working with instruments that enhance the identification of refugees' competencies including portfolio. However, to enhance assessment and recognition one is dependent on educational institutions or assessment centres that can assess and recognize competencies. The availability of these procedures varies across the professional sectors.

Cross-case analysis of portfolio design and implementation

Comparing the characteristics of portfolio design across the three cases it seems that the context indeed has an influence on the applied perspective to change. In the teachers' case the 'fidelity perspective' (cf. Fullan, 2001) was applied using a national assessment procedure for prospective teachers that had been developed by Stoas (2000). The case study did not really contribute to a better understanding of the portfolio design process. To enhance the civil effect of the assessment outcome, only minor adaptations were implemented by the development team of Nuffic after the consultation of the portfolio assessors. The characteristics of the design activities that took place relate to the pragmatic design paradigm (cf. Visscher-Voerman et al., 1999). In the medical doctors' case there was no experience with portfolio assessment. The medical faculty of the University of Utrecht had just implemented a new enrolment procedure for foreign-trained doctors that was exam-based. However, they were willing to experiment with portfolio use in addition to this procedure in order to adhere to the wish of external parties to take better note of the work experiences of foreign-trained medical doctors. (cf. MDW working group, 2001). In this case, the 'evolutionary perspective' to change was applied (cf. Fullan, 2001). Different group meetings were foreseen to discuss the aims and requirements of the portfolio instrument. However, the faculty members were in favour of a quick start and suggested to base further discussions on the results of a first experiment with the portfolio instrument. Hence, the pragmatic design paradigm was implemented (cf. Visscher-Voerman et al., 1999). In the refugees' case, the applied perspective to change was a mixture of the 'fidelity perspective' and the 'evolutionary perspective' (cf. Fullan, 1999). During a two-day workshop the project partners deliberated on the portfolio specifications. Developers from Nuffic and the UAF have used these specifications to develop a first set of portfolio materials that could be implemented by the participating organizations. To meet the project deadlines, it was decided to test these materials in practice and revise certain elements during implementation if the evaluation were to show that this was needed. The evaluation of the materials took place in direct cooperation with the portfolio assessors (the refugees' counsellors) and the portfolio candidates. The design process was structured using the ADDIE model (cf. Plomp, 1982, Van den Akker, 1999). It was therefore concluded in Section 6.3.5 that the implemented design paradigm was a mixture of the 'systematic design paradigm' and the 'pragmatic design paradigm' (cf. Visscher-Voerman et al., 1999).

The characteristics of portfolio design are summarized in Table 7-2 on page 276. It appears that the context influenced the perspective to change as assumed. Furthermore, it can be observed that the pragmatic design paradigm was applied in all three cases. A possible explanation for this might be that the innovation is rather complex. 'Active initiation' (cf. Fullan, 2001) might be needed in environments that are not yet competency-based. This means that a quick start is needed to get to keep the parties involved interested. In addition, the projects that were reviewed in the case studies all had clear deadlines. To meet the deadlines, the developers were focused on the implementation of a first set of materials. The outcomes can be used to further clarify the meaning of portfolio use.

Looking at the characteristics of the implementation process across the three cases the following can be observed. The teachers' case involved a one-off experiment to see whether portfolio use could enhance the identification, assessment and recognition of the competencies of highly-skilled immigrants. It did not contribute to an improved understanding of the implementation process of a portfolio. It was observed from this case that the availability of a national competency-based assessment procedure that has a legal basis is not enough to ensure the valid assessment of the competencies of highly-skilled immigrants. Of equal importance seems to be that the portfolio candidates receive proper guidance and support with respect to the assessment standards, the portfolio evidence, and the cognitive processes that relate to portfolio development (self-assessment and reflective thinking). The role of a portfolio adviser seems indispensable. It was suggested that portfolio development should be part of an orientation programme.

From the medical doctors' case it was observed that the innovation was extremely complex because the dominant evaluation paradigm still focuses on constructs like 'knowledge', 'skills', 'problem-solving skills' and 'attitudes' separately instead of on one integrated construct namely 'competence' (Schuwirth & Van der Vleuten, 2005). The pilot projects were initiated because their objectives comply with international, national and even institutional trends to contribute to the development of PLAR procedures. The projects were financially supported by the Knowledge Centre EVC because it stimulates the use of PLAR practices for non-traditional groups. The implementation process was characterized by what Fullan (2001) calls 'active initiation'; there was a need for a quick start and concrete results that could serve as an impetus for further discussions on what portfolio use could mean in practice. Nuffic served as an 'external change agent' and invested most of its time in the development of the portfolio materials and trainers from Nuffic offered the portfolio development workshops. It was concluded in Section 6.2.5 that the future portfolio assessors have gained too little experience with portfolio assessment to ensure a change in their behaviour or beliefs. As a consequence, there is a chance of what Fullan (2001) calls 'false clarity'. It seems that the training of assessors in the assessment culture is needed to understand what portfolio assessment implies. In addition, the portfolio assessors should get the opportunity to practice portfolio assessment and discuss their experiences with their peers (cf. Fullan, 2001). It was suggested in Section 6.2.5 that portfolio use for highly-skilled immigrants should be linked to a wider innovation to ensure adequate support from management. It is important to realize that the foreign-trained doctors form only a small percentage of students enrolling at the faculty level. It was also observed from the case that the initiation of the national assessment procedure for medical doctors has had a negative influence on the development of a shared meaning of portfolio use at the faculty level. Some of the portfolio assessors who participated in the evaluation of the portfolio format have responded that the Ministry should decide whether portfolio should be part of the national procedure. This reveals that they find it difficult to take position in the discussion.

When looking at the implementation process in the refugees' case it becomes clear that the implementation process has been simplified by focusing on portfolio use for development purposes. Since 2001, portfolio use has gradually been implemented into the integration process to identify the competencies of refugees. The expectation are high, but the practical initiatives that actually result in the assessment and recognition of competencies are still limited (Nieuwhof, 2002). Nevertheless, counselling organizations have started using portfolio to activate refugees, empower them and make them more aware of their own responsibilities in finding employment (König, 2004). The counselling organizations that were involved in the pilot project wanted to experiment with portfolio use in addition to their regular counselling process. They had heard about portfolio use and PLAR but had not gained practical experience prior to the pilot project. The counsellors received support from the other project partners during the implementation process. They were actively involved in the specification of the portfolio requirements, its implementation and evaluation. The portfolio candidates were trained in the portfolio processes.

The characteristics of the implementation process are summarized in Table 7-2 on the next page. It seems that successful implementation depends on compliance with the assessment culture, the availability of clear assessment standards, the involvement of staff members who are likely to fulfil the role of portfolio assessors or portfolio advisors in all phases of portfolio design and implementation and on the involvement of trained assessors and trained portfolio candidates. The implementation of a development portfolio. However, a development portfolio requires individual counselling and the active use of the instrument during a development process (e.g. the integration process in the Dutch society or a study programme). The results of the cross-case analysis with respect to the context and design and implementation process will be further discussed in Section 7.3.

Cross-case analysis of context characteristics and portfolio design and implementation Table 7-2

Context characterist	ics and portfolio design and	implementation across the three ca	ases		
Issues of analysis	Teachers	Medical doctors	Refugees	Conclusions	Observations
Evaluation and recognition policy	Focus on foreign diplomas (international credential evaluation is the main instrument used).	Similar as teachers. Change was announced and implemented in 2005 (exam-based approach).	Similar as teachers. Different parties have argued for linking international credential evaluation and PLAR.	Focus on foreign diplomas.	Gradual acknowledgement that other forms of learning should be taken into account as well.
Professional sector	Competency-based.	Neither content-based nor competency-based, but problem- based (cf. Schuwirth & Van der Vleuten, 2005).	Counselling organizations have started using portfolio to identify the competencies of refugees. For assessment and recognition one is dependent on the availability of an PLAR procedure for a given profession. Emphasis was put on the development function.	The teaching sector had most experience with competency-based assessment.	Competency-based assessment is still in development in the higher educational sector (cf. ITS/IOWO, 2004).
Characteristics of portfolio assessors	Familiar with assessment culture. Trained in portfolio assessment.	Familiar with traditional exams (knowledge, skills and attitudes). No training in assessment culture.	Familiar with individual counselling procedures. No training in portfolio assessment.	0	Experience with portfolio assessment is still limited.
Characteristics of portfolio candidates	No experience with portfolio development. Little experience with reflective thinking and self- assessment.	Similar as teachers.	Similar as teachers.	Highly-skilled immigrants need practice in reflective thinking and self- assessment.	An orientation programme was suggested in the teachers' case to enhance the understanding of Dutch competency-standards and offer adequate support during the portfolio development process.
Design process	Fidelity perspective to change. Pragmatic design paradigm.	Evolutionary perspective to change Pragmatic design paradigm	Mixture of fidelity perspective and evolutionary perspective to change. Mixture of the systematic and pragmatic design paradigm.	The perspective to change seems to depend on the context characteristics. Active initiation seems to be needed in environments that are not yet compe- tency-based. The pragmatic design paradigm assures active initiation.	To avoid 'false clarity' the outcomes of first experiences should be used to develop a shared meaning of what portfolio use means in practice.

Issues of analysis	Teachers	Medical doctors	Refugees	Conclusions	Observations
Implementation	The availability of a natio-	Implementation process was	Implementation was simplified by	Successful implemen-	Complexity of change seems to
process	nal competency-based	focussed on a first quick start	focusing on portfolio as a	tation seems to depend	be influenced by the function of
	assessment procedure is	(initiation of change).	development tool.	on: compliance with	portfolio and compliance with
	not sufficient to ensure the	Involvement of future portfolio	To enhance the assessment and	assessment culture, clear	assessment culture.
	valid assessment of the	assessors was too limited to	recognition of actual competen-	assessment standards,	
	actual competencies of	assure future implementation.	cies, other stakeholders need to	active involvement in all	
	highly-skilled immigrants.	More practice with portfolio	participate, e.g. employers and	phases of portfolio design	
	The portfolio candidates	assessment is needed to assure	educational institutions.	and implementation,	
	need to be properly prepa-	change of behaviour and beliefs;	The availability of adequate	trained assessors and	
	red to take part in the	this requires training and further	assessment standards and	trained portfolio	
	assessment.	staff development activities.	assessment instruments will	candidates.	
			depend on the specific		
			professional sector concerned.		

 Table 7-2
 Cross-case analysis of context characteristics and portfolio design and implementation (Continued)

Legend: EVC: Erkennen Verworven Competencies (Recognition of Acquired Competencies); the international equivalent term is PLAR (Prior Learning Assessment and Recognition).

7.1.2 Cross-case analysis of the portfolio characteristics

The results of cross-case analysis of the portfolio characteristics are discussed below. First, the product characteristics of the portfolio instrument across the three cases are compared. Second, attention is given to the characteristics of the portfolio development by the portfolio candidates, and finally, the characteristics of portfolio assessment are reviewed. The cross-case analysis uses the frameworks of empirical findings of portfolio use that were presented at the end of each case study. If needed, reference is made to the empirical and theoretical building blocks that were discussed in previous sections of this thesis. Table 7-3 gives an overview of the frameworks and the building blocks that were used. The results of the cross-case analysis are summarized in Table 7-5 on page 289.

	Teachers' case	Medical doctors' case	Refugees' case	Theoretical building blocks
Framework of empirical findings	Table 6-8, page 190, Section 6.1.6	Table 6-24, page 234, Section 6.2.6	Table 6-39, page 267, Section 6.3.6	-
Product characteristics	EBB2-1: Table 6-4, page 174, Section 6.1.2	EBB2-2: Table 6-14, page 210, Section 6.2.2	EBB2-3 : Table 6- 29, page 248, Section 6.3.2	TBB2: Table 4-5, page 81, Section 4.1.4
Portfolio development process	EBB3-1: Table 6-5, page 179, Section 6.1.3	EBB3-2: Table 6-19, page 219, Section 6.2.3	EBB3-3: Table 6- 33, page 255, Section 6.3.3	TBB3: Table 4-9, page 92, Section 4.2.3
Portfolio assessment process	EBB4-1 Table 6-6, page 183, Section 6.1.4	EBB4-2: Table 6-21, page 226, Section 6.2.4	EBB4-3: Table 6- 36, page 259, Section 6.3.4	TBB4: Table 4-12, page 100, Section 4.3.3.

Table 7-3Overview of the empirical building blocks and theoretical buildings blocks that were used for the
cross case analysis of the characteristics of the portfolio instrument

Cross-case analysis of the product characteristics

The findings of the cross-case analysis of the product characteristics are presented below, addressing the five issues that were also distinguished in TBB2, namely: function, impact (focusing on the immediate outcome), structure and content, standards, and the evidence as proof of competence.

Function

The main function of the portfolio instrument was different in all three cases. In the teachers' case, the main function of the portfolio instrument was assessment. Its use was aimed at the identification of competencies that meet the assessment standards, which were competencybased. It was concluded in the case that the actual characteristics of the portfolio candidates and the implemented characteristics of the portfolio development process were the reason that the assumed function was not realized. The completed portfolios could not be used for assessment purposes but instead they were used as an information tool. In the medical doctors' case the portfolio instrument was introduced as an information tool from the start. It was used to enhance communication about prior learning experiences between the members of the exam committee and the foreign-trained doctors. It was not clearly specified how the information would be used by the exam committee because the exploration of the possible role that the portfolio instrument could fulfil was one of the aims of the pilot projects. It was observed from the case that the portfolio candidates were confused about the function. Therefore, it was concluded that the function should be clear from the start. The portfolio assessors felt that the information supplied by the portfolio instrument could be used for assessment purposes if the portfolio instrument were embedded in a wider assessment procedure. Some assessors noted that portfolio development seems especially useful for the portfolio candidates themselves. It could raise their awareness about what it means to work as a doctor in the Netherlands. Therefore, it was concluded that there seems to be acceptance for both the assessment function and the development function of the portfolio instrument. In the refugees' case the main function of the portfolio was development. It was intended that the portfolio would inform the refugees counsellor about their prior learning experiences and their targeted objectives. The counsellor could use this information to steer and monitor the orientation and integration process of the refugee.

The empirical findings seem to correspond with the findings from the literature that were discussed in Section 4.1. All three functions – assessment, information and development- were found in the literature. Smith and Tillema (2003) distinguish between an assessment portfolio and a development portfolio. Elshout-Mohr and Van Daalen-Kapteijns (2003) address the information function of portfolio. However, they emphasize that it should be clear at the beginning of the process how the information is primarily to be used: for assessment or development purposes. This is in line with the observations from the medical doctors' case. Some of the candidates questioned the usefulness of portfolio development because they did not know how the exam committee would use the information. Elshout-Mohr and Van Daalen-Kapteijns (2003) warn of the combined function of the portfolio instrument, especially if the candidates are inexperienced users of the portfolio instrument. A combined function was not implemented in any of the cases. It seems that this was a good decision; a combined function would have made the portfolio development even more complex than it already was.

Impact (focusing on the immediate outcome)

The impact of portfolio development is directly linked to its function. The case studies only provide information about the immediate outcome of portfolio use for the portfolio assessors and the portfolio candidates. The observations made in each case are briefly reviewed below. The teachers' case shows that the assumed outcomes for both target groups were only partially met. It was expected that the portfolio would enable the portfolio assessors to identify competencies that had already been developed by the portfolio candidate. However, it was observed in the case study that the characteristics of the portfolio candidates combined with the implemented characteristics of the portfolio development process meant that the portfolio candidates, portfolio development contributed to the development of their communication skills as they had developed a well-structured overview of prior learning experiences in the Dutch language, but it did not result in recognition of their competencies.

In the case study of medical doctors, the intended outcome was less ambitious than for the teachers. It was intended that the portfolio would provide information to the members of the exam committee, which could enhance the quality of the intake interview, because the exam committee members could ask more in-depth questions. The case study shows that this outcome was also observed. Those who reviewed the portfolio format from an assessment perspective have commented that the portfolio could be used to screen foreign-trained medical doctors (FMDs) during the pre-selection phase. For the FMDs, portfolio development resulted in a well-structured overview of prior learning experiences in the Dutch language. This enhanced their communication about prior learning with members of the exam committee. They could better explain the relevancy of their prior learning experience in the Dutch context. The comments show that the immediate outcome of the portfolio instrument could be improved if there was a clear set of assessment standards as well as guidelines for the type of evidence that is admissible to prove that these standards have already been met.

In the refugees' case, it was concluded that the implemented portfolio format provides sufficient information to the counsellor to plan and steer the orientation and integration process of the refugee so that it contributes to his targeted objectives. It was noted that there could be financial or legal obstacles that make it difficult to realize the targeted objectives. It is therefore important that the candidate identifies possible obstacles as part the personal development plan. The portfolio assessors concluded that the portfolio candidates found it useful to have had an empowering effect on the refugees. The portfolio candidates found it useful to have a well-structured overview of prior learning experiences in the Dutch language. This makes it easier to communicate about their prior learning experiences in the Dutch language and to explain the relevancy of these experiences in the Dutch context. However, the portfolio did not result in the recognition of their actual competencies in any of the cases.

Structure and content

The comparison of the structure and content of the portfolio formats across the three case studies shows that a prescribed structure was preferred regardless of the main function. The implemented format contained different parts that each had its own function. In all three cases the different parts contained open, probing questions to encourage reflection. The preference for a prescribed structure, regardless of its main function, can probably best be explained by the fact that the portfolio candidates were inexperienced in portfolio development. Therefore they felt insecure about what was expected of them and how they should structure the information. A prescribed portfolio format seems to be a helpful tool to guide and support them in the development of a portfolio.

Further analysis of the portfolio formats across the three cases shows some differences that relate to the different functions. In the teachers' case, the portfolio format was divided into two part: an application form that gathered information that was useful for selection purposes, and a part that addressed self-assessment in order to define competency claims accompanied by evidence. This portfolio format for the teachers did not contain a part that addressed the specification of a personal development plan. The portfolio format that was used for the medical doctors addressed different content elements. The case study shows that appreciation of the content elements depends on the perspective of the portfolio assessor. Those who view the portfolio from a development perspective evaluated the following content elements as relevant:

- Self-assessment of language proficiency plus the opportunity to learn and practice the language;
- Experience in the professional sector in the Netherlands;
- Reflection on the cultural and professional differences between the Netherlands and the home country;
- Possibilities for professional development (abroad and in the Netherlands);
- Future prospects.

Portfolio assessors who evaluated the content of the portfolio from an assessment perspective indicated that the portfolio should only include factual information that is easily verifiable. Both assessor groups seem to value information on:

- Personal data;
- Formal learning (general content and structure of initial higher education programme, as well as possible advanced study programmes); and
- Work experience (main tasks and responsibilities in previous positions).

However, it was noted that these descriptions should not be too elaborate. Various faculty members indicated that it must not take more than twenty minutes to read the portfolio. This seems unrealistic. Beijaard et al. (2002) note that portfolio assessment takes about two hours per portfolio (including the interview).

In the case of the refugees, the portfolio format contained some parts that addressed the information function (it gathered information on personal data, formal learning experience, non-formal learning experience including work experience). However, it also included parts that explicitly addressed the development purpose. The candidates were encouraged to specify their targeted objectives and write a personal development plan that would contribute to achieving these objectives. The appendices contained a log and network cards.

In summary, the cross-case analysis shows that a prescribed format is preferred by insecure and inexperienced users for portfolio development regardless of the main function of the portfolio instrument (assessment or development). A prescribed format seems to offer adequate support during the portfolio development process. Appreciation of the content of the portfolio format depends on the perspective of the portfolio assessor (the 'coach' is looking for different information than the 'assessor'). All portfolio assessors want to be informed about personal data, the formal learning experiences of the candidate and the former work experiences of the candidate addressing the main tasks and responsibilities. The wish to be informed about formal learning activities separate from non-formal learning experiences shows how dominant the traditional input approach is. If the focus were to be on the output of learning processes it would not be important in which learning processes the applicant had participated as long as he can prove that he has met certain output standards. Reflective information and information on future prospects and how these could be reached are limited to the development portfolio. The assessment information should mainly include information that is verifiable by means of exam scores or other sources.

Standards

The cross-case analysis of the applied standards shows that there were competency-based standards available only for portfolio development by the teachers. The standards applied in each case are briefly discussed below. The teachers were encouraged to analyse their prior learning experience using a 'competency-based model' (Whitaker, 1989). It involved a set of ten core competencies that were defined by Stoas (2000); see Table 5-5 on page 123 for an overview. The competency statements did not make reference to different levels of achievement. The case study shows that the foreign-trained teachers did not understand the meaning of the competency definitions. They had difficulty defining competency claims and submitting adequate evidence. There were no assessment standards available for the medical doctors. They were not expected to define competency claims. Instead they were asked to provide information on different content issues that were derived from Framework 2001. The case study shows that the medical doctors found it difficult to judge the relevancy of their experiences and to determine the level of detail in the portfolio descriptions. The lack of standards also made it more difficult for the trainers (who served as portfolio advisors) to give formative feedback on the portfolio content. Perhaps the introduction of a national assessment procedure for the assessment of foreign-trained doctors would put the definition of a national set of competency-based standards for medical doctors on the agenda of educators in the field of medical science.

In the case of the refugees, the standards for portfolio development were not specifically addressed. Emphasis was put on the development function. The refugees were encouraged to inform their counsellors on their prior learning experiences addressing a number of content elements (personal data, formal education, informal training and work experience). Furthermore, they were asked to define their targeted objectives and think about how these could be realized. The standards for the analysis of prior learning experiences were derived from the targeted objectives (which were defined by the portfolio candidate). To enhance the social or formal recognition of competencies, it is essential that the targeted objectives are linked to standards that relate to Dutch diplomas. Klarus (1998) recommends using the Dutch qualification structure

whenever possible. However, for the higher education sector, outcome-based standards are not readily available. It will depend very much on the specific profession whether there is a clear set of standards that can be used for the analysis of prior learning experiences. Another concern is whether the refugees will understand the standards, if these are available, and whether they can submit adequate evidence to support possible competency claims.

The cross-case analysis seems to contribute to the finding from the literature that assessment portfolios use assessment standards that are externally defined (by the recognition body). It will depend on the implemented assessment paradigm in a particular sector whether these standards are based on competencies or on other constructs, for example knowledge, skills and attitudes. The latter approach has been dominant in the medical sector for quite some time (Schuwirth & Van der Vleuten, 2005). The lack of a national accepted set of competency-based standards in the medical sector combined with the 'information' function has led to the description of experiences receiving more attention than the exploration of the learning that results from these experiences. TBB1 explained that competency definitions are context and culture specific. This implies that highly-skilled immigrants might not easily understand their meaning. The teachers' case confirms this finding from the literature. It was observed that highly-skilled immigrants need adequate guidance. It was suggested by the portfolio assessors to make portfolio development part of an orientation programme. During this programme the portfolio candidates could be informed about the meaning of the competency standards also by observing in Dutch classrooms. The orientation programme would also offer the possibility to gather or reconstruct portfolio evidence.

Evidence as proof of competence

Cross-case analysis of the type of evidence that could be included as proof of competence shows that in all three cases the portfolio candidates were encouraged to make an overview of the different types of evidence they had available. To illustrate what materials could be used as evidence, different examples were mentioned during the portfolio development process, e.g. products of experience, diplomas, course descriptions or references. There were no prescribed evidence categories in any of the cases that would be accepted as proof of competence. Based on the findings of the literature, it was expected that this would have been so in the teachers' case because in that case the portfolio was used as an assessment instrument. The teachers were encouraged to define competency claims, but no guidelines were given with respect to the type of evidence that could proof these claims. In the case of the medical doctors, this was different. The faculty members wanted to be informed about prior learning experiences, but they did not want to use the portfolio as an assessment instrument. For this reason, they were uncertain about the importance of the portfolio evidence. Putting an emphasis on evidence would suggest that the portfolio could lead to exemptions. If the portfolio were to be used as an assessment instrument, the evidence should be limited to factual information that is verifiable, for example, by exam scores. Beijaard et al. (2002) call this 'formal evidence'. The case study also shows that some of the assessors questioned whether they were capable of judging the quality of the submitted evidence, especially with respect to the 'authenticity' of the included documents (in the sense of it being genuine and not fraudulent or false). The quality criteria for portfolio evidence will be further addressed as part of the cross-case analysis of the portfolio assessment process. In the case of the refugees, the portfolio evidence received little attention partly because the portfolio instrument was used as a development tool. However, the refugees were encouraged to make an overview of all the evidence available.

The observations from the cross case analysis seem to correspond with the findings from the literature that show that assessment portfolios generally include evidence of best performance and no reflective information, while the specifications for a development portfolio are not

prescriptive (see TBB2 on page 81). It is up to the portfolio candidate to determine what evidence to include. A problem that arose from all three cases is the fact that the portfolio candidates have little evidence available. Most of them are in possession of diplomas and certificates, but some of the refugees may not be able to produce these. None of the portfolio candidates were prepared to bring products of work or other attributes that could serve as evidence in a portfolio of prior learning and work. This gives rise to the following question: should the portfolio candidates be given the opportunity to reconstruct portfolio evidence, or gather evidence, for example in a skills lab, during an internship or at work under supervision? Another question that arises from the submitted evidence is how the foreign diploma relates to the competency-based standards, especially if the educational programmes were based on a discipline-oriented learning paradigm?

The conclusions and observation from the cross-case analysis of the product characteristics are presented in Table 7-5 on page 289. Next comes the discussion of the cross-case analysis of the portfolio development process by the portfolio candidates.

Cross case analysis of the characteristics of portfolio development

The results from the cross-case analysis of the characteristics of the portfolio development process are presented below. Attention is given to the three issues that were also distinguished in TBB3, namely: steps and strategies in the portfolio development process, the measures for guidance and support and the main roles and responsibilities

Steps and strategies in the portfolio development process

The cross-case analysis of the applied steps and strategies in the portfolio development process shows that all three cases emphasised the 'bottom-up' strategy. The portfolio candidates were encouraged to start with an inventory of prior learning experiences and afterwards they were asked to specify the learning outcomes and relate these outcomes to the applied standards (if available). As became clear above, only the teachers were asked to define competency claims based on a self-assessment, this was not required in the cases concerning the medical doctors and the refugees. As a consequence, the link to Dutch assessment standards was less explicit in the latter two cases

Table 7-4 on the next page shows the relationship between the common phases in the process of portfolio development and the different parts in each portfolio format. The teachers did not receive any additional support, while the medical doctors and the refugees took part in a portfolio development course. From Table 7-4 it can be observed that the different parts do relate to the common steps in the portfolio development process. However, the observations show that the availability of a transparent set of outcome-based standards is essential regardless of the purpose. Portfolio development requires self-assessment, but this cannot be done without a clear frame of reference that is understood by the candidates. Without a transparent set of assessment standards it is difficult to judge the relevancy of previous experiences and write portfolio descriptions that are concise and to-the-point. However, the teachers' case shows that the availability of competency-based standards is not sufficient. The highly-skilled immigrants need further assistance and practice in reflective thinking and self-assessment to develop portfolios of sufficient quality.

Common		Medical		
steps	Teachers' case	doctors' case	Refugees' case	Observations
Identification of prior learning experiences Selection of experiences	Part 1: Overview of basic data	Part 1: Broad inventory (CV)	Part 1: Broad inventory (CV)	-
Selection of experiences Specification of learning outcomes	Part 2 – Part 4: Portfolio descriptions addressing: formal learning, non-formal training and work experience	Part 2 - Part 4: Portfolio descriptions addressing formal learning, work experience and scientific research	Part 2: Portfolio descriptions addressing post- secondary education and work experience	For the teachers, a set of ten core competencies was available as a frame of reference. For the medical doctors and the refugees, outcome-based standards were not available.
Comparison of learning outcomes with assessment standards	Part 5: Open questions Part 6: Self-assessment	Part 5 and 6: Experience in Dutch sector and possibilities for professional development	Part 3: PDP; the targeted objectives of the refugee were taken as a frame of reference to specify the PDP	They were not asked to define competency claims. The lack of standards made it more difficult to judge the relevance of prior experiences and to determine the degree of detail in the portfolio descriptions.
Gathering evidence	Part 7: Portfolio evidence	Cross-reference with evidence in Part 2 – 6.	Part 4: Portfolio evidence	The teachers were encouraged to submit evidence to support the competency claims (no clear guidelines were given). Highly-skilled immigrants have limited evidence of learning (rather they have evidence of experience).
Write PDP	-	Part 7: Future prospects	Part 3: PDP	-

 Table 7-4
 Relationship between the common steps in the portfolio development process and the different parts in the prescribed portfolio format across the three cases

Measures for guidance and support

The cross-case analysis of the measures for guidance and support show that inexperienced candidates benefit from a portfolio development learning line. As mentioned earlier, the teachers did not receive any support. They had to develop the portfolio independently at home. During the evaluation, the portfolio assessors suggested to make portfolio development part of an orientation programme that would prepare the teachers for the assessment process. The assessment standards could be explained in this programme and the teachers could practice self-assessment and develop reflective skills. It was also mentioned , that perhaps they could be given the opportunity to reconstruct portfolio evidence to support their claims. These suggestions were not implemented or tested. Evaluation studies concerning the assessment procedure of prospective teachers show that portfolio development was also problematic for Dutch applicants. Beckmann et al. (2000) point out that portfolio candidates with no prior experience in the teaching sector had difficulties understanding the educational jargon used to explain the core competencies. They needed more guidance and support to develop portfolios of substantive quality.

The medical doctors received support by means of an official portfolio development course as suggested in TBB3. The development of this course was an evolutionary process (see Table 6-17 on page 215 for an overview of the implemented characteristics of the different courses that were offered). The final course contained five workshops of four hours each. In addition to the

workshops, the prescribed format was identified as a useful supportive tool, as was the portfolio development manual that contains a model portfolio. Some of the portfolio assessors questioned whether the supportive measures would not invalidate the portfolio assessment process. They mentioned that the portfolio candidates could easily copy the descriptions in the manual. This is why the portfolio evidence is so important. It is the task of the portfolio assessors to judge if there is sufficient evidence to support the portfolio descriptions. In the event of doubt, one needs to gather additional evidence that either supports the initial interpretation or refutes it. The characteristics of portfolio candidates were very positive about the implemented measures of guidance and support. The case study concerning the refugees supports the positive findings for the use of a portfolio development course. The refugees were very positive about the portfolio development learning line that consisted of:

- six workshops of four hours each;
- reflective group assignments;
- a digital portfolio format;
- a manual for portfolio development; and
- individual guidance and support during the workshops as well as during the regular counselling process.

The support was provided by external trainers as well as the counsellors of the refugees. The case study shows the following suggestions for improvement: more collaboration with other participants, more reflective assignments to identify strengths, more practice in the presentation of competencies and more differentiation in supportive measures. Some refugees wanted more workshops, while others preferred to work on portfolio development independently. The counsellors seems to play an important role in determining the needs of the portfolio candidate with respect to the support measures.

From the observations across the cases it can be concluded that inexperienced portfolio candidates benefit from a portfolio development learning line that combines different measures of support, including workshops, reflective group assignment, a prescribed portfolio format, a portfolio development manual, and individual guidance and support. It was observed in all three cases that the portfolio candidates mainly had formal evidence (diplomas and certificates). To increase the fairness of assessment they should be given the opportunity to reconstruct or gather evidence during the portfolio development process. In the teachers' case it was suggested to make portfolio part of an orientation programme. However, the question was raised of what the function of portfolio would be in such a programme: an assessment, development or instruction tool?

Main roles and responsibilities

The cross-case analysis with respect to the main roles and responsibilities also gives a uniform picture. In all three cases it became evident that it is very important that the roles and responsibilities of the different people involved in the process are clearly specified. In the case of the teachers, the portfolio candidates could contact the general portfolio assessor for further questions. None of them did, because the portfolio candidates wondered if this would have an influence on the assessment outcome. It was therefore concluded that a combined role is inappropriate. In the medical doctors' case, the roles of the portfolio advisor and portfolio assessor were separate; the trainers from Nuffic served as portfolio advisors, while the members of the portfolio advisors were people at the faculty level who are familiar with the portfolio assessment process, for example, admissions officers or student counsellors. This would also enhance the implementation of portfolio use at the faculty level. In the United States and the United Kingdom, where there is more experience with Prior Learning Assessment and

Recognition (PLAR), the position of a 'PLAR counsellor' or 'portfolio advisor' is common at the faculty level. It is their task to give formative feedback to the portfolio candidate before the portfolio is submitted to the portfolio assessors (cf. Whitaker, 1989; Johnson, 2002).

In the case of portfolio development by refugees, the external trainers (from Nuffic, *UAF* and *CWI*) served as portfolio advisors together with the regular counsellors of the refugee (from *COA* or *SVA*). They gave formative feedback to the refugee on how he could improve the quality of his portfolio. The counsellors from *COA* or *SVA* also assessed the portfolio content to steer and plan the orientation process (formative assessment). Hence, they were also portfolio assessors. To enhance the future use of the portfolio instrument it is important that the portfolio development learning line be integrated into the regular counselling procedure (as is planned by *COA*). To enhance the social or formal recognition of competencies, it is important that the portfolio candidates relate their learning experiences to relevant Dutch standards. It was questioned if the counsellors from *COA* and *SVA* could offer sufficient support if the portfolio were to be used for assessment purposes. With reference to the observation in the case of the medical doctors, it seems more appropriate if the portfolio advisor were from the recognition body and was well-informed about the portfolio assessment process, the assessment standards and the accepted evidence of competency development.

The cross-case analysis supports the findings from the literature by distinguishing between three roles, that of portfolio candidate, portfolio advisor and portfolio assessor. The conclusions based on the cross-case analysis of all three dimensions of the portfolio development process are summarized in Table 7-5 on page 289. The results of the cross-case analysis of the characteristics of portfolio assessment process are presented below.

Cross case analysis of the characteristics of portfolio assessment

The cross-case analysis of the portfolio assessment process addresses the two issues that were also distinguished in TBB4. First, the main purpose of portfolio assessment is compared across the three cases. Second, the criteria to warrant the quality of portfolio assessment are discussed.

Main purpose of portfolio assessment

The cross-case analysis of the main purpose of portfolio assessment shows that the implemented purpose was different in all three cases. The main purpose of portfolio assessment process in each case is briefly reviewed below in combination with the implemented function of the portfolio instrument. The most important observations are summarized in Table 7-5 on page 289.

In the case of the teachers, the implemented purpose of portfolio assessment was formative assessment focusing on the identification of competencies. The summative assessment decision was taken on the basis of the outcomes of other assessment instruments as well, namely: criterion-based interviews (to assess planning and reflection competencies), observation in the classroom and self-assessment. However, the quality of the completed portfolio was insufficient to take formative assessment decisions. The purpose experienced was described as 'informative'; it gave the assessors better insight into the prior learning experiences of the candidate. The assessors could use this information to draw inferences about the competencies that could possibly have been developed during the described experiences, but the completed portfolios did not provide evidence of these inferences. This implies that other assessment instruments are needed to check if these inferences are correct.

In the medical doctors' case, the implemented purpose of portfolio assessment was 'informative' assessment; it was intended from the start that the portfolio would inform the portfolio assessors

about the prior learning experiences of the candidate. The case study shows that the assessors who view the portfolio as an information tool appreciate the implemented portfolio format. The submitted information enabled them to get a better picture of the candidate and ask more indepth questions during the intake interview. The assessors who evaluated the portfolio from an assessment perspective indicated that the portfolio did not contain the information needed to take a selection decision. There was a need for more objective information as well as evidence of the portfolio descriptions. It was concluded that the portfolio could be used for assessment purposes if the following conditions would be met:

- a clear set of assessment standards (preferably competency-based);
- agreement on the kind of evidence that is admissible to support competency claims; and
- the portfolio should be embedded in a wider assessment procedure.

The assessors noted that the portfolio instrument should be complemented with instruments that address medical knowledge and skills and communication skills and attitudes (or professional behaviour). This observation shows that the assessors related to the traditional content-based learning paradigm. Schuwirth and Van der Vleuten (2005) note that the traditional approach is gradually being replaced by a competency-based approach. It can be observed from the case study that the assessors do not yet relate to this newer approach.

In the case of the refugees, the portfolio assessment served a formative purpose. The counsellor of the refugees used the information to steer and plan the integration and orientation process. This is in line with the implemented function of the portfolio instrument in this case (development). Portfolio assessment was added to the regular counselling process that included various individual counselling sessions.

Criteria to warrant the quality of portfolio assessment

Finally, attention was given to the cross-case analysis of the criteria applied to warrant the quality of (portfolio) assessment. The cross-case analysis shows that this issue received most attention in the teachers' case which can be explained by the implemented function of the portfolio instrument (formative assessment aimed at the identification of competencies). In the case of the medical doctors, the portfolio instrument was implemented as an information tool, and in the case of the refugees it was used as a development tool. Nevertheless, the portfolio was assessed in all three cases and the applied quality criteria for each case are briefly summarized below.

In the teachers' case, an assessment protocol was available to inform the assessors (and outsiders) on the assessment process. An assessment sheet for the judgement of the quality of the submitted evidence was available to assist the portfolio assessors. This sheet was based on the quantitative approach discussed by O'Grady (1991). The framework was described in Section 4.3 (see Table 4-10 on page 94). It uses the following criteria to judge the quality of the submitted evidence: authenticity, retention, relevance, quantity and variety. However, the assessors have to make their own interpretations of the included materials, and they should reach a consensus about the individual interpretations of the materials. The portfolios were assessed by two assessors who were experts in the teaching profession. They were trained in all parts of the assessment procedure. However, in this case, the implemented measures to warrant quality could not ensure that the assessment decision was valid. The assessors felt that the assessment was invalidated by the characteristics of the portfolio candidates and the implemented characteristics of the portfolio development process. The candidates were unfamiliar with the assessment culture including portfolio development. They should have been better prepared for the process.

In the case concerning the medical doctors, the portfolio was reviewed by at least two assessors who were medical experts or experts in attitude or language training. However, the assessors were not trained in the assessment culture and had no prior experience with portfolio assessment. No supportive instruments were submitted to the assessors like an assessment sheet for the judgement of the portfolio evidence. The portfolio was used in addition to the common instruments used at the faculty level as part of the enrolment procedure. At one faculty, this is a selective process, at the other faculties this is not. Normally, the selection decision is taken on the basis of an interview, at the other faculties the common instruments are an interview or a multiple choice exam and an interview. It could be observed from the case study that the assessors appreciate the following quality criteria:

- First of all, the recency of the portfolio evidence; if the portfolio is used for assessment purposes, some of the assessors mentioned that the portfolio candidate only had to include evidence that related to the last five years. In this respect, reference was made to the BIG act that states that one is excluded from the BIG register if one has not practiced medicine for more than five years;
- Second, the authenticity of the portfolio evidence; it was noted that specific expertise is required to judge the authenticity of the submitted documents. The assessors felt that they were not capable of doing this; and
- Third, practicality; it was mentioned that it should not take more than twenty minutes to read a
 portfolio.

It was also noted that a transparent set of assessment standards is needed if the portfolio instrument is to be further implemented. It is expected that the introduction of a national assessment procedure will give further impetus to the definition of a set of competency-based standards, although this procedure also relates to the dominant construct-oriented approach that defines medical expertise in terms of knowledge, skills, problem-solving skills and attitudes.

The case of the refugees did not offer further evidence regarding this issue. As discussed earlier, the emphasis was on the development function of the portfolio instrument. The portfolio was reviewed by the refugees' counsellors to plan and steer their orientation and integration process. Table 7-5 provides an overview of the most important observations that were discussed above. These will be used in Section 7.2 for the adaptation of the theoretical building blocks.

Portfolio character	istics					
Main topic	Issues of analysis	Teachers	Medical doctors	Refugees	Conclusions	Observations
Portfolio product Main function of portfolio Impact (immediate outcomes) Structure and conter of portfolio	portfolio	Assessment (identification of competencies). The assessment function was not realized because the FTs were insufficiently prepared for the self-assessment of the core competencies. Instead the portfolio was used as an information tool.	Information to enhance communication. It was not specified how the information would be used by the exam committee. It seems that both purposes are accepted. As an assess- ment instrument, portfolio should be part of a wider assessment procedure.	Development (steer and monitor orientation and integration process), although a combined function was intended (assessment to enhance social and formal recognition)	The functions correspond with the functions addressed in the literature. The function should be clearly specified before the portfolio development process starts. The function should relate to either assessment or development. A combination of functions is very complex for beginning users (Elshout-Mohr & Van Daalen-Kapteijns, 2003).	If the portfolio is used for assessment purposes it is very important that the candidates understand the assessment standards and receive adequate support in developing the portfolio.
		For the assessor: informative (it gave insight in prior learning experiences) For the FT: it has resulted in a documented overview of prior learning experiences in the Dutch language. This has enhanced their communication skills (contribute to empowerment and self-confidence)	For the assessor: informative (see notes teachers' case) For the FMD: contributes to empowerment and self- confidence (see notes teachers' case)	For the assessor: formative assessment (submitted information was used to plan and steer the orientation process) For the refugee: contributes to empowerment and self-confi- dence (see notes teachers' case), plus refugees became more aware of 'targeted objec- tives' (specification PDP)	The portfolio instrument informs (future) assessors about prior learning experiences and contributes to the empowerment of the highly-skilled immigrants. It enhances their communication skills in the Dutch language and contributes to PDP (if the function of the portfolio is development- oriented)	 The impact can be increased by: transparent assessment standards that are understood by the portfolio candidates clear guidelines for the type of evidence that is accepted as proof for learning (competency claims).
	Structure and content of portfolio	 Prescribed, thematic format. Open, probing question to stimulate reflection Format contained seven parts: Personal data Formal education Non-formal education Work experience Open questions on Dutch teaching sector Self-assessment and competency claims Evidence Part 1-5 have formed the application form to select FT 	Prescribed, thematic format. Open, probing question to stimulate reflection Format contained seven parts: 1. Curriculum Vitae 2. Formal learning 3. Work experience 4. Scientific research 5. Experience in Dutch health care sector 6. Professional development 7. Future prospects Part 1-4 was appreciated for both purposes (assessment and development); part 5-7 only for development purpose	 Prescribed, thematic format. Open, probing question to stimulate reflection Format contained five parts: 1. Curriculum Vitae 2. Portfolio descriptions (addressing post-secondary education and work experience) 3. PDP 4. Portfolio evidence 5. Appendices (network cards and log) 	The target group benefits from a prescribed format regardless of the main function of the portfolio instrument Appreciation of the content elements depends on the perspective of the portfolio assessors. All assessors appreciate information on: Personal data Formal education Work experience For assessment the portfolio should contain factual information that is verifiable. For development purposes the portfolio may also contain reflective information, a PDP, portfolio descriptions for which no evidence can be submitted and outcomes of self-assessment.	The highly-skilled immigrants are insecure about how to structure the information. They benefit from a prescribed format regardless of the function of the portfolio instrument In the teacher case candidates were asked to formulate competency claims. In the other two cases the focus was on portfolio descriptions that gave information on addressed subjects. For the exploration of learning a distinction between formal and non-formal learning is not relevant.

Table 7-5 Cross-case analysis of the portfolio characteristics

Portfolio characteristics						
Main topic	Issues of analysis	Teachers	Medical doctors	Refugees	Conclusions	Observations
Portfolio product	Standards	Competency-based standards were available (no differentiation in levels). Standards were not understood by the teachers	No competency-based standards available. Content issues were derived from <i>Framework 2001</i>	Not specifically addressed. PDP has formed starting point for portfolio assessment.	Competency-based standards are essential for exploration of learning These standards are not available in each sector yet. If available, they are not automatically understood by highly- skilled immigrants.	The lack of adequate stan- dards combined with the information and development function has caused that the description of experience has gained more attention than exploration of learning.
	Portfolio evidence	Encouraged to submit evidence for each competency claim. No detailed specifications were given concerning amount and type of evidence. FTs have included limited evidence.	Evidence was not linked to portfolio descriptions. FMDs mainly have formal evidence (diplomas and course specifications).	Evidence was not linked to portfolio descriptions. Refugees have only limited evidences available (see note doctors case)	The evidence for learning should get more attention, especially if portfolio is used for assessment purposes. Highly-skilled immigrants have limited evidence for learning	How to judge the authenticity of submitted evidence (like contracts, references)? Should candidates get the opportunity to reconstruct or gather evidence to support their claims?
Portfolio development	Steps and strategies in portfolio development	Bottom-up strategy. Portfolio format guides development process Link to Dutch assessment stan- dards is explicitly made by self- assessment and definition of competency claims.	Bottom-up strategy. Portfolio format guides development process No competency claims were defined (information func- tion). Exploration of learning outcomes has gained too little attention to enhance the assessment function	Bottom-up strategy. Portfolio format guides development process No competency claims were defined (development function). See note doctors case.	The portfolio format has guided the portfolio development process. The implemented process is linear and not cyclic.	The lack of assessment standards has caused that the exploration of learning statements (competency claims) has gained too little attention, just as the evidence for learning.
	Measures taken to support portfolio candidates	Portfolio development was independent process. It was suggested to offer an orientation programme that could prepare the teacher on all aspects of portfolio development.	 Portfolio development was supported by: five workshops (four hours each) reflective group assignments a digital portfolio format a manual for portfolio development formative feedback inbetween the workshop 	 Portfolio development was supported by six workshops (four hours each) reflective group assignments a digital portfolio format a manual for portfolio development 	Unexperienced portfolio candidates benefit from a portfolio development learning line that includes different measures of support, including:: workshops reflective group assignments a prescribed portfolio format	What would the function of portfolio be if it would be part of an orientation programme?
	Measures taken to support portfolio candidates (continue)		 individual support during periods of independent work (behind the computer) 	 individual guidance and support during the workshops as well as during the regular counselling process. 	 A manual for portfolio development formative feedback individual guidance and support. portfolio presentation 	In doctors case some assessors felt that the suppor- tive measures invalidate assessment outcome, while in teachers case the assessors felt that portfolio assessment was invalidated by a lack of support.

Table 7-5 Cross-case analysis of the portfolio characteristics (Continued)

Portfolio character						
Main topic	Issues of analysis	Teachers	Medical doctors	Refugees	Conclusions	Observations
Portfolio development	The clarity about roles and responsibilities	Portfolio assessors was also appointed as portfolio advisor. This was experienced as inappropriate. It was suggested that the portfolio advisor should be familiar with the assessment process but not take part in it.	The trainers served as portfolio advisors but were not familiar with the assessment process. The members of the exam committee served as portfolio assessors.	The course leader and the counsellor have served as portfolio advisors. The counsellors were also the portfolio assessors (development purpose). This was not experienced as inappropriate.	There should be a clear distinction in roles and responsibilities. To enhance the quality of portfolio use, the portfolio advisors should be familiar with the assessment process, but he should not take part in the assessment itself.	If the refugee wishes to use the portfolio for assessment purposes the portfolio advisors should come from the recognizing body.
Portfolio assessment	The function of portfolio assessment	Formative evaluation (identification of competencies), although an 'informative' function was experienced. Portfolio is embedded in a wider assessment procedure.	'Informative' evaluation; provide information about prior learning experiences If the portfolio is used as a (formative) assessment instrument it should be embedded in a wider assessment procedure.	Formative evaluation (development oriented); to plan, steer and monitor the integration and orientation process	The function of portfolio assessment relate to the main function of the portfolio instrument.	If the portfolio is used for assessment purposes it should be embedded in a wider assessment procedure Highly-skilled immigrants should be sufficiently prepared for the assessment.
	Additional instruments	Other instruments used are: Criterion-based interviews Observation (lesson) Self-assessment	Other instruments should focus on: Medical knowledge and skills Communication and attitudes (professional behaviour)	Not relevant for development function	Assessment of competencies is based on the outcomes of different instruments ('multimodal', Baartman et al., 2004).	The assessors in the case of the medical doctors relate to the dominant construct- oriented model of medical expertise (cf. Schuwirth & Van der Vleuten, 2005
	Quality criteria for (portfolio) assessment	Assessment protocol available Applied assessment approach was a mixture between the quantitative approach and the qualitative approach and the qualitative approach Assessment sheet was used to standardize the evaluation of evidence (based on O'Grady's framework, 1991). Applied criteria were: • Authenticity • Retention • Relevance • Quantity • Variety Two assessors who were knowledgeable in the assessed field and trained in all aspects of the assessment procedure	No assessment protocol Quality criteria need more attention if used for assessment purposes. Important criteria for portfolio evidence are retention and authenticity No assessment sheets were developed to support the evaluation of evidence. The following criteria were appreciated: • Authenticity • Retention • Practicality Three assessors or more who were knowledgeable in the field assessed but not trained in the assessment culture	No assessment protocol Quality criteria were not addressed because of the development function of the portfolio instrument	If the portfolio is used as an assessment instrument the assessment process should be explained in an assessment protocol. Assessors should relate to the assessment culture and be trained in all aspects of the assessment process (including the interpretative approach to reach consensus)	In the case of the teachers the assessment outcomes was invalidated by the characteristics of the portfolio candidates as well as those of the portfolio development process

Table 7-5 Cross-case analysis of the portfolio characteristics (Continued)

Legend: FT: Foreign-trained teacher; FMD: Foreign-trained medical doctor; PDP: Personal development plan.

7.2 A framework for portfolio use by highly-skilled immigrants

This section answers the first research question:

1. What are the characteristics of the portfolio instrument and its use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?

It reflects on the outcomes of the cross-case analysis and discusses whether the observations give rise to the adjustment of the theoretical building blocks that were previously presented in Chapter 3 and Chapter 4. In Chapter 4, the 'targeted objectives' of the highly-skilled immigrants were linked to the characteristics of the portfolio instrument using three types of portfolios: a personal development portfolio, a reflective portfolio and a dossier portfolio (cf. Smith & Tillema, 2003). In Chapter 6 it was explained how the three case studies relate to the targeted objectives of highly-skilled immigrants. A distinction was made between: orientation, social recognition and formal recognition. Table 7-6 shows that it was expected that the implemented portfolio characteristics in the teachers' case and the medical doctors' case would relate to the characteristics of a 'dossier portfolio', while the implemented portfolio characteristics in the refugees' case would comply with the characteristics of a 'personal development portfolio'. Section 7.2.1 reflects on the characteristics of both types of portfolios in relation to the results and observations from the cross-case analysis. The comparison will show that a third type of portfolio was identified in practice, namely a 'descriptive' portfolio. Section 7.2.2 presents a conceptual framework for portfolio use by highly-skilled immigrants, taking note of the results and observations from the cross-case analysis, the work of Smith and Tillema (2003), Tigelaar et al. (2004) and Tillema (2001a).

	Exploratory cases			
	Teachers	Medical doctors	Refugees	
Targeted objective of	Formal re	Orientation		
highly-skilled immigrants	De jure professional recognition	Academic recognition	Orientation towards the possibilities in Dutch society including work	
Type of portfolio (cf. Smith & Tillema,	Dossier portfolio		Personal development portfolio	
2003)	Assessment portfolio		Development portfolio	

Table 7-6Relationship between the exploratory cases, the 'targeted objective' of highly-skilled immigrants
and the type of portfolio that should be used

7.2.1 Comparing the theoretical characteristics of a dossier portfolio and a personal development portfolio with the empirical characteristics

This section compares the characteristics of the 'dossier portfolio' and the 'personal development portfolio' with the results of the cross-case analysis. Table 7-7 gives a summary of the theoretical characteristics that were discussed earlier in Section 4.1 and the empirical findings from each case study. The congruence between theory and practice is briefly discussed below.

		Assessment portfolio		Deve	lopment portfolio
	Theory	Teachers' case	Medical doctors' case	Theory	Refugees' case
Product characteristics (TBB1)	Specific focus	Specific focus (core competencies)	Specific focus (medical expertise, but this was not clearly defined)	Broad focus	Broad focus (orientation towards the possibilities in Dutch society)
	Prescribed structure	Prescribed format with open questions. Portfolio descriptions on specified subjects, competency claims and evidence.	As in teachers' case, but no competency claims	Prescribed structure (CV)	As in medical doctors' case, a PDP was added , and a log and network cards.
	Performance-oriented	Performance oriented and reflective	As in teachers' case	Reflective	As in teachers' case
	Numerous evidence. Best performance, including guided performance.	Evidence for competency claims. No specifications with respect to the amount and type of evidence. Teachers mainly have formal evidence.	Evidence for portfolio descriptions. No further specifications. Doctors mainly have formal evidence. For assessment purposes, formal evidence and standardized evidence is appreciated.	Numerous evidence, including average performance Individual performance.	Evidence for portfolio description s . No further specifications. Refugees mainly have formal evidence.
Portfolio development (TBB2)	Support focuses on understanding assessment standards and portfolio evidence.	No support was offered.	Support was focused on understanding purpose of portfolio and different parts of the portfolio format, practice reflection (group assignments), self-assessment and peer assessment (feedback). There were no standards available.	Support focused on self- assessment and reflection.	As in medical doctors' case. A portfolio presentation (open assessment) was added.
Portfolio assessment (TBB4)	Formative assessment. Portfolio is part of the assessment procedure; summative decision is based on different assessment outcomes.	Formative assessment. Portfolio is part of assessment procedure. Assessment protocol available	Informative assessment. Portfolio was added to regular instruments. No protocols available.	Formative assessment	Formative assessment by the refugee's counsellor (to plan and steer the orientation process. Portfolio was added to regular counselling procedures.
	Restricted assessment	Restricted assessment	Restricted assessment	Open assessment	Open assessment

Table 7-7 Relationship between theoretical portfolio characteristics and the empirical portfolio characteristics

The comparison shows that the lack of assessment standards as well as the unfamiliarity with the assessment culture meant that the completed portfolios were more 'descriptive' in nature rather than development or assessment oriented. To enhance future recognition, the 'descriptive' part should be complemented by a 'reflective' part to specify competency claims (either for the purpose of assessment or development).

Dossier portfolio

Table 7-7 on the previous page shows that the portfolio format that was implemented in the teachers' case complies to a large extent with the characteristics of a 'dossier portfolio'. It had a specific focus, a prescribed structure, it was performance oriented and it was embedded in a wider assessment procedure to take an assessment decision. The differences relate to:

The evidence:

In the teachers' case the number and type of evidence was not prescribed. Some examples of evidence were mentioned but is was left to the candidate to select the evidence that formed the best proof for the competency claims.

• The orientation:

The portfolio was performance oriented as well as reflective. The implemented portfolio in the teachers' case also gathered reflective information on the Dutch school system. The candidates were asked to give their opinion on some educational issues and reflect on important differences between the Dutch school system and the one in which they used to work.

• The support:

The foreign-trained teachers did not receive any support during the development of the portfolio. It was observed from the case study that the portfolio candidates did not understand the meaning of the competency definitions that formed the assessment standards. Moreover, the foreign-trained teachers needed training and practice in self-assessment and critical reflection. This type of support was offered in the doctors' and refugees' cases.

The lack of support meant that the completed portfolios were more 'descriptive' in nature rather than assessment oriented. The portfolios contained background information on personal data, formal learning and work experience combined with evidence. This information was not adequately linked to the core competencies that formed the frame of reference. No competency claims were defined, and the submitted evidence was not linked to learning statements.

The intended and implemented function of the portfolio in the medical doctors' case was 'information' instead of 'assessment'. This is why the data from the medical doctors' case in Table 7-7 is not printed in yellow. However, the case study showed that the information could be used for assessment purposes if certain conditions were met. These conditions relate to the use of transparent assessment standards, the specification of clear guidelines for portfolio evidence, and the use of additional instruments to take a recognition decision (see Section 7.1.2). All three conditions comply with the theoretical characteristics of a dossier portfolio.

Some general concerns were noted in the cross-case analysis that should be kept in mind if an assessment portfolio is implemented. These relate to:

- The lack of evidence as proof of competence:
 - Many of the highly-skilled immigrants had no evidence to prove their competence. Most of them brought diplomas and course descriptions (formal evidence), but no products of work that provide information about their performance in authentic learning situations. To assure fairness, the portfolio candidates should be given a chance during the portfolio development process to gather or reconstruct evidence to prove their competency claims, e.g. in a skills lab, observation at the work place or through internships. O'Grady (1991) refers to these

materials as 'interviews or oral assessments' or 'other types of current assessments'. However, this has consequences for the support process.

- The cultural sensitivity of the assessment standards: The teachers' case showed that highly-skilled immigrants do not automatically understand the meaning of competency-definitions. It was suggested that portfolio development should be part of an orientation programme that would give them the opportunity to experience in practice what the standards mean. Such an orientation programme would also give them the opportunity to practice self-assessment and critical reflection, which relates to the third concern.
- The opportunity to practice self-assessment and critical reflection: Regardless of the function of portfolio (assessment or development), the development of a portfolio requires cognitive processes like self-assessment and reflective thinking (cf. Klenowski, 2002). Portfolio candidates need to be trained in these processes. Many of the highly-skilled immigrants have been educated in educational cultures that value conserving attitudes to knowledge. This implies that the required cognitive processes might be new to them and that adequate support should be given. Hence, the support for an assessment portfolio should focus on the portfolio development process, the clarification of the assessment standards and the search for adequate evidence to prove the competency claims.

Personal development portfolio

Table 7-7 also shows that the implemented portfolio characteristics in the refugees' case comply with many of the characteristics of the 'personal development portfolio': it had a broad focus, a prescribed structure with open probing questions to stimulate reflection, and it was used as a formative assessment instrument to plan and steer personal development. However, it was noted in Section 7.1.2 that the lack of assessment standards meant that the information function was addressed more than the development function (see Table 7-5 on page 289). As indicated in the second theoretical building block (TBB2), the common elements of a development portfolio are:

- personal data (CV);
- targeted objectives in terms of competency claims;
- analysis of strengths and weaknesses in the competency profile (self-assessment); and
- a personal development plan.

The empirical characteristics show that the refugees were not asked to define competency claims but they were encouraged to make portfolio descriptions on certain pre-specified items to inform their counsellor about their prior learning experiences. In addition, the refugees were asked to develop a personal development plan. The targeted objectives in the personal development plan formed the starting point for portfolio assessment by the refugees' counsellors. The targeted objectives were not explicitly linked to a set of external standards to define competency claims (to steer future development) and to explore the discrepancy between the actual competencies of the refugees were encouraged to explore what it takes to reach these targeted objectives and how the orientation process could contribute to realizing these objectives. Gaining formal recognition for competencies might be one of the steps in this process.

The cross-case analysis showed that the exploration of learning (e.g. in the form of competency claims) was paid too little attention in all three case studies. In the teachers' case the portfolio candidates were insufficiently guided and supported during the portfolio development process, while in the doctors' and the refugees' cases the lack of competency-based standards meant that the portfolios were more descriptive in nature. This also meant that the submitted evidence was 'proof of experience' rather than 'proof of learning'. Beijaard et al. (2002) noted that many portfolios contain two parts:

- a 'dossier' part (that contains information on all the available materials), and
- a 'reflective' part that links the available material to the assessment standards.

It seems that the implemented portfolios in the three case studies relate particularly to the first part. The prescribed format guided the highly-skilled immigrants to develop a well-structured overview of prior learning experiences addressing numerous topics that were evaluated as relevant by future portfolio assessors: personal data, formal education, non-formal training, and work experience. The portfolio candidates were encouraged to enclose evidence for the portfolio descriptions. The development of the 'descriptive' part of the portfolio had the following immediate outcomes:

- It gave the portfolio assessors better insight into prior learning experiences;
- It made the portfolio candidates more aware of their prior learning experiences, and it contributed to their communication skills in the Dutch language about their previous experiences.

However, to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants, the descriptive part should be linked to a clear set of assessment standards. These standards should be used to define competency claims that either steer future development (in the case of a development portfolio) or enhance recognition (in the case of an assessment portfolio).

7.2.2 A framework for portfolio use by highly-skilled immigrants

This section presents a framework for portfolio use by highly-skilled immigrants. It combines the theoretical building blocks that were previously presented with the targeted objectives of the highly-skilled immigrants and builds on the work of Smith and Tillema (2003), Tillema (2001a) and the conceptual framework presented by Tigelaar et al. (2004). Below the conceptual framework of Tigelaar et al. (2004) is briefly described. It relates to the three theoretical building blocks that addressed the first research question, namely the product characteristics (TBB2), portfolio development (TBB3) and portfolio assessment (TBB4). After the explanation of the dimension extremes in the conceptual framework of Tigelaar et al (2004), the framework for portfolio use by highly-skilled immigrants is presented. This framework could guide the conceptual choices in portfolio use by highly-skilled immigrants and assist developers in the portfolio design process.

Conceptual framework for portfolio use by Tigelaar et al. (2004)

Tigelaar et al. (2004) build on the work of Zeichner and Wray (2001) who developed a conceptual framework for the identification of different types of portfolios. Zeichner and Wray have examined teaching portfolios that were used as an assessment or development tool in pre-service teacher education programmes in the United States. Tigelaar et al. (2004) slightly adapted the four dimensions in this framework and they searched for the dimension extremes to make conceptual choices for portfolio design and implementation. The adapted framework contained extremes for the following dimensions:

- Portfolio purpose
- Portfolio organization and evidence
- Social interaction in the process of portfolio development; and
- Portfolio assessment

Each dimension is briefly discussed below in relation to the theoretical building blocks that were previously discussed in this research study and the results of the cross-case analysis. Table 7-8 on page 299 gives a summary of this discussion.

The two dimension extremes that Tigelaar et al. (2004) found for the dimension 'portfolio purpose' are formative evaluation versus summative evaluation. This dimension relates to the function of portfolio that was discussed in TBB2. In this research study a distinction was made between a development portfolio (that serves a formative assessment purpose) and an assessment portfolio

(that either serves a formative or summative assessment purpose). In a development portfolio emphasis is put on the stimulation of professional growth, while an assessment portfolio aims at gaining recognition, e.g. in terms of promotion or certification. The cross-case analysis showed that many of the completed portfolios were more 'descriptive' in nature; they informed assessors about prior learning experiences. A lack of familiarity with portfolio assessment combined with a lack of assessment standards meant that emphasis was put on the information function. To enhance the identification, assessment and recognition of prior learning it was noted that it should be decided beforehand whether the information is to be used for development purposes (to steer professional growth in the Netherlands) or assessment purposes (to gain social or formal recognition). The descriptive portfolio might be used as an impetus to further clarify the meaning and requirements of portfolio assessment at the institutional level as part of the design and implementation process.

The two extremes for the dimension 'portfolio organization and evidence' are: open-ended structure and highly varied, non-standardized evidence versus tightly-organized structure and prescribed, standardized evidence. The dimension extremes for the organization were also mentioned in TBB2; an open structure (for a development portfolio) and a prescribed structure (for an assessment portfolio). However, the cross-case analysis showed that inexperienced portfolio candidates benefit from a prescribed format regardless of the purpose of the portfolio. The appreciation of the specific content elements was influenced by the perspective of the portfolio assessor. All the assessors wanted to be informed about personal data, background information about formal education, non-formal training and work experience, while reflective information, a personal development plan and self-assessment was reserved for a development portfolio. The assessment portfolio should mainly contain information that can be easily interpreted (formal and standardized evidence). The evidence included in an assessment portfolio should relate to best performance. The cross-case analysis also showed that highlyskilled immigrants mainly have formal evidence (foreign diplomas, course descriptions, the results of language exams or a credential evaluation). They were not prepared to bring products of work that could prove their abilities. They need support in selecting and gathering evidence that can prove their competency claims. To assure fairness, they might even be given a chance to reconstruct evidence during the portfolio development process.

The third dimension relates to the social interaction in the portfolio development process. The two extremes identified by Tigelaar et al. (2004) are process versus product. If the focus is on the process of portfolio development, the interaction aims to improve the insight of the portfolio candidate into his own learning process and professional development. Reflection, feedback, meetings with peers and supervisors are all important in this respect. During this process, the 'targeted objectives' of the portfolio candidate form the focal point. Tigelaar et al. (2004) note that peer coaching can be a very helpful way of obtaining feedback and advice from colleagues. If the focus of the interaction relates to portfolio as a product, the selection of portfolio evidences in relation to the assessment standards is the main concern. The portfolio candidate discusses with peers and supervisors what the standards mean and which materials best prove that the candidate's performance is up to standard. This dimension relates to TBB3 that addresses the portfolio development process by the highly-skilled immigrant. TBB3 notes that portfolio candidates need a clear picture of the purpose of the portfolio, the assessment standards and the admissible evidence. Inexperienced portfolio candidates need support to understand the meaning of portfolio development, individually, in a group or as part of an official portfolio development course. Those who are inexperienced with cognitive process like self-assessment and reflective thinking need the opportunity to practice these skills during the development process. The crosscase analysis showed that the foreign-trained candidates were not used to self-assessment,

giving and receiving feedback and reflective thinking. It was therefore concluded that highlyskilled immigrants need the opportunity to practice these skills during the process of portfolio development. It was also learned from the case studies that highly-skilled immigrants need to learn the meaning of the competency definitions (if available); preferably in practice, as these experiences will also give them an opportunity for critical reflection (cf. Driessen et al., 2005).

Finally, Tigelaar et al. (2004) discuss the extremes of 'portfolio assessment' i.e. a holistic assessment versus an analytical assessment. Holistic assessment relates to the interpretative process that was described in Section 4.3.1. It is based on the hermeneutic approach to reach consensus among assessors (cf. Moss, 1984). The assessors are encouraged to look for contradicting evidence in the portfolio that could challenge initial interpretations. This provides an impetus for debate among the assessors, and possibly others, including the portfolio candidate (Tigelaar et al., 2005). Analytical assessment, on the other hand, is based on the use of precise, uniform standards and a standardized rating procedure. It relates to the dominant psychometric approach to warrant assessment decisions. The framework of O'Grady (1991) is an example of this approach. This dimension relates to TBB4. It was argued in this framework that portfolio assessment is an interpretative approach that should be based on a hermeneutic approach regardless of the purpose of the portfolio. To warrant the quality of summative assessment decisions, portfolio should be embedded in a wider assessment procedure, it should make use of trained and knowledgeable assessors, and the assessment trail should be transparent. However, practice will show that in many contexts the psychometric approach to assure quality is still dominant.

Table 7-8 gives a summary of the discussion above.

Dimension ext	remes (Tigelaar et al., 20	004)	Theoretical buil	ding block	Observation from this research study
Portfolio purpose	Formative evaluation To stimulate professional development.	Summative evaluation To take decisions about promotion and licensure.	TBB2: Product characteristics Section 4.1.4, Table 4-5 on	Development portfolio (to steer professional growth) versus assessment portfolio (to be awarded promotion, selection or recognition decisions).	In practice, a third type of portfolio was identified, a descriptive portfolio that relates to the information function.
Portfolio organization and evidence	<i>Open-ended</i> No structure is provided.	<i>Tightly-organized</i> A clear prescribed structure is given.	page 81	Open versus prescribed. Both contain a dossier part and a reflec- tive part that links competency claims to available materials.	Inexperienced candidates benefit form a prescribed format regardless of the purpose.
	Highly varied, non- standardized Portfolio candidates are free to chose materials that need interpretation.	Prescribed, standardized Portfolio candidates should add prescribed materials that need no interpretation.		Open versus restricted Evidence in an assessment portfolio generally contains no reflection and self- assessment, products of work relate to best performance.	Inexperienced candidates benefit from clear guidelines about amount and type of evidence regardless of the purpose. Highly-skilled immigrants mainly have formal evidence at their disposal. They need an opportunity to gather or reconstruct evidence during portfolio development process.
Social interaction in the process of constructing the portfolio	Process The focus is on the portfolio development process and professional development.	<i>Product</i> The focus is on the portfolio product and on best performance.	TBB3: Portfolio development Section 4.2.4, Table 4-9 on page 92	Candidates need support to understand the meaning of portfolio development. It is a cyclic process. The assessment standards and the evidence should be clearly explained. Inexperienced candidates need to be trained in self-assessment and reflective thinking.	Foreign-trained candidates are inexperien- ced in self-assessment and reflective thin- king. They need to practice these skills. They need to learn the meaning of competency definitions. Portfolio advisors should be well-informed about the assessment standards and the evidence that can be submitted.
Portfolio assessment	Holistic The portfolio is assessed in a holistic way taking the perso- nal development goals as a starting point.	Analytical The portfolio is assessed in an analytical way taking a set of external assessment standards as a starting point.	TBB4: Portfolio assessment Section 4.3.3, Table 4-12 on page 100	Portfolio assessment requires a herme- neutic approach to assure quality. It is an interpretative process. Consensus is reached through critical dialogue. Portfolio is embedded in a wider assessment procedure.	Portfolio should be embedded in a wider assessment procedure if used for assess- ment purposes. Assessors in medical sector were not trained in portfolio assessment. Assessment process needs more transparency.

 Table 7-8
 Dimension extremes for a conceptual framework of portfolio use (cf. Tigelaar et al., 2004) related to the findings in this research study

A conceptual framework of portfolio characteristics for highly-skilled immigrants

Next, a refined conceptual framework of portfolio characteristics by highly-skilled immigrants is presented. It combines the previous TBBs 2, 3 and 4 with the results and observation from the cross-case analysis and builds on the work of Smith and Tillema (2003), Tillema (2001a), and the dimension extremes presented by Tigelaar et al. (2004). The conceptual framework is presented in Table 7-9. It takes the 'targeted objectives' of the highly-skilled immigrants as a focal point, distinguishing between gaining 'formal recognition' for prior learning and 'orientation' towards future possibilities using prior learning experiences. An assessment portfolio should be implemented if portfolio assessment is intended to enhance formal recognition. If the portfolio is intended to contribute to the orientation process, a development portfolio should be implemented. The framework addresses the characteristics of both types of portfolio with respect to:

- The structure,
- The evidence,
- The standards,
- The development strategies,
- The guidance and support of the portfolio candidates,
- The roles and responsibilities,
- The assessment purpose,
- The assessment approach, and
- The quality assurance approach for the assessment outcome.

The framework could guide the conceptual choices in portfolio use by highly-skilled immigrants and assist other developers in the portfolio design and implementation process of a portfolio that would enhance the recognition of prior learning. It takes note of the results and observations from the cross-case analysis to inform people on the lessons that could be learned from previous practice. The concerns that are listed relate to aspects that cannot easily be changed. It is, however, important to keep them in mind during the design process to see if a solution can be found. Further research is needed to test if the framework could improve portfolio design and implementation for highly-skilled immigrants. Section 7.3 below will focus on the second research question and explore the guidelines for portfolio design and implementation taking note of the context and the purpose of recognition.

Purpose of			Observations from	
recognition	Formal recognition	Orientation	cross-case analysis	Concerns
Type of portfolio	Assessment portfolio	Development portfolio	A descriptive portfolio might be implemented if there are no standards available.	False clarity.
Structure	 Prescribed Items addressed are: CV, addressing personal data, formal education and work experience Competency claims (based on assessment standards) Evidence 	 Prescribed Items addressed are: CV, addressing personal data, formal education and work experience Targeted objectives (ambitions defined as competency claims) Strengths and weaknesses of the competency profile Evidence Personal development plan 	Inexperienced candidates benefit from a fixed portfolio format. The format should contain open, probing questions to enhance reflection. The content elements of the format depend on the purpose of assessment.	Completing the format might result in a linear development process instead of a cyclic development process.
Evidence for proving competence	Restricted (linked to assessment standards). Clear guidelines about the amount and type of evidence. Evidence is performance oriented. It relates to best performance). No self assessment or reflection. Standardized materials are preferred.	Open (linked to targeted objectives. Clear guidelines about the amount and type of evidence. Evidence is process oriented (professional growth) and performance oriented. It may include self assessment, reflection and average performance.	Highly-skilled immigrants mainly have formal evidence. They did not bring products of work to prove competence. They need an opportunity to gather or reconstruct evidence during the portfolio development process.	Highly-skilled immigrants have few opportunities to gather or reconstruct evidence because they have no work.
Standards	External, competency-based standards defined by recognition body.	Internal, derived from targeted objectives. To enhance future recognition the targeted objectives should be linked to external standards.	Competency definitions are not automatically understood by highly- skilled immigrants. In practice the applied standards are often implicit.	Examination standards in higher education are not transparent (Educational Council, 2004). Are the applied standards competency- based?
Development strategies	Cyclic process.	Cyclic process	The prescribed portfolio format meant that the development process was linear instead of cyclic.	-
Development strategies	Common phases are: identification, selection, specification of learning outcomes, comparison with standards and gathering evidence.	Common phases are: identification, selection, specification of learning outcomes and comparison with standards and gathering evidence.	The lack of standards meant that the exploration of learning received too little attention, as did evidence for learning.	A 'descriptive' portfolio might be implemented if there are no adequate standards available.

Table 7-9	Conceptual framework of portfolio char	acteristics for highly-skilled immigrants (Continued)

Purpose of		Orientation	Observations from	Concerne
recognition Type of portfolio	Formal recognition Assessment portfolio	Development portfolio	cross-case analysis A descriptive portfolio might be implemented if there are no standards available.	Concerns False clarity.
Guidance and support	Support should focus on the portfolio development process (self-assessment, reflective thinking) as well as on the product (assessment standards and evidence). A portfolio learning line should be considered.	Support should focus on the portfolio development process (self-assessment, reflective thinking) and the specification of 'targeted objectives'. A portfolio learning line should be considered.	The portfolio learning line was well- received. It contained: workshops, reflective group assignments, a manual, a prescribed format, individual feedback and a portfolio presentation.	Will there be sufficient support from management? Portfolio use by highly- skilled immigrants probably needs to be linked to another major investment to assure training of staff.
Roles and responsibilities	 Three roles: Portfolio candidate (development) Portfolio advisor (guidance and formative feedback) Portfolio assessor (assessment) The roles of portfolio advisor and portfolio assessor are separate. The portfolio advisor is well-informed about the assessment procedure. 	 Three roles: Portfolio candidate (development) Portfolio advisor (guidance and formative feedback) Portfolio assessor (assessment) The portfolio advisor and portfolio assessor might be the same person. 	To enhance future use, the portfolio advisor should come from the institution that initiates portfolio use. Portfolio advisors and assessors should be trained in their new role and take part in staff development.	
Assessment purpose	Formative assessment; for summative decisions portfolio assessment is embedded in a wider assessment procedure.	Formative assessment to steer the development process.	-	New assessment instruments are still in development in Dutch higher education (ITS/IOWO). This means that assessors relate more to the traditional forms of examination and the psychometric approach to warrant quality.
Assessment approach	Interpretative process based on hermeneutic approach. Multimodal assessment. Restricted assessment.	Interpretative process based on hermeneutic approach. Single use Open assessment	-	
The quality assurance approach	Hermeneutic Important criteria are: Trained assessors Transparent procedure	Hermeneutic Quality criteria are less important	-	

7.3 Towards design building blocks for portfolio use by highly-skilled immigrants

This section answers the second research question:

2. What are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice?

Inspired by the 'curriculum spider web' presented by Van den Akker (2003), Section 7.3.1 presents a 'portfolio spider web' that contains the key components for successful portfolio use by highly-skilled immigrants. The key components of the spider web relate directly to the issues that are addressed by the framework for portfolio use that was presented in the previous section. The core of the spider web is the 'rationale' of portfolio use. The rationale relates to the 'targeted objective' of the highly-skilled immigrants which determines the purpose of the recognition of competencies. Section 7.3.2 reflects on the results of the cross-case analysis with respect to the context characteristics and the portfolio design and implementation process in order to define two design building blocks. These blocks can be used by other developers who wish to commence portfolio use to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants.

7.3.1 The key components of portfolio use by highly-skilled immigrants

This section discusses the key components of portfolio use by highly-skilled immigrants. Inspired by Van den Akker (2003), the metaphor of a spider web is used to indicate that all the components are interrelated and interdependent. The key components are distilled from the framework for portfolio use that was presented in Section 7.2 (see Table 7-9). Each component is briefly described below.

The first component is the *rationale of portfolio use*, which relates directly to the purpose of the recognition of competency and thus to the 'targeted objective' of the highly-skilled immigrant. As discussed earlier the 'targeted objective' of the highly-skilled immigrant is either 'orientation' or 'formal recognition'. To enhance the identification, assessment and recognition of prior learning for the first purpose, a development purpose should be used, while an assessment portfolio should be implemented to enhance formal recognition. Each portfolio has its own distinctive features. Therefore, the rationale of portfolio use forms the core of the spider web. The other components should relate to the rationale and be consistent with each other.

The second, third and fourth components are 'competency claims', 'assessment standards' and portfolio evidence'. They relate to the following three issues addressed in the framework for portfolio use presented in Table 7-9: 'structure', 'evidence for proving competence' and 'standards'. The competency claims form an important part of the content of the portfolio. In a development portfolio, the competency claims relate to 'targeted objectives'. The portfolio candidate is free to define them; they are not prescribed. The portfolio development process enables the portfolio candidate to analyze the discrepancy between the actual competencies and the targeted competencies. Future activities might contribute to competence development in the targeted direction. As such the portfolio helps to steer and plan the development of the portfolio candidate. In an assessment portfolio, the competency claims relate directly to the assessment standards prescribed by the recognition body. The competency claims describe the actual competencies accompanied by evidence that proves that the claims have been met. Hence, the competency claims relate to the third component: the assessment standards. To enhance future recognition it is important that the assessment standards are nationally recognized. In a development portfolio, the assessment standards can be open; it is up to the portfolio candidate to choose them, while in an assessment portfolio the assessment standards are prescribed, determined by the recognition body. The fourth component is the *portfolio evidence* to support the competency claims. It is important that there are clear guidelines on the type and amount of evidence that is needed to support competency claims. They support the portfolio candidate in selecting the right materials. If the portfolio is development-oriented, the guidelines can help to select useful learning opportunities that contribute to competence development. As observed from the cross-case analysis, the highly-skilled immigrants might need the opportunity to reconstruct evidence or gather it during the portfolio development process. Moreover, for an assessment portfolio it is important that the highly-skilled immigrants get a fair chance to reconstruct or gather portfolio evidence to prove their competencies.

The fifth component concerns the *support of the portfolio candidate*. This component relates to the issue of 'guidance and support' in the conceptual framework for portfolio use by highly-skilled immigrants. It was concluded from the cross-case analysis that the support should relate to:

- The portfolio development processes: self-assessment and reflective thinking;
- The purpose of portfolio development;
- The assessment standards applied;
- The evidence that can be submitted to support competency claims.

The sixth component concerns the support of staff involved in portfolio use. This component was derived from the issue 'roles and responsibilities', as were components seven and eight: role of portfolio assessor and role of portfolio advisor. It was concluded from the cross-case analysis that the staff that play a role in the portfolio process (either as a portfolio advisor or portfolio assessor) should be adequately trained for the job. Experience with the assessment culture in Dutch higher education is still limited (Educational Council, 2004). This implies that the staff should be trained in the assessment culture and that other staff development activities should be organized to share experiences with portfolio use, like peer review meetings and coaching. The seventh component is the role of the portfolio assessor. To enhance the transparency of portfolio use, it is important that the role of the portfolio assessor is clearly defined and communicated to the portfolio candidates. Of equal importance is that he receives adequate support in fulfilling this role. The eighth component relates to the role of the portfolio advisor, which should also be clearly defined and communicated to the portfolio candidates. This role too should be clearly defined. The portfolio advisor should be well-informed on how the portfolio is assessed by the portfolio assessor. Driessen et al. (2005) suggest the portfolio assessor should also practice the role of portfolio advisor and vice versa although not for the same portfolio candidate.

The ninth component is the *purpose of assessment*. It relates to the issue of 'assessment purpose' in the conceptual framework that was presented in Section 7.2. The purpose of assessment should be clearly communicated to all the parties involved (portfolio candidate, portfolio assessor and portfolio advisor) and relate to the rationale of portfolio use. It is important to inform portfolio candidates about other possible instruments that might also be used to take an assessment decision. The tenth component is the *assessment protocol*. It relates to the issues of 'assessment approach' and 'the quality assurance approach for the assessment outcome'. To enhance the transparency of portfolio use, the whole procedure should be clearly described in an assessment protocol that takes note of all the components discussed earlier.

Figure 7-1 gives a visual representation of the key components of effective portfolio use. Inspired by Van den Akker (2003), the metaphor of a spider web is used to show that the components are interrelated. It is argued that each component has its own value to make portfolio use successful. Therefore, each component should be systematically addressed in the process of portfolio design and implementation. The rationale of portfolio use influences the operationalization of some of the components. Table 7-9 on page 301 contains the distinctive features of an assessment portfolio

and a development portfolio that were derived from the observation from the cross-case analysis and theory. Section 7.3.2 discusses the guidelines for portfolio design and implementation that can be derived from the conceptual framework that was presented in Section 7.2.2 and the portfolio spider web.

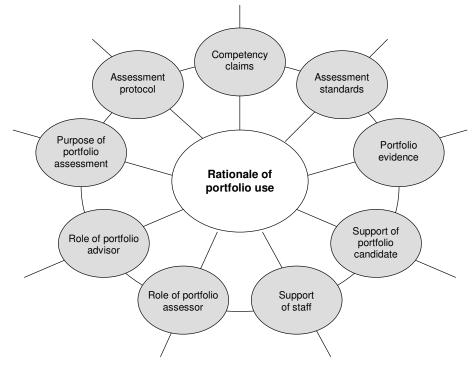


Figure 7-1 Key components of portfolio use visualized in a portfolio spider web

7.3.2 Reflection on the cross case analysis results: Towards two design building blocks

This section reflects on the results of the cross-case analysis addressing the context characteristics and the portfolio design and implementation process (see Table 7-2 on page 276). It uses the results to develop two design building blocks, which take note of the 'portfolio spider web' and the conceptual framework that was presented in Section 7.2. The design building blocks can be used by other developers who wish to initiate portfolio use for highly-skilled immigrants in order to enhance the assessment and recognition of prior learning.

As concluded in Section 7.1.1, the context characteristics seem to influence the perspective to change and the design process itself. The innovation is more complex if the context does not comply with the characteristics of competency-based learning. Compliance with competency-based learning assures some important conditions that influence the success of implementation, namely:

- The availability of competency-based assessment standards;
- The availability of competency-based assessment instruments that can be used to complement portfolio assessment; and
- Assessors who are familiar with the assessment culture.

However, as was observed from the teachers' case, this alone is not sufficient to assure valid assessment. The highly-skilled immigrants are not familiar with the portfolio development processes and do not automatically relate to the assessment standards. In addition, they need guidance to select the proper evidence for proving their competency claims. As they did not bring products of work from home, they might need the opportunity to reconstruct or gather evidence during the portfolio development process.

The context in the medical doctors' case was classified as neither content-based nor competency-based. The dominant learning approach is 'problem-based education' (Schuwirth & Van der Vleuten, 2005). In the medical doctor's case it was difficult to specify beforehand how the information in the portfolio could be used. As a consequence, the emphasis was put on the information function and the completed portfolios were 'descriptive' documents. However, the appreciation of the content elements and the type of evidence included appeared to depend on the purpose for which the information would be used; assessment or development. The uncertainty about the purpose also caused confusion for the portfolio candidates. It was therefore, concluded that the purpose should be clearly communicated beforehand. Fullan (2001) points out the importance of 'active initiation and participation' to get started. He explains that there is no evidence that the widespread involvement of all stakeholders in the initiation phase of change is feasible or effective. In some contexts it is important just to get started and to activate other factors like 'participation', 'initiative-taking' and 'empowerment'. From the medical doctors' case it was concluded that 'active initiation' might be necessary to get started and clarify the requirements of portfolio use using the results of initial experiences. Therefore, it is important that the implementation process assures that the results of early experiments are indeed used as input for discussion among staff members to develop a shared meaning of portfolio use. If this does not take place, there is the danger of 'false clarity' (cf. Fullan, 2001).

Another important observation relates to the need and priority of change and the availability of sufficient resources to implement the portfolio instrument. It is important that portfolio use for highly-skilled immigrants is linked to a larger ambition at the institutional level, for example, introducing the portfolio instrument for all students and not only foreign-trained students. Portfolio use for highly-skilled immigrants implies the implementation of an assessment culture at the institutional level. If this is not yet the dominant evaluation paradigm, the effort to change is too great for this specific group of students alone and there is a significant chance that the innovation will only concerns one dimension of change (the instrument). The change of the assessment approach and the underlying assessment beliefs requires much more commitment, resources and actions. It seems that this is often underestimated at the start. Driessen et al. (2002) speak of the 'portfolio paradox' to point out the high expectations of portfolio use by policy makers and teachers, but the low outcomes in practice when implementing its use. The implementation seems easy; an instrument is introduced for which the portfolio candidate is mainly responsible. However, to meet the expectation the institution needs to change the dominant evaluation paradigm and train their staff in the assessment culture, and this is often not realized (Klenowski, 2002).

In the refugees' case it was concluded that the implementation was simplified by focusing on the development function of the portfolio. The counselling organizations would like to use the portfolio to empower and activate refugees. However, to assure success it is also important that the refugees learn to gather useful evidence for competency development that might enhance future recognition. For example, if a refugee takes part in an internship, he should specify the competencies he would like to develop during this internship. Subsequently, he should gather evidence during the internship that shows his growth towards the targeted objectives. On completion, the mentor should write a statement that shows whether the specified competencies have been met or not. The document should also show how the mentor reached his conclusion. This also requires a change of mindset.

Two design building blocks for portfolio use by highly-skilled immigrants

In the previous section, a 'portfolio spider web' was presented that contains ten components that should be considered to make portfolio use successful. These components were derived from theory and practice. The core of the spider web is the rationale of portfolio use: what is the main

purpose of portfolio use? A set of practical guidelines for portfolio design and implementation are specified below using the 'portfolio spider web' and the results from the cross-case analysis. The design building blocks are a refinement of TBB1 and TBB5.

Portfolio design should start with an analysis of the context characteristics to determine the complexity of change. The issues of analysis that could be used are:

- the evaluation standards that are being used; are the standards defined in term of knowledge, skills and attitudes or in term of competencies; are there different levels of achievement specified to show the different phases in professional growth;
- the evaluation instruments that are being used; are these focused on the evaluation of separate constructs like knowledge, skills and attitudes or competency-based; and
- the evaluation paradigm; is the validity of evaluation determined by psychometric approaches or by hermeneutic approaches?

If the analysis shows that the context relates to the traditional, content-based model that evaluates knowledge, skills and attitudes separately, the following guidelines for portfolio design and implementation can be defined:

- Portfolio use for highly-skilled immigrants should be linked to a wider ambition to implement an 'assessment culture' and use the portfolio instrument for other student groups than highlyskilled immigrants alone;
- Staff should be informed about the concepts of the assessment culture and trained in the application of these principles;
- Staff should play an active role in all phases of portfolio design and implementation;
- 'Active initiation' might be needed to get started (Fullan, 2001). This implies that in the first instance, the pragmatic design paradigm might be most suitable (cf. Visscher-Voerman, 1999). However, to assure future use, the implementation process should guarantee that the outcomes of first use are discussed with staff members to develop a shared meaning of what portfolio use entails. Hence, after the first experiment, the design paradigm should change to the 'communicative design paradigm' (cf. Visscher-Voerman, 1999);
- There is a need for pressure and support from the administrative level. Portfolio use implies the implementation of an assessment culture. This requires substantial resources because staff members need to be involved in all phases of the design process, they need to take part in training activities and practice portfolio assessment. This concerns the role of 'portfolio assessor' and 'portfolio advisor';
- The help of an external change agent can be considered during the initiation phase, but to assure future use, it is important that staff members are involved from the start in all phases of portfolio design and implementation;
- During the design process all ten component of the portfolio spider web should be considered. Table 7-10 on the next page contains explorative questions for each component that should be addressed during portfolio design and implementation;
- If there are no competency-based standards available a selected number of standards should be defined for which the portfolio is primarily used. This may enhance the initial start. The standards should be further operationalized in terms of observable behaviour. In addition, levels of achievement should be identified to visualize growth in development. Finally, the types of evidence that can be submitted to prove competence at a certain level should be specified;
- The design and implementation of a qualitative instrument takes time. It is therefore important that different quality reviews are foreseen to adapt the instrument where needed (cf. Van Berkel, Hofman, Kinkhorst & Te Lintelo, 2003).

If the context analysis shows that the current evaluation paradigm already relates to the assessment culture, it is assumed that the implementation of portfolio is less complex. The portfolio design and implementation process should address all ten components that are part of the 'portfolio spider web'. This implies that the explorative questions that are listed in Table 7-10 should be addressed. To enhance the development of shared meaning of portfolio use, the 'communicative design paradigm' might be applied to reach consensus about the operationalization of the ten components.

Portfolio	
component	Explorative questions
Rationale of portfolio use	 Is there consensus on the rationale of portfolio use; assessment versus development? Is the rationale in line with other innovations or developments at the institutional level? E.g. if the rationale is assessment; is flexible enrolment and the offering of tailor-made study programmes possible?; or, if the rationale is development; is the portfolio embedded in the curriculum, in other words, is portfolio development addressed in different modules or courses so that it is an integral part of the study programme?
Competency claims	 Is there consensus on how the competency claims should be defined? Are examples of claims communicated to portfolio advisors, portfolio assessors and portfolio candidates to inform them about 'best practice'?
Assessment standards	 Is there consensus on the assessment standards for which the portfolio can contain evidence? These standards can be derived from a professional profile, but can also be a specific selection of standards for which the portfolio is primarily used. Are the standards operationalized in terms of observable behaviour? Do the standards relate to different levels of achievement?
Portfolio evidence	 Is there consensus about the type of evidence that is accepted as proof of competence for each assessment standard? Are examples of claims communicated to portfolio advisors, portfolio assessors and portfolio candidates to inform them about 'best practice'?
Support of portfolio candidate	 Are there sufficient measures taken to support the portfolio candidates during portfolio development? The support should relate to: the meaning of portfolio development, the cognitive processes that are needed for portfolio development, the structure of the portfolio, the meaning of the assessment standards, the specification of competency claims, and the evidence that can be submitted as proof of competence.
Support of staff	 Are there sufficient measures taken to support the staff that is involved in portfolio use? The support should relate to: the key concepts of the assessment culture, the key concepts of portfolio development and portfolio assessment, practice with portfolio assessment and peer consultations to discuss experiences with each other.
Role of portfolio assessor	Is the role of the portfolio assessors clearly specified and communicated to all parties involved?Are staff members sufficiently prepared for the role?
Role of portfolio adviser	Is the role of the portfolio advisor clearly specified and communicated to all parties involved?Are staff members sufficiently prepared for the role?
Purpose of portfolio assessment	 Is there consensus about the purpose of portfolio assessment? Is the purpose in line with practice? E.g. if the purpose is assessment, are there other assessment instruments available to take an assessment decision? Or, if the purpose is development, is the portfolio embedded in the curriculum and is it possible to steer the learning process on the basis of the portfolio review?.
Assessment protocol	 Is the assessment procedure clearly specified in an assessment protocol, addressing its purpose, the standards applied, the instruments used, the trail of evidence and the possibilities for appeal?

 Table 7-10
 Explorative questions that should be addressed during portfolio design and implementation

Next, two design building blocks are presented to support other developers who wish to design and implement a portfolio to enhance the identification, assessment and recognition of prior learning. One design building block relates to a content-based environment and one to a competency-based environment. The issues addressed in the design building block relate to the cyclic design and development process that was briefly described in Chapter 5 (see Figure 5-1 on page 116). It contains four aspects: 'design process W' leads to 'intervention X' that has the 'immediate outcomes y1, y2 and y3' and the 'distant outcomes Y1, Y2 and Y3' (Plomp, 2002). The two main research questions of this research study address the characteristics of the intervention (a portfolio instrument to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants), and the characteristics of the design and implementation process. The case studies briefly addressed the immediate outcome of portfolio development for both the portfolio candidate and the portfolio assessor, but the distant outcomes were not studied. Plomp (2006) points out that the intervention should distinguish between 'input' and 'process'; there might be specific input that is required to make the process function.

Design process	 A pragmatic design paradigm should be considered (cf. Visscher-Voerman 1999). Active initiation might be needed to get started (cf. Fullan 2001); this implies that one should start with a small group of enthusiastic people instead of reaching consensus on the operationalization of the key component of portfolio use for highly-skilled immigrants. The help of an external change agent might be considered during a first experiment. The results of the first experiment should be used to enhance a discussion with a wider group of people to determine further aims and requirements. After a first experiment the design paradigm should change into a communicative design paradigm (cf. Visscher-Voerman 1999).
Implementation process	 In the first instance, a small enthusiastic group of staff might start. However, to assure a change of evaluation paradigm there is a need for pressure and support from the administrative level to assure sufficient resources for the implementation. Link portfolio use for a specific target group to a wider institutional ambition to assure the need and priority for change. Staff should play an active role in each phase of the design process especially implementation and evaluation. Staff should be informed and trained in concepts like the assessment culture and portfolio. Staff should be informed and trained in cultural differences and the consequences these concepts have for assessment. Organize peer consultations between portfolio advisors, portfolio assessors and between the two groups
Intervention – input	 Clear view on the rationale of the portfolio instrument. Definition of a set of assessment standards for portfolio assessment. Guidelines for portfolio evidence. Portfolio materials (to support portfolio candidates and staff). Portfolio advisors should be appointed and trained. Portfolio assessors should be appointed and trained. Assessment protocol to inform others about the aims and procedures of portfolio use.
Intervention – process	 Portfolio development is a cyclic process. Portfolio candidates should be supported in the portfolio development process including the required cognitive processes like self-assessment and critical reflection, the definition of competency claims and the selection of portfolio evidence to prove competency claims; in some cases there might be a need to reconstruct or gather evidence during the portfolio development process.

 Table 7-11
 Design building block: Content-based environment

 Table 7-12
 Design building block: Competency-based environment

Design process	 A communicative design paradigm should be considered to reach consensus on the rationale of portfolio use for the specific target group and the operationalization of the related key component of portfolio use for highly-skilled immigrants (cf. Visscher-Voerman 1999). 			
Implementation process	 Staff should play an active role in each phase of the design process especially implementation and evaluation. Staff should be informed and trained in cultural differences and the consequences these have for assessment. Organize peer consultations between portfolio advisors portfolio assessors and between the two groups. 			
Intervention – input	 Clear view on the rationale of the portfolio instrument. Definition of a set of competency-based assessment standards for portfolio assessment. Guidelines for portfolio evidence. Portfolio materials (to support portfolio candidates and staff). Portfolio advisors should be appointed and trained. Portfolio assessors should be appointed and trained. Assessment protocol to inform others about the aims and procedures of portfolio use. 			
Intervention – process	 Portfolio development is a cyclic process. Portfolio candidates should be supported in the portfolio development process including the required cognitive processes like self-assessment and critical reflection, the definition of competency claims and the selection of portfolio evidence to prove competency claims; in some cases there might be a need to reconstruct or gather evidence during the portfolio development process. 			

7.4 Answering the research questions using the observations from theory and practice

This section refers back to the two main research questions that guided the research study and answers them using the observations from theory and practice. The research questions are repeated below, where after the answers are explored one by one:

- 1. What are the characteristics of the portfolio instrument and its use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?
- 2. What are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice?

The *first research question* was addressed from a theoretical perspective in Chapter 4. Three theoretical building blocks were presented that contain characteristics of the portfolio instrument addressing:

- the product characteristics (TBB2);
- the characteristics of portfolio development by the portfolio candidates (TBB3); and
- the characteristics of portfolio assessment (TBB4).

It was argued that the targeted objectives of the highly skilled immigrant influence the portfolio characteristics. A distinction was made between 'formal recognition' and 'orientation'. To enhance the first, an assessment portfolio should be used; to enhance the second, a development portfolio should be implemented. The theoretical building blocks were used to distil issues of analysis for the data analysis of the pilot projects that were reviewed in the three exploratory case studies. In Chapter 6, the characteristics of the portfolio instrument were explored and presented in empirical building blocks for each case study. Table 7-13 on the next page gives an overview of the theoretical and empirical building blocks.

In the teachers' and medical doctors' case the portfolio was implemented to enhance 'formal recognition' (respectively 'de jure' professional recognition and academic recognition); in the refugees' case, the purpose of recognition was 'orientation'. In Section 7.1.2, the discrepancy between theory and practice was further discussed as part of the cross-case analysis of the portfolio characteristics.

	Theoretical building block	Teachers	Medical doctors	Refugees
Product characteristics	TBB2: Table 4-5, page 81, Section 4.1.4	EBB2-1: Table 6-4, page 174, Section 6.1.2	EBB2-2: Table 6- 14, page 210, Section 6.2.2	EBB2-3 : Table 6-29, page 248, Section 6.3.2
Portfolio development	TBB3: Table 4-9, page 92, Section 4.2.3	EBB3-1: Table 6-5, page 179, Section 6.1.3	EBB3-2: Table 6- 19, page 219, Section 6.2.3	EBB3-3: Table 6.33, page 255, Section 6.3.3
Portfolio assessment	TBB4: Table 4-12, page 100, Section 4.3.3.	EBB4-1 Table 6-6, page 183, Section 6.1.4	EBB4-2: Table 6- 21, page 226, Section 6.2.4	EBB4-3: Table 6.36, page 259, Section 6.3.4

 Table 7-13
 Overview of the theoretical and empirical building blocks that address the portfolio characteristics

In Section 7.2, the features of the implemented portfolio in the three case studies were linked to the theoretical features of an assessment portfolio and a development portfolio (see Table 7-7 on page 293). It was argued that the completed portfolio were more 'descriptive' in nature rather than that they could be classified as a 'dossier portfolio' or 'personal development portfolio' (cf Smith & Tillema, 2003). The observed causes relate to:

- unfamiliarity with the assessment culture (in the medical doctors' case); therefore emphasis
 was put on the information function;
- the lack of assessment standards that could be used for the 'reflective part' of the portfolio (cf. Beijaard et al., 2002) (in the doctors' and refugees' case);
- the lack of support during portfolio development (in the teachers' case).

In Section 7.2.2, an adapted conceptual framework of portfolio characteristics is presented in Table 7-9 on page 301 that is a refinement of TBB2, 3 and 4. It builds on the work of Smith and Tillema (2003), Tigelaar et al. (2004) and Tillema (2001a) and contains the distinctive features of a portfolio instrument that could enhance the recognition of the actual competencies of highly-skilled immigrants addressing:

- The type of portfolio instrument;
- The structure;
- The evidence;
- The standards;
- The development strategies;
- The guidance and support of the portfolio candidates;
- The roles and responsibilities;
- The assessment purpose;
- The assessment approach; and
- The quality assurance approach for the assessment outcome.

If a highly-skilled immigrant aims for formal recognition of his actual competencies, an assessment portfolio should be implemented. Such a portfolio has the following features:

- It has a prescribed structure that addresses the following items: a Curriculum Vitae, competency claims, and portfolio evidence to prove the competency claims;
- The evidence that can be submitted is restricted. There are clear guidelines that explain the amount and type of evidence that can be submitted to prove that certain standards have been met. The evidence is performance-oriented. It relates to best performance and does not contain self-assessment or reflection. The evidence is preferably standardized and objective;
- The assessment standards are defined by the recognition body that uses the portfolio;
- The portfolio development process is a cyclic process that contains the following phases: identification, selection, specification of learning outcomes (in terms of competency claims), comparison with standards and the gathering of evidence;

- The support of the portfolio candidates should address the cognitive processes that are needed for portfolio development (self-assessment and reflective thinking) as well as the product characteristics (e.g. explanation of the assessment standards, specification of competency claims and selection of portfolio evidence);
- The roles and responsibilities of the people involved in portfolio use should be clearly specified and communicated, distinguishing between: the portfolio assessor, the portfolio advisor and the portfolio candidate;
- The purpose of assessment is formative assessment (focused on the identification of competencies); other instruments are used in addition to take a recognition decision;
- Portfolio assessment is an interpretative process that uses the hermeneutic approach to assure valid assessment. Consensus is reached through critical dialogue among assessors. Discrepancies in the data do not automatically invalidate the assessment but point to the need for additional evidence. Quality is warranted through the use of knowledgeable and trained assessors and transparent procedures;
- Portfolio assessment is often part of wider, multimodal assessment procedure. Portfolio assessment itself is a restricted process.

If a highly-skilled immigrant aims to orient himself towards his labour market chances in Dutch society, a development portfolio should be used. Such a portfolio has the following characteristics (see Table 7-9 on page 301):

- It has a prescribed structure that addresses the following items: a Curriculum Vitae, the targeted objectives defined in terms of competency claims, an analysis of the strengths and weaknesses in the current competency profile, portfolio evidence for the current competency profile and a Personal Development Plan (PDP);
- The evidence that can be submitted is open. However, there are clear guidelines that explain the amount and type of evidence that can be submitted to prove that certain standards have been met. The evidence is process-oriented (to show professional growth) and performanceoriented (to show that certain standards have been met). It may include average performance, self-assessment and reflection;
- The assessment standards are derived from the targeted objectives; they are internally driven. However, to enhance future recognition it is important that the standards are recognized by other stakeholders (e.g. employers, educational institutions);
- The portfolio development process is a cyclic process that contains the following phases: the identification, selection and specification of learning outcomes (in terms of competency claims), comparison with standards and the gathering of evidence;
- The support of the portfolio candidates should address the cognitive processes that are needed for portfolio development (self-assessment and reflective thinking) as well as the product characteristics (e.g. specification of the targeted objectives in terms of competency claims, linking the targeted objectives to relevant assessment standards, selection of portfolio evidence);
- The roles and responsibilities of the people involved in portfolio use should be clearly specified and communicated, distinguishing between: the portfolio assessor, the portfolio advisor and the portfolio candidate;
- The purpose of assessment is formative assessment to steer the development process;
- Portfolio assessment is an interpretative process that uses the hermeneutic approach to assure valid assessment. Portfolio assessment is an open process; the portfolio might be presented to a group of peers to discuss its content and gather feedback on how quality could be improved.

The *second research question* was addressed from a theoretical perspective in Chapter 4. Two theoretical building blocks were presented that contain characteristics of:

- the context that would have a positive influence on portfolio use (TBB1); and
- portfolio design and implementation (TBB5).

It was argued that the context would have an influence on the perspective of change and the design and implementation process. If the context complies with a competency-based learning paradigm, some important conditions for successful portfolio use are met. The theoretical building blocks were used to distil issues of analysis for the data analysis of the pilot projects that were reviewed in the three exploratory case studies. In Chapter 6, the characteristics of the context and the portfolio design and implementation process were presented in empirical building blocks for each case study. Table 7-14 below gives an overview of the theoretical and empirical building blocks that were presented in this thesis.

	Theoretical building block	Teachers	Medical doctors	Refugees
Context characteristics	TBB1: Table 3-6, page 66, Section 3.3	EBB1-1: Table 6-2, page 168, Section 6.1.1	EBB1-2: Table 6-10, page 199, Section 6.2.1	EBB1-3: Table 6-27, page 241, Section 6.3.1
Portfolio design and implementation	TBB5: Table 4-15, page 108, Section 4.4.4	EBB5-1: Table 6-7, page 187, Section 6.1.5	EBB5-2: Table 6-23, page 231, Section 6.2.5	EBB5-3 : Table 6- 38, page 264, Section 6.3.5

Table 7-14 Overview of the theoretical and empirical building blocks that address the portfolio characteristics

From the cross-case analysis it was observed that the context characteristics seem to influence the portfolio design and implementation process. Therefore, it was concluded in Section 7.3.2 that portfolio design and implementation should start with a context analysis. Two design building blocks were presented: one for a content-based environment (see Table 7-11 on page 309) and one for a competency-based environment (see Table 7-12 on page 310). If the context relates to the more traditional content-based evaluation paradigm it is important to link portfolio use for highly-skilled immigrants to a wider innovation that aims at portfolio use for more student groups. Portfolio use seems easy, but the implementation requires a shift towards the assessment culture which is rather complex and intensive. It requires commitment at the institutional level because it entails extensive time and resources in terms of staff development. It was noted that active initiation might be needed to get started; but to develop a shared meaning of what portfolio use entails, it is essential that the outcomes of first experiments are used for further deliberation among staff members. It was suggested that the design process should in the first instance relate to the 'pragmatic design paradigm' and later to the 'communicative design paradigm' (cf. Visscher-Voerman, 1999).

However, regardless of the context, this research study distilled ten key components of portfolio use that should be addressed during portfolio design and implementation. These components were discussed in Section 7.3.1 and are:

- the rationale of portfolio use;
- the competency claims;
- the assessment standards;
- the portfolio evidence;
- the support of portfolio candidates;
- the support of staff involved in portfolio use;
- the role of the portfolio assessor;
- the role of the portfolio advisor;
- the purpose of portfolio assessment; and
- the assessment protocol.

Inspired by Van de Akker (2003), the ten components were visualized as a 'portfolio spider web' in Figure 7-1 on page 305 to show that the each components are inter-related to the other and they should all be in line with the rational of portfolio use. Section 7.3.2 presented different explorative questions for each component that should be addressed during the process of portfolio design and implementation (see Table 7-10 on 308). As a refinement of TBB1 and 5, two design building blocks were presented: one for a content-based environment (see Table 7-11 on page 309) and one for a competency-based environment (see Table 7-12 on page 310).

The final chapter of this thesis starts with a summary of the research study and its findings. Section 8.2 reflects on the research study and discusses the lessons that can be learned from it. It addresses the applied research approach and the substantive outcomes. Section 8.3 discusses the recommendations for further research and policy and practice.

8.1 Summary of the research study

This research study explores the characteristics of the portfolio as an instrument for highly-skilled immigrants to facilitate the identification, assessment and recognition of their actual competencies in order to define guidelines for portfolio design and implementation. The two research questions that guided the research process are:

- 1. What are the characteristics of the portfolio instrument and its use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?
- 2. What are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice?

The research study was undertaken at the Netherlands Organization for International Cooperation in Higher Education (Nuffic). From 2000 to 2004, Nuffic undertook five pilot projects that were aimed at exploring the characteristics of the portfolio instrument as a tool to make the prior learning of highly-skilled immigrants visible. In this manner, the recognition bodies (higher education institutions, ministries and employers) could take the outcomes of all types of learning – formal, non-formal and informal – into account in their recognition decisions. The pilot projects were used for a multiple case study. The case studies explored the characteristics of portfolio use addressing numerous 'issues of analysis' that were derived from a set of five theoretical building blocks that relate to:

- 1. The context characteristics;
- 2. The product characteristics of the portfolio instrument;
- 3. The characteristics of portfolio development by the highly-skilled immigrant (the portfolio candidate);
- 4. The characteristics of portfolio assessment by the recognition body (the portfolio assessor); and
- 5. The characteristics of portfolio design and implementation.

The cross-case analysis resulted in a refined and adapted conceptual framework of portfolio characteristics for highly-skilled immigrants, a 'portfolio spider web' (see Figure 8-1 on page 326 and also Section 7.3) that contains ten key components for effective portfolio use by highly skilled immigrants and two design building blocks for portfolio design and implementation.

The relevancy of this study can be discussed from different perspectives. From a theoretical viewpoint it contributes to the body of scientific knowledge about portfolio use for highly-skilled immigrants to enhance the identification, assessment and recognition of their actual competencies. It used literature on competency-based assessment and portfolio instruments to develop five theoretical building blocks. These building blocks were used as the framework for analysing and describing the portfolio characteristics in three case studies. Based on the results of the cross-case analysis, a refined conceptual framework of portfolio characteristics for highly-skilled immigrants could be presented. From a practical viewpoint, the study is relevant because the 'portfolio spider web' and the two design building blocks might assist other developers or practitioners in the design and implementation process of a portfolio instrument. Finally, the research study contributes to the

social and political debate about the effective use of human resources, lifelong learning and the integration of highly-skilled immigrants into Dutch society through paid employment or study. It is generally acknowledged that all forms of learning need to be recognized but how this should be realized in practice remains in many cases an unanswered question.

This section gives a summary of the research study. It starts with a brief overview of the context and the set-up of the research study. Next, the five theoretical building blocks that address the research questions from a theoretical perspective are summarized. The theoretical building blocks were used for the development of a framework for the analysis of the Nuffic pilot project data. As indicated earlier, the five Nuffic pilot projects were used for the three exploratory case studies. Thereafter, the results of the three case studies are described. Each case study concluded with a framework of empirical findings of portfolio use by respectively foreign-trained teachers, foreign-trained medical doctors and refugees. The main aspects of each framework are briefly summarized. Last, the results of the cross-case analysis are discussed in such a manner as to answer the research question.

8.1.1 Context and set up of the research study

To date, the evaluation and recognition practice of highly-skilled immigrants has focused on formal competencies that are measured in years of completed formal education. The main instrument used is international credential evaluation. The practice of international credential evaluation neglects the learning that takes place in non-formal and informal settings. This research study was initiated at the turn of this century when debate began regarding the implementation of the lifelong learning agenda at the international and national level. The European Commission (2000) noted that innovative forms of evaluation and recognition need to be found to include the outcomes of non-formal and informal learning in recognition decisions. As an example, the Commission points to the 'Accreditation of Prior Learning (APEL)' systems that exists in various countries, for example, in the United Kingdom. Internationally, a variety of terms are used to refer to the evaluation process of prior learning (cf. Evans, 2000). In this research study, the term 'Prior Learning Assessment and Recognition (PLAR)' is preferred as it indicates that assessment and recognition are two separate processes. The portfolio instrument is a common instrument used in PLAR procedures to document the results of prior learning experiences.

The research study was carried out at the Netherlands Organization for International Cooperation in Higher Education (Nuffic). Nuffic has long-standing experience in international credential evaluation. In 2000, Nuffic decided to start experimenting with portfolio use to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants. In the period from 2000 to 2004, five pilot project were carried out: one teachers' pilot project, three medical doctors' pilot projects and one refugees' pilot project. These pilot projects were used to conduct a *reconstructive design study* that explored the characteristics of a portfolio instrument for highly-skilled immigrants and its design and implementation process. In reconstructive design studies, research activities generally take place after the design of the intervention to derive more general design principles (Van den Akker, 1999). This study used a *multiple exploratory case study* approach. A case study is "an empirical enquiry that investigates a contemporary phenomenon within its real-life, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 1994, p.18). Based on a literature review, five theoretical building blocks (TBBs) were developed to answer the two research questions from a theoretical perspective. The topics addressed by each the respective building blocks are:

- 1. The context characteristics (TBB1);
- 2. The product characteristics of the portfolio instrument (TBB2);
- 3. The characteristics of portfolio development by the portfolio candidate (TBB3);

- 4. The characteristics of portfolio assessment by the portfolio assessor (TBB4); and
- 5. The characteristics of portfolio design and implementation (TBB5).

The five TBBs were used to develop an analysis framework for the case studies. Each TBB is briefly summarized below.

8.1.2 Overview of five theoretical building blocks

Context characteristics (TBB1)

The first theoretical building block addresses the context characteristics that are likely to have a positive influence on the implementation of a portfolio instrument that aims to enhance the identification, assessment and recognition of actual competencies. It is developed in Chapter 3. In Section 3.1 it was decided to follow Kouwenhoven (2003) who uses the term 'competence' in a generic sense referring to the quality of being able to perform the key professional tasks of a profession up to standard. In order to perform up to standard, the professional needs certain attributes which are the 'competencies'. A 'competency' is "the capability to choose and use (apply) an integrated combination of knowledge, skills and attitudes with the intention to realize a task" (Kouwenhoven, 2003, p.43). The meaning of the term 'competence' is thoroughly discussed using the six dimensions of the 'inside-out approach' presented by Stoof et al. (2000):

1. Personal characteristics versus task characteristics:

In this research study the term competency is used to refer to a '*personal attribute*' and not to a 'tasks characteristic'. Ellström (1998) differentiates between 'formal competence' which is often measured in years of formal learning and 'actual competence' which is the capacity to perform certain tasks. This research study aims to make the actual competencies of highly-skilled immigrants visible using the portfolio instrument so that these can be assessed and recognized.

- Individual competence versus distributed competence: The term competence s viewed as something that goes beyond the individual and refers to something more. Reference is made to the 'interactive model' of competence (cf. Hodkinson, 1992). This means that competencies are context and culture specific (Hodkinson, 1992; Klarus, 1998, 2000).
- Specific competence versus general competence: This research study prefers to define competencies using an *integrated, holistic approach* that derives competency statements from the 30 to 40 professional tasks that need to be performed up to standard (cf. Gonzci, 1994; Hager, 1993).
- 4. Levels of competence versus competence as a level: Furthermore, competencies are viewed as a *continuum* representing various levels. This means that competency-standards need to be defined in relation to a development scale (Klenowski, 2002).
- 5. Teachable competence versus non-teachable competence: In this research study competencies are viewed as *teachable* concept.
- 6. Static competence versus dynamic competence:

Finally, competencies are viewed as a *dynamic* concept and not a static one.

For a more detailed explanation of the conceptual choices made in this research study see Table 3-1 on page 46.

Section 3.2 addresses the characteristics of competency-based curricula in comparison to the characteristics of content-based curricula or disciplinary-based curricula. It gives attention to the learning process (Section 3.2.1), the assessment process (Section 3.2.2) and the quality assurance of assessment (Section 3.2.3). Each sub-section concludes with a summarizing overview that presents the key characteristics for both paradigms (see respectively Table 3-2 on

page 48, Table 3-3 on page 52 and Table 3-4 on page 57). Section 3.2.4 explores competencybased learning from a global perspective. It used a model developed by Ballard and Clanchy (1992) that shows the relationship between teaching and learning strategies and cultural attitudes to knowledge (see also Figure 3-4 on page 61). This model is based on the assumption that there are attitudes to knowledge that emphasize either *conservation* or *extension*. Second, it is assumed that there are dominant tendencies in each national culture that make one of these two attitudes more appropriate. The conserving attitude to knowledge relates to a reproductive learning approach while the extending attitude to knowledge relates to the speculative learning approach. The analysis shows that competency-based learning is very different from the reproductive learning approach. It is therefore concluded that highly-skilled immigrants who come from an educational culture that favours a conserving attitude to knowledge need to be properly prepared to participate in a competency-based environment because there important differences with respect to: the learning and teaching strategies, the role of the lecturer, the role of the student and the function and nature of assessment. For a detailed overview of the differences see Table 3-5 on page 63.

The exploration of the characteristics of competency-based learning versus content-based learning led to the conclusion that the following two factors influence the complexity of portfolio use to enhance the identification, assessment and recognition of the actual competencies of highly-skilled immigrants:

- 1. The extent to which the environment in which the portfolio instrument is introduced complies with the content-based learning paradigm or the competency-based learning paradigm;
- 2. The extent to which the highly-skilled immigrant was educated in an educational system that complies with the conserving attitude to knowledge or the extending attitude to knowledge.

The first theoretical building block (TBB1) contains context characteristics that are likely to have a positive influence on the introduction of the portfolio instrument. It addresses three issues: competency-based learning, competency-based assessment and the quality approach (see also Table 3-6 on page 66). Important facilitating features include:

- The learning environment is based on the future professional practice of the learner;
- The learning environment is based on the elaboration of professional profiles and the identification of competencies required to perform the key professional tasks up to standard;
- The availability of assessment instruments that focus on competencies in an integrated manner, in real-life contexts using different instruments (multi-modal); and
- Assessment is based on a contextual, qualitative approach to warrant the quality of the assessment decision (e.g. the hermeneutic approach).

Portfolio product characteristics (TBB2)

In Chapter 4, four theoretical building blocks are added. Section 4.1 starts with a short introduction into the variety of products that are labelled as portfolio in the literature. The section concludes with the classification of Smith and Tillema (2003) who differentiate between two types of assessment portfolios (a 'dossier portfolio' and a 'reflective portfolio') and two types of development portfolios (a 'personal development portfolio' and a 'training portfolio'). These four types of portfolios were discussed in relation to the 'targeted objectives' of the highly-skilled immigrants. It was concluded that:

- The 'dossier portfolio' seems most relevant if the highly-skilled immigrant is aiming for formal recognition of his competencies; either to gain access to a regulated profession ('de jure' professional recognition) or to gain access to a Dutch study programme (academic recognition);
- The 'reflective portfolio' seems relevant if the highly-skilled immigrant aims for ' social recognition (e.g. finding a job in a non-regulated profession or voluntary work);

• The 'personal development portfolio' seems relevant for highly-skilled immigrants who wish to orient themselves regarding their (labour market) possibilities in Dutch society.

Figure 4-2 on page 71 gives an overview of how the three types of portfolio relate to the general purposes of competency recognition and the general purposes of the evaluation and recognition of foreign diplomas.

In the remaining part of Section 4.1 the characteristics of the development portfolio (Section 4.1.2) and the characteristics of the assessment portfolio (Section 4.1.3) are discussed in more detail. The section concludes with an overview of the key characteristics of each type of portfolio addressing the following issues: function, impact, structure and content and standards and evidence for proving competence. This overview forms the second theoretical building block (TBB2), which is presented in Table 4-5 on page 81. The *development portfolio* aims to plan and steer the development process of the portfolio candidate. A development portfolio contributes to the awareness of 'targeted objectives', strengths and weaknesses in the current competency profile, and the steps that need to be taken to reach the targeted objectives. It also contributes to the development of reflective skills. Generally the structure is open, containing a dossier section and a reflective section. Since the portfolio contributes to the 'targeted objectives' of the portfolio candidate, the standards are often internally defined (by the portfolio candidate). A development portfolio contains all kinds of evidence, e.g. average performance, best performance, reflections, self assessment, and peer assessment. The selection of evidence is open. The assessment portfolio aims to gain formal or social recognition. Its immediate outcomes can be materialized in terms of 'credit points' or money as it leads to certification, entrance to a study programme, exemptions or a job. Generally, the structure and content of an assessment portfolio is prescribed by the recognition body. It often contains a dossier part and a reflective part. The standards used for the exploration of learning are externally defined by the recognition body. The assessment portfolio contains materials that relate to best performance. Generally, neither reflective information or self assessment is included.

Portfolio development process by the highly-skilled immigrant (TBB3)

Section 4.2 discusses the portfolio development process. It starts with a discussion of the common steps and strategies that should lead the portfolio candidate through the process of identification, selection, self-assessment, reflective practice and documentation. It briefly discusses the common steps in PLAR procedures in three countries: the United States, the United Kingdom and the Netherlands. It concludes that portfolio development is a cyclic process that generally starts 'bottom-up' by making an inventory of prior learning experiences. The common steps that are included in the third theoretical building block (TBB3) are:

- 1. Identification of prior learning experiences;
- 2. Selection of relevant experiences;
- 3. Specification of learning outcomes (using a 'college course model', a 'block credit model' or a 'competency model' (Whitaker, 1989);
- 4. Comparison of learning outcomes with the assessment standards;
- 5. Gathering evidence;
- 6. Writing a personal development or action plan.

Portfolio development is based on three important learning process like self-assessment and reflective thinking (Klenowski, 2002). Section 4.2.2 points out that these learning processes might be new for many portfolio candidates, especially for highly-skilled immigrants who were educated and trained in a reproductive learning environment. Building on the work of Ballard and Clanchy (1992), Klenowski (2002) and Teekens (2002), various support measures were derived that could assist

highly-skilled immigrants in the portfolio development process. These measures are summarized in TBB3 which is presented in Table 4-9 on page 92. The last issue addressed in TBB3 concerns the main roles and responsibilities of the people involved in portfolio development. These are:

- The portfolio candidate who is the owner of the portfolio and responsible for portfolio development;
- The portfolio advisor who is responsible for the guidance and support of the portfolio candidate.
 He conducts a formative evaluation before the portfolio is submitted to the portfolio assessor;
- The portfolio assessor who is responsible for the portfolio assessment.

Portfolio assessment process by the recognizing body (TBB4)

Section 4.3 explores the characteristics of the portfolio assessment process and summarizes the key characteristics in a fourth theoretical building block (TBB4). TBB4 is presented in Table 4-12 on page 100 and contains two issues: the main purpose of portfolio assessment and the criteria used to warrant the quality of portfolio assessment. Portfolio assessment either has a formative or a summative purpose. In a development portfolio, the purpose of portfolio assessment automatically concerns formative assessment (to steer and monitor the development process of the candidate). In an assessment portfolio, the purpose of portfolio assessment can be formative (focused on the identification of competencies) or summative (focused on the assessment and recognition of competencies).

Portfolio assessment is described as a very complicated, interpretative process (Klenowski, 2002; Tigelaar et al., 2005). Each portfolio has its own unique content that needs to be interpreted before an assessment and recognition decision can be taken. To assure validity it is important that the portfolio evidence relates to the assessment standards. In addition, there should be consensus about the assessment decision among the portfolio assessors. Consensus is warranted through critical dialogue among knowledgeable and trained portfolio assessors (Johnson, 2002; Klenowski, 2002; Moss, 1984). The initial set of interpretations should be challenged by looking for counter-examples in the portfolio, and the assessment results should be debated with other portfolio assessors, the portfolio advisor and/or the portfolio candidate (Tigelaar et al., 2005). In addition, it is important that the assessment procedure is transparent. In this respect, it is also important that the assessment outcome contains contextual information to inform others about the purpose of the assessment, the content, the level, the assessment approach and the measures taken to assure the quality of the assessment decision.

Portfolio design and implementation (TBB5)

The fifth theoretical building block (TBB5) is presented in Section 4.4 (see Table 4-15 on page 108). It addresses portfolio design and implementation. Section 4.4.1 explains that portfolio implementation is a 'multilevel' and 'multidimensional' change (cf. Fullan, 2001). It describes three common phases in a change process: initiation, implementation and institutionalization (Fullan, 2001). This reconstructive study relates to the initiation and implementation phase of change. Therefore, the factors that commonly influence successful initiation and implementation were briefly described. Section 4.4.2 gives attention to two important design paradigms: the 'communicative design paradigm' and the 'pragmatic design paradigm' (cf. Visscher-Voerman et al., 1999). It is argued that the portfolio design process that should be safeguarded by the design process. These are:

- Active involvement and participation of staff who need to adopt the change;
- Pressure and support from the central level of administration (management);
- Changes in behaviour and beliefs; and
- Creation of a sense of ownership.

8.1.3 Overview of the three exploratory case studies

In Chapter 5, the five theoretical building blocks are used to develop a framework for the secondary data analysis to support the multiple exploratory case study (see Table 5-4 on page 121). A number of issues of analysis were derived from each TBB to analyse the empirical portfolio characteristics. A distinction is made between the intended, the implemented and the experienced portfolio characteristics. Furthermore, Chapter 5 explains the set-up of the five Nuffic pilot projects that were used for the case studies. Section 5.2 describes the teachers' pilot project and links the available database to the analysis framework for the case studies (see Table 5-9 on page 133). Section 5.4 does the same for the three medical doctors' pilot projects (see Table 5-13 on page 147) and Section 5.5 for the refugees' pilot project (see Table 5-17 on page 158). Chapter 6 presents the results of the multiple case study. Each case study is briefly summarized below.

Teachers' case

The context of the teachers' case was classified as a competency-based environment. In 2000, the Ministry of Education introduced a competency-based assessment procedure to assess the competencies of prospective primary and secondary school teachers (cf. Stoas, 2000). The teachers' case applied the 'fidelity perspective of change' (cf. Fullan, 2001). It used the national assessment procedure for prospective teachers to see whether it could enhance the identification of the actual competencies of foreign-trained teachers. Portfolio assessment was carried out by an official assessment centre called *Educom*. The assessors had been trained in the assessment procedure and had experience with students from different cultural backgrounds. The portfolio candidates had no prior experience with the portfolio instrument. Four of the six candidates had experience in the Dutch teaching sector. Four had passed the highest level of the state exam for Dutch language proficiency.

The intended and implemented function of the portfolio instrument was assessment. However, this function was not realized in practice. The completed portfolios were more descriptive in nature giving insight into prior learning experiences but containing no (or little) evidence for competency development in relation to the assessment standards. The main causes for this were:

- The actual characteristics of the portfolio candidates (inexperienced portfolio users who did not grasp the meaning of the assessment standards);
- The implemented characteristics of the portfolio development process (portfolio development was an independent activity and there was no clear distinction between the roles of the portfolio assessor and the portfolio advisor).

The portfolio candidates were unfamiliar with the assessment culture and the cognitive processes that play an important role in portfolio development: self-assessment and reflective thinking. These processes need to be practiced in a learning environment. The portfolio assessors therefore suggested that portfolio development should be a part of an orientation programme. The orientation programme could address the meaning of the core competencies, give portfolio candidates the opportunity to practice self-assessment, and if needed, give them the opportunity to reconstruct or gather portfolio evidence. It was also concluded that the role of portfolio assessors and portfolio advisor should be clearly separated. The portfolio advisor should give formative feedback before the portfolio is submitted for assessment. The portfolio assessors were of the opinion that the assessment outcomes were invalidated by the unfamiliarity of the portfolio candidates with the assessment standards, the assessment culture and the lack of support mechanisms. It was therefore concluded that in the teachers' case the availability of a national assessment procedure with a legal basis is not enough to enhance the identification of prior learning. Of equal importance is a good support structure for the portfolio candidate. For a detailed overview of the empirical findings in the teacher case see Table 6-8 on page 190.

Medical doctors' case

The context of the medical doctors' case was characterized as neither content-based nor competency-based. Schuwirth and Van der Vleuten (2005) characterized the dominant learning paradigm as 'problem-based learning'. They indicate that the shift towards competency-based learning is gradually taking place. In this approach, a distinction is made between four roles of a medical doctor, namely: the doctor as a medical expert, the doctor as a scientist, the doctor as a worker in the health care system and the doctor as a person (Overeem et al., 2003). At the national level, there are no competency definitions to define medical expertise (cf. Metz et al., 2001). Half of the twenty portfolio assessors who participated in the medical doctors' case had heard about the portfolio instrument, but none of them were trained in the assessment culture. The 53 portfolio candidates had no prior experience with portfolio development. Half of them had some kind of experience in the Dutch medical sector. About a quarter had passed the highest level of the state exam for Dutch language proficiency.

In the medical doctors' case the 'evolutionary perspective to change' was applied (cf. Fullan, 2001). The Ministry of Health had announced the development of a national assessment procedure for foreign-trained professionals who wish to work in the Dutch health care system. The development of this procedure took place parallel to the medical doctors' pilot project initiated by Nuffic. The implemented design paradigm was characterized as a 'pragmatic design paradigm'. The faculty members suggested to use the portfolio instrument as an information tool. They were in favour of a quick start and suggested to use the outcomes of a first experiment for further discussion on the portfolio characteristics. Nuffic served as an 'external change agent' (c. Fullan, 2001) and played an important role during the implementation phase. It was concluded in the medical doctors' case that faculty members were mainly involved in the analysis and evaluation phase of the projects. To assure a change of behaviour (and belief) it is important that future portfolio assessors (and portfolio advisors) get the opportunity to practice their roles.

The intended and implemented function of the portfolio instrument was 'information-oriented'. The experienced characteristics showed that the appreciation of certain content items in the portfolio depend on the perspective from which the portfolio assessors review the format (assessment perspective versus development perspective). It was therefore concluded that the function of the portfolio should be more clearly defined than 'giving information on prior learning experiences'. The portfolio structure changed from an open structure to a prescribed format. Both the portfolio candidates and the portfolio assessors felt a need for a prescribed format. Each part of the format had its own specific function. It was concluded in this case that the prescribed format had the disadvantage that the portfolio candidates completed the form without becoming aware of the cyclic process of portfolio development and the true meaning of the portfolio instrument. It is therefore important that the support process specifically addresses the portfolio development strategies.

The implemented characteristics of the portfolio development process were well received. In the medical doctors' case, a portfolio development course was developed containing reflective group assignments, presentations, individual guidance and support, formative feedback and independent work. It was concluded that the portfolio advisor should be more aware of the portfolio assessment process. Portfolio assessment received too little attention in the medical doctors' case because of the intended and implemented function (information-oriented). The experienced characteristics showed that the information could be used for assessment purposes if the completed portfolio were to contain more objective information, if there were a clear set of assessment standards and if the portfolio were embedded in a wider assessment procedure. For a detailed overview of the case study findings see Table 6-24 on page 234.

Refugees' case

In the refugees' case the implemented function of the portfolio instrument was 'developmentoriented'; it aimed to inform the refugees' counsellors on prior learning experiences to steer and monitor the development process of the refugee. It was expected that this would have an empowering effect on the refugees. Looking at the context characteristics, it was concluded in the refugees' case that the counselling organizations started using the portfolio instrument to activate and empower refugees. The thirteen portfolio assessors who participated in the case study were all professionals in counselling refugees. None of them had previous experience with portfolio assessment. The portfolio candidates (110 at the start, 74 at the end) had no prior experience with portfolio development either. Their Dutch language skills varied from no knowledge of the Dutch language to a pass on the highest level of the state exam for Dutch language proficiency. It was concluded that the complexity of change was simplified by focusing on the development function instead of both (as intended). To enhance the identification, assessment and recognition of prior learning, the portfolio descriptions need to be linked to a set of external assessment standards to define competency claims and gather evidence to accompany these claims. To guide this process, a portfolio advisor from a recognition body (a higher education institution) needs to be involved, something that could not be realized by the project partners.

The perspective to change applied in the refugees' case is a combination of the 'fidelity perspective' and the 'evolutionary perspective' (cf. Fullan, 2001). The implemented portfolio materials were based on an analysis of existing portfolio materials used by other organizations, sometimes for other target groups. It was concluded that the implemented design paradigm was a mixture of the 'systematic design paradigm' and the 'pragmatic design paradigm' (cf. Visscher-Voerman et al., 1999).

The implemented structure and content matched the implemented function. The prescribed format contained four parts and an appendix that each had its own specific function: an inventory of experiences (Curriculum Vitae), detailed portfolio descriptions, a Personal Development Plan (PDP) and portfolio evidence. For portfolio assessment (by the refugees' counsellors) the 'targeted objectives' of the refugee (which were stated in the PDP) were taken as a starting point. To enhance future the recognition of prior learning it is important that these objectives are linked to a set of external assessment standards that are nationally accepted. However, this step received too little attention as a consequence of the implemented function (development). The same was concluded for the portfolio evidence. The experienced characteristics show that the portfolio gave the counsellors good insight into prior learning experiences and future prospects. In some cases this helped to steer the orientation process.

The implemented portfolio development learning line was well-received by both the portfolio candidates and the counsellors. *COA* decided to implement the portfolio for all refugees (regardless of educational background). As a consequence, train-the-trainer workshops were organized in 2005 to train *COA* counsellors in giving the portfolio workshops to the refugees. For a detailed overview of all the case study findings see Table 7-9 on page 301.

8.1.4 Characteristics of a portfolio instrument for highly-skilled immigrants

Chapter 7 describes the results of the cross-case analysis to answer the two research questions using theory and practice. The answers to the first research question are summarized below: *What are the characteristics of the portfolio instrument and its use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?* It uses the results of the cross-case analysis with respect to:

- The portfolio product characteristics;
- The portfolio development process;
- The portfolio assessment process.

Section 7.2 linked the theoretical characteristics of the 'dossier portfolio' and the 'personal development portfolio' to the empirical portfolio characteristics. It was concluded that the completed portfolios were more 'descriptive' in nature rather than that they could be classified as a 'dossier portfolio' or a 'personal development portfolio'. The causes for this relate to:

- the unfamiliarity with the assessment culture as a consequence of which the information function of the portfolio instrument was emphasized (in the medical doctors' case);
- the lack of assessment standards that could be used for the exploration of competency claims or learning statements (in the medical doctors' case and refugees' case);
- the lack of support (in the teachers' case).

Building on the work of Smith and Tillema (2003), Tigelaar et al. (2004) and Tillema (2001a) and the case study findings, it was decided to refine TBB2, TBB3 and TBB4 by presenting an adapted conceptual framework of portfolio characteristics for highly-skilled immigrants. This framework takes the 'targeted objective' of the highly-skilled immigrant as a focal point. If the highly-skilled immigrant aims for *formal recognition* of his actual competencies an *assessment portfolio* should be implemented. The distinctive features for this type of portfolio include:

- A prescribed structure containing a: Curriculum Vitae, competency claims, and portfolio evidence;
- The evidence is restricted. There should be clear guidelines that explain the amount and type of evidence that can be submitted in relation to the applied assessment standards;
- Portfolio development is a cyclic process;
- The support offered to the portfolio candidates should address the cognitive process needed for portfolio development (self assessment and reflective thinking) as well as the product characteristics of the portfolio instrument (the definition of competency claims, the assessment standards, the selection of portfolio evidence);
- The purpose of portfolio assessment is formative; other assessment instruments are used in addition to take a recognition decision; portfolio is embedded in a wider, multi-modal assessment procedure.

(See Table 7-9 on page 301 for a detailed overview).

If the highly-skilled immigrants aims to *orient* themselves regarding their labour market chances in Dutch society, a *development portfolio* should be implemented. The distinctive features for this type of portfolio include:

- A prescribed structure containing a: Curriculum Vitae, the targeted objectives in terms of competency claims, an analysis of strengths and weaknesses in the current competency profile, portfolio evidence for the current competency profile and a Personal Development Plan (PDP);
- The evidence is open. However, there should be clear guidelines that explain the amount and type of evidence that can be submitted as proof of competency claims;
- Portfolio development is a cyclic process;
- The support offered to the portfolio candidates should address the cognitive process needed for portfolio development (self assessment and reflective thinking) as well as the product characteristics of the portfolio instrument (the definition of competency claims, the assessment standards, the selection of portfolio evidence);
- The purpose of portfolio assessment is formative to steer and monitor the development process of the portfolio candidate.

(See Table 7-9 on page 301 for a detailed overview).

8.1.5 Characteristics of portfolio design and implementation

Finally, the answers to the second research question are summarized: what are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice? It uses the results of the cross-case analysis with respect to:

- The context characteristics; and
- The characteristics of the portfolio design and implementation process.

Furthermore, it uses the answers to the first research question but presents them differently so that they can assist developers and practitioners during the design and implementation process of a portfolio instrument for highly-skilled immigrants.

Section 7.3 presented ten key components for effective portfolio use by highly-skilled immigrants. These components relate (directly or indirectly) to the issues addressed in the adapted conceptual framework of portfolio characteristics for highly-skilled immigrants.

1. Rationale of portfolio use:

The rationale of portfolio use relates directly to the 'targeted objective' of the highly-skilled immigrant. In this research study a distinction is made between 'formal recognition', 'social recognition' and 'orientation' (cf. European Commission, 2004). An 'assessment portfolio' seems appropriate to enhance the identification, assessment and recognition of competencies for the first two purposes. A 'development portfolio' should be used for the latter purpose. Both types of portfolios have their own distinct characteristics. Therefore, the rationale of portfolio use forms the core of the portfolio spider web.

2. Competency claims:

The competency claims form an important part of the content of the portfolio. In a development portfolio, the competency claims relate to the 'competencies aimed for'. Portfolio development helps the candidate to specify how these competencies can be developed (which steps should be taken). In an assessment portfolio the competency claims refer to the actual competencies of the portfolio candidate. The claims should be accompanied by evidence that proves that the claims have been met.

3. The assessment standards:

The competency claims should relate to the assessment standards that form the frame of reference for portfolio development by the portfolio candidate. These standards should be defined in relation to a development scale to enhance self-assessment and reflection.

4. Portfolio evidence:

It is important that there are clear guidelines on the type and amount of evidence that is needed to support the competency claims. These guidelines support the portfolio candidates to select adequate evidence in relation to the assessment standards.

5. Support of portfolio candidates:

The portfolio candidates need to receive adequate support during the portfolio development process. The support should relate to: a) the cognitive processes that are part of the portfolio development process (self assessment and reflection); b) the purpose of portfolio development; and c) the assessment standards and the portfolio evidence.

6. Support of staff:

Of equal importance is the support of staff that plays a role in the support of portfolio candidates or the assessment of the portfolio content. The staff should be trained in the assessment culture and the portfolio instrument. In addition staff development activities should be organized like peer review meetings and coaching.

7. Role of portfolio assessor:

To enhance the transparency of the assessment procedure it is very important that the role of the portfolio assessor is clearly defined and communicated to the portfolio candidates.

8. Role of portfolio advisor:

The same accounts for the role of the portfolio advisor. The portfolio advisor should be well informed about the portfolio assessment procedure.

9. Purpose of assessment:

The purpose of portfolio assessment should be clearly defined and communicated to the portfolio candidates before the portfolio development process starts.

10. Assessment protocol:

To enhance the transparency of the assessment procedure and guarantee the quality of the assessment outcome it is important that all aspects of the assessment procedure are specified in an assessment protocol.

To indicate that all components are closely related to each other and dependent on the rationale of portfolio use, the metaphor of the spider web was used following Van den Akker (2003). The portfolio spider web is presented in Figure 7-1 on page 305 as well as in Figure 8-1.

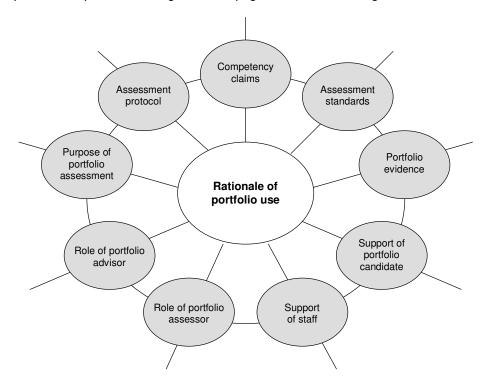


Figure 8-1 Ten key components of portfolio use visualized in a portfolio spider web

The cross-case analysis of the context characteristics and the portfolio design and implementation process showed that the first influences the latter. Therefore, it was concluded that portfolio design and implementation should start with a context analysis that addresses: the evaluation standards, the evaluation approach and the evaluation paradigm. Two design building blocks were presented: one relevant for a *content-based environment* and one relevant for a *competency-based environment*. Each building block addresses the design process, the implementation process, the inputs of the intervention and the process of the intervention. In summary, the design building block for a *content-based environment* indicates, amongst other things, that:

- The pragmatic design paradigm should be considered (cf. Visscher-Voerman, 1999);
- Active initiation might be needed to get started (cf. Fullan, 2001);
- The design process should ensure that the results of a first experiment are used to develop a shared understanding of the aims and requirements for future use;

- To assure a change of evaluation paradigm there is a need for pressure and support from the administrative level; portfolio use for a specific group should be linked to a wider, institutional ambition to assure the need and priority for change;
- Staff should play an active role in each phase of the design and implementation process;
- Staff should be trained in the assessment culture and portfolio use;
- There should be a clear view on the rationale of portfolio use;
- There should be a clear set of assessment standards as well as guidelines for portfolio evidence;
- Portfolio advisors and portfolio assessors should be appointed and trained;
- Portfolio candidates should receive adequate support during the portfolio development process. (See Table 7-11 on page 309 for a detailed overview).

The design building block for a competency-based environment indicates amongst other things that:

- The communicative design paradigm should be considered (cf. Visscher-Voerman, 1999);
- Staff should play an active role in each phase of the design and implementation process;
- Staff should be trained in cultural differences and the consequences these might have for assessment;
- peer consultation should be organized between portfolio advisors and portfolio assessors and between the two groups;
- There should be a clear view on the rationale of portfolio use;
- There should be a clear set of assessment standards as well as guidelines for portfolio evidence;
- Portfolio advisors and portfolio assessors should be appointed and trained;
- Portfolio candidates should receive adequate support during the portfolio development process.

For a detailed overview see Table 7-12 on page 309.

8.2 Reflection on the research study

This section reflects on the research study from two perspectives: the methodology applied and the substantive outcomes. Section 8.2.1 contains the methodological reflection. It reflects on the research approach applied – a reconstructive multiple case study – and the three case studies. It discusses the change from formative research to reconstructive research and the effect this change had on the research findings. Section 8.2.2 concerns the substantive reflection. It discusses some important new insights that occurred at the final stage of this research study. The first concerns the question of whether portfolio use for highly-skilled immigrants can only be successful if a competency-based learning environment is implemented. Second, attention is given to another classification system of portfolio purposes and an explanation is given of how the three case studies relate to this classification.

8.2.1 Methodological reflection

As discussed in Chapter 5, the research approach applied is 'development research'. In 2006 Van den Akker, Gravemeijer, McKenney and Nieveen use the term 'design research' instead (cf. Plomp 2006). In this reflective part of the thesis the term 'design research' is used instead of 'development research'. As explained In Chapter 5, design research focuses on the designing interventions in the real context of education or training. Plomp (2006) explains that it has an 'interventionist characteristic' combined with a 'process orientation' and a 'theory orientation'. Apart from developing interventions, it aims to understand and improve interventions and use the development and evaluation of consecutive prototypes to build theory. In the first instance, it was the intention to conduct 'formative design research' to answer the two main research question of this study:

1. What are the characteristics of portfolio use by highly-skilled immigrants that facilitate the identification, assessment and recognition of their actual competencies?

2. What are the characteristics of portfolio design and implementation that enhance the acceptability and prospective use of the portfolio instrument in the current evaluation and recognition practice?

In formative research, the role of designer and researcher is often combined in one person and the research activities are performed throughout the design process and reverse (Van den Akker, 1999). However, experience showed that the development team of Nuffic was not in control of many of the design decisions that had to be made during the Nuffic pilot projects. The future portfolio assessors exerted considerable influence on the portfolio characteristics. It was also difficult to guarantee the continuity of portfolio use in a particular sector which made it difficult to field test and evaluate consecutive prototypes of the intervention. As explained in Chapter 1, it was therefore decided to change to reconstructive design research. In reconstructive studies, the roles of designer and researcher are more separate and the research activities generally take place after the design process (Van den Akker, 1999). It became the intention to describe the empirical portfolio characteristics with the purpose to see whether characteristics for portfolio use by highly-skilled immigrants could be distilled. Therefore, a multiple exploratory case study was conducted to answer the two main research questions using the Nuffic pilot project as cases.

For the analysis of the characteristics of portfolio use in the three case studies, first a theoretical framework was developed that contains five theoretical building blocks (TBBs). These building blocks address the two research questions from a theoretical perspective. The building blocks concern:

- 1. the context characteristics (TBB1);
- 2. the portfolio product characteristics (TBB2);
- 3. the characteristics of the portfolio development process by the portfolio candidate (TBB3);
- 4. the characteristics of the portfolio assessment process by the recognition body (TBB4); and
- 5. the characteristics of portfolio design and implementation (TBB5).

TBB2, TBB3 and TBB4 relate to the first research question, while TBB1 and TBB5 address the second. The five TBBs were used to develop a framework for the data analysis of the Nuffic pilot projects (one pilot project on teachers, three pilot projects on medical doctors and one pilot project on refugees). From each TBB a number of issues of analysis were distilled and placed in the analysis framework for the case studies. The issues of analysis were studied in the three exploratory case studies (one teachers' case, one medical doctors' case consisting three pilot projects and one refugees' case). Since the pilot projects were difficult to steer, there were some issues of analysis for which only limited data was available. To illustrate this:

- The teachers' case was a one-off experiment to test the added value of the portfolio instrument. It used an existing assessment procedure. As a consequence the case did not contribute to a better understanding of portfolio design and implementation. Furthermore, it contained little data on the portfolio development process. The data on the assessment process on the other hand was more extensive than in the other cases.
- The medical doctor's case resulted in extensive information on the portfolio product, the portfolio development process and portfolio design and implementation. The information on portfolio assessment was, however, limited.
- The refugees' case contributed to a better understanding of the portfolio product and the portfolio development process. The information on portfolio assessment was again limited, as was the information on portfolio design and implementation.

Yin (1994) explains that in a multiple case study, each case needs to be carefully selected so that replication logic can be applied. This can either be 'literal replication' which means that the case produces similar results or 'theoretical replication' which means that the case produces contrasting results but for predictable reasons. This requires a rich theoretical framework that indicates the conditions under which a particular observation is likely to be found or not. In this research study, the cases were the Nuffic pilot projects that had been undertaken in the period

2000-2004. They could not be selected but were a given at the beginning of this research study. The nature and focus of the three cases were too different to apply what Yin (1994) calls 'literal replication'. Most of the case study findings could be explained using the TBBs and therefore the case study applied a 'theoretical replication logic' instead (cf. Yin, 1994). To illustrate the differences between the cases, some aspects of the three case studies are summarized below:

- First, the teachers' case, which took place in a competency-based environment with trained portfolio assessors and inexperienced portfolio candidates. The function for which portfolio was used was 'assessment'. Based on the theory, it was therefore expected that the portfolio had a prescribed format, that there were competency-based standards available and that there were clear guidelines about the type of evidence that could serve as proof of competence. The purpose of portfolio assessment was 'formative assessment', or in order words the 'identification of competencies' that were further assessed using other instruments. The case showed that the portfolio candidates were not familiar with portfolio development. Furthermore, they did not receive any guidance or support during the process of portfolio development. The completed portfolios were of too low quality to serve the purpose. It was concluded in the case study that this was caused by a combination of factors that relate to the actual characteristics of the portfolio candidates had limited portfolio development process (lack of support). Moreover, the portfolio candidates had limited portfolio evidence available.
- The medical doctors' case took place in a context that was neither content-based nor competency-based. The portfolio assessors were not trained in portfolio assessment. There were no assessment standards available that could guide portfolio development or portfolio assessment. The intended and implemented function of the portfolio instrument was therefore 'information-oriented'; giving insight into prior learning experiences. The portfolio candidates were not familiar with portfolio development but were offered a portfolio development course to support the development process. Both the portfolio assessors and the portfolio candidates felt a need for a prescribed portfolio format that would address a specific set of content issues. The completed portfolios were more descriptive in nature than analytic, exploring the learning outcomes of prior learning experiences. It was concluded in the case study that this was caused by the lack of assessment standards, as well as the intended and implemented function. The portfolio development course was well received by the portfolio candidates. The portfolio assessors indicated that the information could be used for assessment purposes if the portfolio instrument were embedded in a wider assessment procedure and if a clear set of assessment standards were available.
- The refugees' case concerned various professions. The emphasis was put on the development function of the portfolio instrument (to plan and steer the orientation process). Based on the theoretical findings it was expected that the portfolio structure would be open. However, this was not the case because the portfolio candidates were inexperienced in portfolio development and appreciated a prescribed format. The 'targeted objectives' of the refugees formed the starting point for portfolio assessment by the counsellors from *COA* and *SVA*. The portfolio candidates were offered a portfolio development learning line to support the development process, which was well received. To enhance formal recognition (in terms of exemptions, certificates or diplomas) the targeted objectives needed to be related to external assessment standards that are used by recognition bodies like educational institutions. The portfolio candidates also had to include more portfolio evidence, which many of them did not have. In the refugees' case no recognition bodies participated.

The results of each case study were compared across the three cases in Section 7.1. Despite the varying specific nature and focus of each case study a few observations were made in each case, like:

- 1. the need to offer sufficient support addressing the cognitive process of portfolio development (self-assessment and reflection);
- 2. the opportunity to reconstruct or gather evidence for learning during the portfolio development process (because of the lack of portfolio evidence);
- 3. the need for trained portfolio advisors and portfolio assessors;
- 4. the need for transparent assessment standards; and
- 5. the need for a transparent assessment procedure.

All these issues were included in the TBBs, except for the second issue (the opportunity to reconstruct or gather evidence during the portfolio development process). In Section 7.2, the portfolio characteristics in the three case studies were directly linked to the theoretical characteristics of a 'dossier portfolio' (for assessment purposes) and a 'personal development portfolio' (for development purposes) (cf. Smith & Tillema, 2003). It was decided to refine TBB2, TBB3 and TBB4 and present an adapted conceptual framework of portfolio characteristics that takes the targeted objective of the highly-skilled immigrant as a focal point. In Section 7.3 the refined conceptual framework was viewed from a practical perspective. Ten key components of effective portfolio use were distilled from the conceptual framework and presented as a 'portfolio spider web' (see also Figure 8-1 on page 326). These components relate directly or indirectly to the issues in the conceptual framework. Moreover, TBB1 and TBB5 were replaced by two design building blocks: one relevant for a content-based environment and one relevant for a competency-based environment. Both design building blocks were presented in Section 7.3. The analytical generalization of these outcomes (cf. Yin, 1994) could have been improved if the research design of the multiple case study could have applied the 'literal replication' logic as well (cf. Yin, 1994). This means that more cases with a comparable context and a comparable focus on portfolio use could have been selected and included in the research study (e.g. yet another case in a competency-based environment that used the portfolio as an assessment instrument). However, this could not be realized in the timeframe of this research study also because the experiences with portfolio development for highly-skilled immigrants are still limited. It would also have been interesting to test the design building blocks by initiating yet another pilot project. This is a suggestion for further research (see Section 8.3).

8.2.2 Substantive reflection

This section reflects on the results of the research study from a substantive perspective. It discusses the new insights that were gained from the research study. In the first instance, the reflection focuses on the purposes of recognition and how these influence the portfolio characteristics. Second, attention is given to the question of whether portfolio use for highly-skilled immigrants can only be successful if a competency-based learning environment is implemented. If so, what does this mean for the recognition of non-formal and informal learning in contexts that are still, and perhaps will remain, content-based? Third, some notes are made on the implementation of PLAR procedures in the higher education sector in the Netherlands. Finally, attention is given to opportunities PLAR seems to present in theory and the obstacles still present in practice.

Purposes of recognition and portfolio characteristics

As discussed earlier, five theoretical building blocks were developed to answer the two research questions from a theoretical perspective. The theoretical building blocks involved the context, the portfolio characteristics, the portfolio development process, the portfolio assessment process and the design and implementation process. Next, an analytical framework was derived using the five building blocks to analyze the portfolio characteristics in the three case studies. In the theoretical building blocks a distinction was made between an 'assessment portfolio' and a 'development portfolio'. For each type of portfolio some distinctive features were discussed. In the Nuffic pilot

projects that were used for the case study, the targeted objectives of the highly-skilled immigrants were taken as a starting point.

- the teachers' case aimed to enhance 'formal recognition' (gaining access to a regulated profession);
- the medical doctors' case aimed to enhance 'formal recognition' (gaining access to a Dutch medical science programme); however, the purpose of the portfolio instrument was information-oriented. It was as yet undecided how this information would be used;
- the refugees' case aimed to enhance 'orientation'; what are the characteristics of the portfolio instrument to enhance the orientation and integration programme of refugees in Dutch society?

The multiple case study showed that in practice the distinction between an 'assessment portfolio' and a 'development portfolio' was not found. The completed portfolios were *descriptive documents* that gave insight into the prior learning experiences of the portfolio candidate.

Overeem et al. (2003), Seegers (n.d.) and Van Tartwijk, Driessen, Hoeberigs, Kösters, Ritzen, Stokking and Van der Vleuten (2003) discuss three purposes of portfolio that each require specific content:

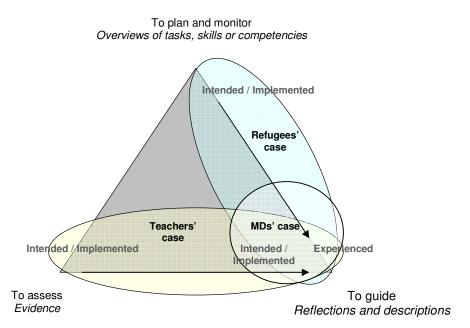
- 1. To plan and monitor; these portfolios generally contain *overviews of tasks* that need to be carried out or *lists of skills or competencies* that need to be developed;
- 2. To guide; these portfolios often contain a *Curriculum Vitae* in which the portfolio candidate explains and *reflective statements* that give insight into the learning process of the portfolio candidate; and
- 3. To assess; these portfolios contain *varying types of evidence* of learning to prove what the portfolio candidate is able to do.

The development portfolio (cf. Smith & Tillema, 2003; Tillema, 2001a) relates to the first two purposes; the assessment portfolio to the third. Overeem et al. (2003), Seegers (n.d.) and Van Tartwijk et al. (2003) place each purpose on an angle of a triangle. In practice, a combination of two models is often found (Seegers, n.d.).

Referring to the three case studies, it can be said that the intended purpose of portfolio use in the teachers' case was 'to assess'. In the medical doctors' case it was as yet undecided, although, the portfolio assessors wanted to gain insight into the prior learning experiences of the portfolio candidates. In the refugees' case is was 'to plan and steer development'. Looking at the portfolio content, the case studies show that in all three cases the completed portfolios included: an *extensive Curriculum Vitae, portfolio descriptions* on a number of pre-specified items, and some *reflective statements*. The case studies showed that the completed portfolio contained hardly any overviews of developed competencies (e.g. defined as competency claims) or materials that could prove that certain competencies had been met. The explanations for this finding were the following:

- The purpose of portfolio was 'information-oriented' instead of assessment or development (the medical doctors' case);
- Assessment standards were not understood and the portfolio development process was not sufficiently guided (the teachers' case);
- Transparent assessment standards were lacking which made the exploration of learning experiences (in the form of an overview of developed competencies) rather difficult (the medical doctors' case and the refugees' case);
- Portfolio candidates only have limited materials available; they were not prepared to bring proof of competence when they came to the Netherlands (all cases);
- The portfolio candidates were not used to cognitive processes like self-assessment and reflective thinking (all cases).

Figure 8-2 visualizes how the intended and implemented portfolio characteristics in the three cases studies related to the experienced characteristics using the triangle model applied by Overeem et al. (2003), Seegers (n.d.) and Van Tartwijk et al. (2003). As indicated above, the completed portfolios contained content elements that relate to the purpose of 'to guide'. Does this imply that portfolio use for highly-skilled immigrant should in the first instance be introduced 'to guide' highly-skilled immigrants in their development process? Or should it be concluded that the portfolio candidates cannot produce the portfolio materials that are needed to assess the actual competencies developed or to plan future development?



Legend: MDs case = medical doctors' case.

Figure 8-2 The intended, implemented and experienced purpose of the portfolio instrument in the three case studies in terms of the triangle model applied by Overeem et al. (2003), Seegers (undated) and Van Tartwijk et al. (2003)

It seems fair to say that the introduction of a portfolio for the purpose of 'guidance' is less complicated and more informal than a portfolio for the purpose of 'assessment' or for the purpose of 'planning and monitoring' competency development in a learning programme. It takes the Curriculum Vitae of the portfolio candidate as a starting point. The organization that introduces the portfolio is not immediately required to change their assessment behaviour and/or assessment paradigm. However, to benefit from portfolio development, the next step should be either to plan and monitor the development process of the portfolio candidate or to assess what the portfolio candidate has learned (cf. Elshout-Mohr & Van Daalen-Kapteijns, 2003). Both purposes require a transparent frame of references that can be used for the exploration of prior learning experiences (assessment purpose) or the planning of future learning activities (development purpose). Related to this is the question of what portfolio materials are accepted as proof of prior learning (assessment purpose) or future learning (development purpose) and what other assessment instruments are needed to take an assessment decision. The case studies show that these questions are rather difficult to answer. The case studies also reveal that the portfolio candidates also have difficulties to produce the required content elements that relate to the purpose of assessment and development (planning and monitoring). This issue will be further discussed at the end of this section.

Competency-based education and the recognition of prior learning

Reflecting on the findings of this research study it might be concluded that effective portfolio use requires a shift towards a competency-based learning environment. Competency-based learning (and assessment) takes a rather central position in the results of this research study. The portfolio spider web' speaks of 'competency claims' instead of a more general term 'learning statements'. Moreover, there are two design building blocks: one for a content-based environment and one for a competency-based environment. This section discusses whether this is indeed required or whether there might be other learning paradigms that could also enhance the identification, assessment and recognition of prior learning. In Chapter 3, the characteristics of competency-based curricula were discussed in relation to the characteristics of the more traditional content-based or disciplinary-based curricula. Both paradigms could be viewed as two extremes of a continuum. However, there are different other forms of education that have characteristics in common with competency-based education. Kouwenhoven (2003) discusses the following forms: problem-based learning; project-oriented learning, case-based learning and outcome-based learning and highlights the differences when compared to competency-based education. Buskermolen and Slotman (1999) discuss competency-based learning in relation to problem-based learning, project-based learning and action learning. It is beyond the scope of this thesis to place the specific characteristics of each form of learning on a continuum and analyze the effect each curriculum has on the identification, assessment and recognition of prior learning. However, if curricula have a close relation to professional practice, prior learning assessment and recognition gets a more fair chance. It is expected that these types of curricula make use of assessment instruments that make the assessment of learning that takes place outside the formal curriculum possible. Moreover, portfolio candidates are more likely to submit documented evidence to prove that they have coped with problems of a certain complexity rather than to prove that they have read and mastered a specific set of books. The same applies to projects of a certain nature in cases where a project-based learning environment is implemented.

In Chapter 2, the practices of prior learning assessment and recognition (PLAR) in the United States and the United Kingdom were briefly discussed. This part shows that the accepted PLAR method in the United Kingdom is *portfolio* assessment, while in the United States *standardized exams* and *course challenge examinations* are used in addition to *portfolio assessment*. The standardized exams and the course challenge examinations give a PLAR candidate the opportunity to show that he has mastered the content of the formal study programme outside the walls of the educational institution. However, it can be questioned if these approaches really relates to the core of PLAR. Important other learning outcomes (either defined in terms of knowledge, skills and attitudes or competencies) remain unrecognized if the formal curriculum is taken as the frame of reference for recognition (Colardyn & Bjørnåvold, 2004). It is important to note that the disadvantages of standardized exams were one of the main reasons why the assessment culture gained interest. There was a need for new and other forms of assessment that allow the direct assessment of competencies.

With respect to *portfolio assessment*, Whitaker (1989) presents three models for the analysis of prior learning: a 'college course model', a 'block credit model' and a 'competency model' (see also Table 4-6 on page 83). In the first model, the course objectives form the frame of reference for the analysis of prior learning experiences. It is up to the candidate to prove that he has reached these objectives in another setting. It will depend on the nature of the learning outcomes whether these can be easily linked to learning that took place in, for example, a work environment. As mentioned earlier, the more the linkages there are with the professional sector, the more opportunities there will be to take account of learning that took place in non-formal settings. At the start of this research it was more or less expected that one of the three models

discussed by Whitaker (1989) would be identified in the case studies. This appeared not to be the case, except for the teachers' case study:

- In the teachers' case a 'competency-based model' was used. However, the case study showed that the highly-skilled immigrants need to be educated in the meaning of the Dutch competency definitions. It was therefore suggested that portfolio development should become a part of an orientation programme.
- In the medical doctors' case, there were no competency definitions available. More
 importantly, it was not the intention to define or choose standards that could be used for the
 exploration of learning. The emphasis was put on providing information on a number of prespecified content elements. The use of a 'college credit model' could lead to false
 expectations on the side of the portfolio candidates.
- In the refugees' case, the emphasis was put on providing information on prior learning experiences and the specification of a Personal Development Plan (PDP). No recognition bodies participated in the project, as a consequence of which the targeted objectives were not linked to formal assessment standards.

Nevertheless, the explicit linking of prior learning to specific courses of a curriculum shows how dominant the input approach is in the evaluation of learning. It can be questioned if the ultimate learning outcomes of the study programme can only be met by following the pre-specified curriculum. This brings the discussion to *curriculum-independent assessment*, which is an important prerequisite of prior learning assessment (cf. Education Council, 2003; 2005; Klarus, 1998).

In Chapter 3, it was explained how the terms 'competence' and 'competencies' relate to the term 'gualification'. Klarus (1998) explains that the terms 'competence' and 'gualification' are different but complementary. If a person can show that he has mastered a certain competence, the relevant gualification is awarded. Hence, competence and gualification are linked to each other by a set of assessment standards. Mansfield and Mitchell (1996) note that for curriculumindependent assessment it is essential that the standards, the curriculum and the assessment system are three separate aspects. A qualification relates to a specific set of standards. The assessment standards should be derived from a professional profile. Next, these standards should be used for the design and development of a curriculum as well as for an independent assessment system. As such, education (learning) and examination (assessment) can take place in separation which offers opportunities for PLAR. It should be realized, however, that a separation of the two systems does not automatically guarantee a 'fair' system of prior learning recognition. As an example, the standardized exams applied in the United States are curriculumindependent exams. However, if these exams are very knowledge-based it would be rather difficult to pass the exam without formal learning experience. Colardyn and Bjørnåvold (2004, p.72-73) give the following explanation - they speak of the 'validation of learning' instead of 'assessment and recognition':

Standards are divided into three elements: occupation, education and assessment. Education and training standards derive from occupational standards: they define the education and training process needed to be able to perform the occupation described in the occupational standards. The three steps are essential to assess and validate learning taking place through an education and training procedure. With the assessment of non-formal and informal learning (acquired outside a learning setting), only the occupational and the assessment standards are essential.

An inventory of PLAR practices in the Member States of the European Union shows that several PLAR experiments refer to either national standards (defined by Ministries of Education and/or Employment) or 'other' standards defined by professional bodies or other organizations. Colardyn

and Bjørnåvold (2004) note a few 'other' validation processes in which prior learning is not related to 'formal standards'. The legitimacy of these processes is in most cases provided by European or national norms, for example, the EU or ISO norms for the certification of the competencies of individuals.

In the Netherlands, the Onderwijsraad [Education Council] has put the discussion of the division between the education system and the examination system on the policy agenda (cf. Education Council 2003; 2004; 2005). They pleaded for the implementation of more independent assessment and certification systems, as part of the regular formal education sector, to facilitate and stimulate the lifelong learning agenda. In 2006, the Education Council published a more operational recommendation 'Examinering: draagvlak en toegankelijkheid' [Examination: commitment and accessibility] giving direction to what the proper distance between education and examination should be. For the higher education sector, the Education Council recommends various kinds of actions. First, the higher education institutions should improve the quality and transparency of their internal examination systems by making (more) use of external examiners. Second, the higher education institutions should start developing common assessment procedures to expand the basis for examination in a certain sector. Finally, the Education Council suggests adding an open examination institute for higher education to the education infrastructure. The latter recommendation is an example of the complete separation of education and examination. If this were to be realized, together with a further implementation of outcome-based assessment standards in the higher education sector, and the use of alternative assessment instruments that enable the assessment of (professional) competencies, then the identification, assessment and recognition of the actual competencies of highly-skilled immigrants would become less complicated.

Implementation of PLAR in the Dutch higher education system

The idea for this research study was born in 2000. At that time it was observed that in the Dutch higher education sector PLAR was still in its infancy. At that time, numerous initiatives were taken to facilitate access to higher education, in part because it was expected that there would be severe labour market shortages of highly-education personnel in various sectors, e.g. education, nursing and ICT. In 2007, PLAR has still not come to full implementation in the higher education sector of the Dutch education system. Research conducted by ITS/IOWO (2004) showed that traditional examinations are still dominant in Dutch higher education, including: essay questions, multiple-choice exams, project reports and a thesis. Higher education institutions have started to develop new assessment instruments including portfolio, but in practice the portfolio instrument is still rarely used (ITS/IOWO, 2004; Education Council, 2004). Schlusmans, Van der Klink, Rutjens, Stalmeier, Joosten-ten Brinke and Van Dinther (2006) discuss PLAR procedures at nine higher education institutions. At some of these institutions PLAR procedures are used by various faculties or institutes. This overview contains no universities. In most of the PLAR procedures, the portfolio instrument is used in addition to other instruments, like a criterion-based interview, observation at work or simulations.

To assure the quality of the implemented PLAR procedure, the Knowledge Centre *EVC* worked on the development of a 'PLAR Quality Code' (*Kwaliteitscode EVC*) in direct cooperation with the *KwaliteitsCentrum Examinering (KCE)* [QualityCentre Examination] and the *Nederlands-Vlaamse Accreditatieorganisatie (NVAO)* [Netherlands-Flanders Accreditation Organization]. The 'PLAR Quality Code' addresses:

- 1. the purpose of PLAR;
- 2. the responsibilities of the participants;
- 3. the trust in the procedures and instruments;

- 4. the role of the assessors and advisors; and
- 5. quality assurance.

Providers of PLAR procedures are invited to sign the 'PLAR Quality Code' on a voluntary basis. At the time of writing there were six higher education institutions who had signed this code (Knowledge Centre *EVC*, 2007). Again, none of them are universities.

At the start of the research study, it was not expected that the implementation of PLAR practices would cost so much time and energy. The need for PLAR procedures also seems to depend on the labour market conjuncture which cannot be influenced. The competency-based assessment procedure that was used in the teachers' case was developed to cope with teacher shortages in primary and secondary education. It has since then been realized that the implementation of PLAR goes hand in hand with a curriculum innovation. In many cases, this innovation concerns a shift from a content-based curriculum to a competency-based curriculum which takes many years. The multiple case studies showed that portfolio use for highly-skilled immigrants is less complex if this curriculum innovation has already started, as in the teachers' case. However, in this case too, it was observed that the availability of a competency-based assessment procedure for prospective teachers did not automatically lead to a change in the evaluation and recognition policy of foreigntrained teachers. This practice is still dominated by traditional recognition instruments, like international credential evaluation. If the paradigm shift has not yet started in a particular sector, the introduction of a portfolio instrument to enhance the identification, assessment and recognition of actual competencies of highly-skilled immigrants is not incentive enough to set such an innovation in motion. It was therefore concluded in this research to link the implementation of portfolio use for highly-skilled immigrants to a larger innovation at the institutional level. However, Beijaard et al. (2002) warn about the risks of innovating too much at the same time. The research study does not give concrete guidelines on how far the competency-based learning paradigm has to be implemented to make portfolio use for highly-skilled immigrants a success.

Opportunities versus obstacles

Finally, a reflective comment is made about the opportunities PLAR seems to have in theory and the obstacles there still seem to be in practice in terms of profiting from PLAR. PLAR provides many opportunities. "For an employer it is a question of human resource management, for individuals a question of having the full range of skills and competences valued and for society a question of making full use of existing knowledge and experience, thus avoiding waste and duplication" (Colardyn & Bjørnåvold, 2004, p.69). However, practice shows that often important prerequisites are still lacking, like:

- transparent assessment standards;
- assessment instruments that enable the assessment and recognition of prior learning;
- clear guidelines for the evidence that can serve as proof of competence;
- trained assessors.

With respect to portfolio use, Driessen et al. (2002) speak of the 'portfolio paradox' to point out the high expectations of portfolio use by policy makers and lecturers, but the low outcomes in practice when implementing its use. The implementation seems far easier than it actually is. As explained in Chapter 4, the introduction of the portfolio instrument involves a 'multidimensional' and 'multilevel' change (cf. Fullan, 2001). Realising change in all three dimensions (materials, approach and beliefs) can take more than ten years (Fullan, 2001). The acceptability of PLAR plays an important role in the change of beliefs of the portfolio assessors. At the institutional level, the portfolio assessors are members of the exam committee. These members should accept that the standards of a given course can be reached through non-formal learning experiences (gained outside the walls of a higher education institution). A complicating factor in this research study

was that the portfolio assessors needed to accept that the standards could be met through nonformal learning experiences from abroad. This might be a bridge too far for them. The international recognition of foreign, formal learning experiences is often still hampered because members of an exam committee lack confidence in the quality of the foreign institution.

The acceptability might be improved if the PLAR procedure offers opportunities to assess competencies in addition to portfolio assessment. The research study showed that the portfolio candidates have few materials that can prove their competence. It was therefore concluded that they need the opportunity to gather or reconstruct evidence during the portfolio development process. A complicating factor in this is that many of the highly-skilled immigrants lack a workplace that enables them to gather relevant evidence. Hence, in theory PLAR provides opportunities to enhance the formal recognition process of highly-skilled immigrants to work in their previous field of expertise. However, to assess whether, for example, a foreign-trained teacher meets the Dutch competency standards he needs to submit proof of competence in a Dutch environment. This cannot be realized because the foreign-trained teacher is not allowed to work. The teachers' case showed that foreign-trained teachers do not automatically relate to the Dutch competency standards. It was therefore suggested that portfolio development should become part of an orientation programme. It was guestioned what the purpose of this programme should be. Perhaps it should give foreign-trained professionals the opportunity to work under supervision? It would enable them to gather evidence that could be submitted in the portfolio, and it would make assessment of the workplace possible. This brings the discussion to the recommendations for further research, as well as policy and practice.

8.3 Recommendations

This section presents the recommendation that can be drawn from the results of the research study. First, the recommendations for further research are discussed. Second, the recommendations for policy and practice are presented.

8.3.1 Recommendations for further research

This section presents recommendations for further research. Some recommendations are derived from the reflection on the research methodology applied. Others relate to the substantive outcomes of the research study:

- 1. The reflection in Section 8.2.1 addresses the influence that the 'selected' cases had on the research findings. It is therefore recommended to gather further data on portfolio use by highly-skilled immigrants by conducting additional case studies. These case studies could validate, and possibly further refine: a) the conceptual framework of portfolio use that was presented in Section 7.2, b) the portfolio spider web and c) the design building blocks that were presented in Section 7.3. In this respect it would be interesting to look for cases that make 'literal replication' possible (cf. Yin, 1994). For example, a case that concerns the use of an assessment portfolio in a competency-based environment that offers portfolio candidates guidance and support during the portfolio development process. It is also suggested to look for cases that concern portfolio use in non-regulated professions, aiming at 'social recognition' instead of 'formal recognition' (cf. European Commission, 2004).
- 2. It is also recommended to study experiences with portfolio use to enhance the identification, assessment and recognition of actual competencies from abroad. This research study built on the experiences in the United States and the United Kingdom (cf. Chapter 4). However, there are more countries with experience in PLAR from which interesting lessons could be learned.

This might enhance the understanding of certain 'issues of analysis' for which limited data was available in the current three cases, e.g. the portfolio assessment process, the role of the portfolio advisors, or the role of the portfolio assessors.

Kuhlemeier, Van Weeren and Van der Werf (2006) studied PLAR procedure in Belgium, Denmark, France, the Netherlands and the United Kingdom. They note that of the five countries, France and the United Kingdom have the most developed systems for PLAR. In both countries, external examiners take part in the PLAR procedure. In France, an independent jury is appointed by the educational institution constituting of members from both the education sector and the relevant professional field (Colardyn & Bjørnåvold, 2004). Feutrie (2007) explains that all French citizens who have at least three years' experience, are entitled to apply for a PLAR procedure (in France called *Validation des Acquis Experiential – VAE*) resulting in a qualification. The independent jury that is appointed by an institution can decide to award either a full qualification or a partial one. If a partial qualification is awarded, the jury also writes a recommendation for further development that specifies what needs to be submitted to receive a full qualification at a later date. The candidates have 5 years to present this additional material to the jury.

Another interesting country is Canada, which is a nation of immigrants. Beaudin (2007) refers to the *Halifax Declaration for the Recognition of Prior Learning* (2002) that states, among other things, that 'Canadians including immigrants to Canada should have the right to have their prior learning assessed and recognized'. He explains that although PLAR procedures are an accepted practice, many higher education institutions are slow to change. They allocate too little funding to train and compensate PLAR advisors and PLAR assessors, to create tools and resources and implement administrative procedures. It is recommended to study the PLAR procedure for immigrants, focusing on the portfolio characteristics in more detail.

- 3. It would also be interesting to initiate international comparative research addressing the key components of the portfolio spider web. As mentioned above, PLAR practices in other countries might enhance the understanding of certain specific, key components of the portfolio spider web. This research showed that the highly-skilled immigrants have little portfolio evidence to prove their competencies. This is because they were not prepared to bring materials from home, but also because most of the portfolio candidates do not have a relevant workplace in the Netherlands. It would be interesting to explore how other countries cope with this problem. What materials do they accept as proof of competence at a certain level? How do they explain competency standards to foreign-trained professionals? Do portfolio candidates get the opportunity to gather or reconstruct evidence during the portfolio development process? If so, how is this organized?
- 4. Validation of the research findings can also be realized by undertaking a *formative research study*. It would be interesting to know if the conceptual framework, the portfolio spider web and the design building blocks give sufficient support to design and implement a high quality portfolio that enhances the identification, assessment and recognition of the actual competencies of highly-skilled immigrants.
- 5. This research study focused on the exploration of the portfolio characteristics to enhance the identification, assessment and recognition of actual competencies. Section 4.2 highlights the immediate and long term outcomes of portfolio use. However, the case studies only address the immediate outcomes of portfolio development for the portfolio assessor and the portfolio candidate. At a later stage, it would be interesting to undertake a research study that focuses on the long term outcomes of portfolio use for highly-skilled immigrants, the higher education institutions, the employers, and Dutch society at large. The cross-case analysis showed that

the portfolio candidates were of the opinion that portfolio development had enhanced their communication skills and contributed to the development of a Personal Development Plan (PDP). The ultimate goal of portfolio use is for it to contribute to the recognition process of competencies and that the portfolio candidates find jobs in professions that relate to their previous field of expertise. The portfolio development process should make them more aware of their own responsibilities in this process and contribute to the development of life long learning skills. It is therefore interesting to learn to what extent highly-skilled immigrants, who have developed a portfolio are indeed self-regulated learners, more aware of their own responsibilities in the Dutch orientation and integration process and better able to steer their development process. Does portfolio use contribute to tailor-made study programmes?

- 6. The final recommendation for further research relates to the use of an electronic portfolio. In the course of this research study various experiments took place with the use of an 'electronic' or 'online' portfolio The main motives for the implementation of an electronic portfolio are the following (cf. Dobbelaere, De Volder, Eisendrath & Geens, 2002; Seegers, n.d.; Van Tartwijk et al., 2003):
 - An electronic portfolio is usually more compact than a paper version, which makes it easier to save and disseminate the included information;
 - An electronic portfolio can be distributed to various persons at the same time, who can respond to its content and add feedback;
 - The use of hyperlinks makes it easy to include various types of documents and it provides the opportunity to make certain connections (e.g. between reflective statements and materials to prove a certain competency);
 - The use of an electronic portfolio contributes to the development of Information and Communication Technology (ICT) skills for both the portfolio candidates and the portfolio assessors;
 - An electronic portfolio is very flexible. The included materials can be presented in different ways for different purposes. For this reason, it was noted in the medical doctors' case that an electronic version of the portfolio could be considered. Highly-skilled immigrants could be encouraged to include all kinds of materials in a portfolio archive from which different selections can be made depending on the purpose: e.g. a showcase portfolio for a job application, an assessment portfolio for a selection interview with an exam committee or a development portfolio for a meeting with a job counsellor (see Figure 6-1 on page 208).

At the same time, there are important reasons not to choose for an electronic portfolio. Van Tartwijk et al. (2003) list the following arguments. Some portfolio advisors (counsellors) prefer to make notes on a paper version of the portfolio. They have trouble reading all the information from a screen. Second, the use of an electronic portfolio requires some basic ICT skills from the portfolio candidates, the portfolio advisors and the portfolio assessors. If one of the user groups lacks these skills, working with an electronic portfolio becomes a handicap. Finally, at the institutional level, working with an electronic portfolio requires a good ICT infrastructure.

Driessen and Bodewes (2006) note that there is no evidence from research about the effect of the medium used. It might be interesting to know what the effect of the medium would be on highly-skilled immigrants; would it further complicate the process or would it facilitate portfolio development.

8.3.2 Recommendations for policy and practice

This last section contains recommendations for policy and practice that are derived from the results of this research study and the substantives outcomes:

- 1. First, it is recommended to the Dutch government to further explore the possibility to develop an orientation programme that can prepare foreign-trained professionals for working in a particular sector in the Netherlands. These programmes could give foreign-trained professionals the opportunity to work under supervision, learn the Dutch language on the job, develop a portfolio and take part in an assessment procedure that determines which of their competencies meet the Dutch professional standards. The assessment outcomes should also contain a recommendation on how the missing competencies can be achieved.
- 2. Second, it is recommended to the higher education institutions to make the assessment standards used to gain access to a study programme or to gain exemptions for certain parts of the programme more transparent. The case studies showed that the lack of transparent (outcome-based) standards hampered the exploration of prior learning experiences. It is also important that the higher education institutions start discussing which materials could be used to prove that the standards have been met.
- 3. Reflecting on international developments, it is expected that the transparency of Dutch higher education qualifications will increase. As a consequence of the Bologna Process numerous initiatives are being taken to transform higher education in Europe. The Berlin Communiqué encouraged the development of national qualification frameworks to increase transparency, recognition and mobility across Europe. These frameworks should describe qualifications in terms of *workload*, *level*, *learning outcomes* and *profile*. In addition, an overarching framework of qualifications for the European Higher Education Area (EHEA) should be developed to which national qualifications can be linked. It is therefore recommended to the Dutch Ministry of Education to encourage the higher education institutions to contribute to this process. Internationally, numerous instruments are available that aim to enhance the recognition of formal and non-formal learning, e.g. the Lisbon Recognition Convention (1997), the Diploma Supplement, ECTS, Europass (cf. Chapter 2). To enhance recognition, it is important that these measures are embedded in national and institutional frameworks.
- 4. It is recommended to the ENIC/NARIC network to further explore the consequence of the shift towards more outcome-based information. It seems fair to say that competency-based learning or at least outcome-based learning is gaining ground. In response to the Bologna Process, a group of European universities initiated a project called Tuning Educational Structures in Europe (Tuning). The Tuning project was launched in 2000 in order to support universities across Europe to implement the Bologna Process at the university level. In short, the Tuning project aims to make study programmes comparable and compatible, to facilitate transparency and academic recognition at the European level and to build trust between institutions by offering a methodology to assure and enhance the quality of study programmes. Tuning proposes and promotes the redefinition of educational programmes in an outcome-oriented manner, such that learning outcomes are expressed in terms of generic and subject-specific competences as well as ECTS credits that are based on workload. Currently, universities from about 35 countries in Europe are participating in the Tuning process including the Netherlands. Since 2005, the Tuning project has also been extended to Latin America from where another 18 countries are participating. Across all the participating countries, the project aims at identifying reference points for generic and subject-specific competences for both first (Bachelor's Degree) and second (Master's Degree) cycle graduates in a series of subject areas (cf. González & Wagenaar, 2003, 2005).

In principle, the outcomes of the Tuning project should be relevant to the recognition practice of the ENIC/NARIC networks. Nuffic (Dutch NARIC) and the UK NARIC have started a joint project called *Competences in Education and Cross-border Recognition (CoRe)*, in order to evaluate whether the Tuning project has succeeded in its aim to further facilitate transparency and academic recognition.

In addition to the CoRe project, it is recommended to the ENIC/NARIC network to further explore what consequence the shift towards more outcome-based information has on recognition procedures and criteria. As explained in Chapter 2, the current approach is input and process oriented instead of output oriented. A related question that should be answered is whether the two extremes (competency-based learning and content-based learning) should be considered as a 'substantial difference'. This research study has shown that the portfolio can prepare highly-skilled immigrants for studying in a competency-based environment.

5. Finally, it is recommended to Nuffic to keep the identification, assessment and recognition of actual competencies on the national and international policy agenda. Internationally, the ENIC/NARIC network should set ambitions for the implementation of competency-based recognition procedures and determine a path that could contribute to reaching that ambition. Could ENIC/NARICs follow the French approach and appoint independent juries to assess portfolios at the national level, or perhaps at the international level? Are the competency definitions used in the overarching frameworks like the European Qualification Framework (EQF) and the one that is being developed as part of the Bologna Process (the overarching framework of the European Higher Education Area) concrete enough to use for the purpose of prior learning recognition? At the same time, it is recommended to Nuffic and the ENIC/NARIC network to warn national authorities about the risk of 'double assessment'. Over the years a lot of progress has been made in the recognition of formal learning outcomes. If the focus of evaluation is now tending to shift towards competencies instead of curricula, there is a risk that foreign-trained people need to take part in assessment to prove their actual competencies. It is therefore very important that transparent information is provided on examination systems that explains at what level certain competencies were assessed, by whom, how and when. This kind of information should be included in a portfolio to serve as proof of competence to avoid the continuous assessment of learning.

- Adam, S. (2007). Why is the recognition of prior experiential learning important and what are the national and institutional implications of this for lifelong learning? Paper presented at the Bologna Seminar New Challenges in recognition: Recognition of prior learning and recognition between Europe and other parts of the world. Riga, Latvia, 25-26 January 2007.
- American Council on Education (ACE) (n.d.) Retrieved January 14, 2000, from http://www.acenet.edu/calec/home.html
- Arter, J. A., & Spandal, V. (1992). Using portfolios of student work in instruction and assessment. Educational Measurement: Issues and Practice, Spring, 36-44.
- Ashworth, P. D., & Saxton, J. (1990). On 'Competence'. Journal for Higher Education, 14, 3-25.
- Baartman, L. K. J., Bastiaens, T. J., & Kirscher, P. A. (2004). *Requirements for competency assessment programmes.* Paper presented at the Onderwijs Research Dagen 2004, Utrecht. Retrieved September 20, 2004, from <u>http://edu.fss.uu.nl/ord/fullpapers/Baartman%20FP.doc</u>
- Ballard, B. & Clanchy, J. (1992). Teaching students from overseas. A brief guide for lecturers and supervisors. Melbourne: Longman Cheshire.
- Barton, J., & Collins, A. (1997). *Portfolio assessment: A handbook for educators.* Parsippany, Dale Seymour Publications.
- Baumgratz, G. (1993). Mobility in higher education: Cross-cultural communication issues. *European Journal of Education, 28*, 327-338.
- Beard, C., & J. P. Wilson (2002). The power of experiential learning: A handbook for trainers and educators. London: Kogan Page Limited.
- Beaudin, Y. E. (2007). Lifelong learning for all. Prior learning assessment and recognition. Paper presented at the Bologna Seminar New Challenges in recognition: Recognition of prior learning and recognition between Europe and other parts of the world. Riga, Latvia, 25-26 January 2007.
- Beckmann, N., Tillema, H., & Verberg, C. (2000). *Gewaardeerd meesterschap [Valued competence]*. Leiden: University of Leiden.
- Beijaard, D., Driessen, E. W., Van Tartwijk, J., & Van der Vleuten, C. P. M. (2002). Portfolio verder uitgewerkt [The portfolio instrument in more detail]. In E. Driessen, D. Beijaard, J. van Tartwijk, & C. van der Vleuten (Eds.), *Portfolio's [Portfolios]* (pp.119-138). Groningen/Houten: Wolters-Noordhoff bv.
- Berk, R. A. (1999). Assessment for measuring professional performance. In P. D. Ely, L. E. Odenthal, & T. Plomp (Eds.), *Educational science and technology. Perspectives for the future* (pp. 31-47) Enschede: Twente University Press.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. Higher Education, 32, 347-264.
- Birenbaum, M. (1996). Assessment 2000: Towards a pluralistic approach to assessment. In M. Birenbaum, & F. J.
 R. C. Dochy (Eds.), Alternative in assessment of achievements, learning processes and prior knowledge (pp. 3-29). Dordrecht: Kluwer Academic Publishers.
- Birenbaum, M., & F. J. R. C. Dochy (1996). Alternative in assessment of achievements, learning processes and prior knowledge. Dordrecht: Kluwer Academic Publishers.
- Bjørnåvold, J. (2000). *Making learning visible. Identification, assessment and recognition of non-formal learning in Europe.* Thessaloniki: Cedefop European Centre for the Development of Vocational Training.
- Bom, W., Klarus, R., & Nieskens, M. (1997). Portfolio in opleiding en bedrijf. 's-Hertogenbosch: E²B/CINOP.
- Bos, E. S. (1998). *Competentie: Verheldering van een begrip [Competence: clarification of a concept]*. Heerlen: Open University, the Netherlands.
- Brink, M., Pasariboe, M., & Hollands, M. (1996). Integratie van vluchtelingen op de arbeidsmarkt [Integration of refugees on the labour market]. Amsterdam: Instituut voor Sociale Geografie.

- Bruijns, V., Eringa, K., Rietveld, J., & Zwaal, W. (1999). Het gebruik van assessment en development centres in een competentiegerichte leeromgeving [The use of an assessment and development centre in a competency-based learning environment]. In K. Schlusmans, R. Slotman, C. Nagtegaal, & G. Kinkhorst (Eds.), *Competentiegerichte leeromgevingen [Competency-based learning environments]* (pp. 241-260). Utrecht: Lemma BV.
- Buskermolen, F., & Slotman, R. (1999). Beroepsopleiding innoveren met competenties: Problemen en nieuwe kansen [Innovating professional study programmes with competencies: Problems and opportunities]. In K. Schlusmans, R. Slotman, C. Nagtegaal, & G. Kinkhorst (Eds.), *Competentiegerichte leeromgevingen* [Competency-based learning environments] (pp. 103-116). Utrecht: Lemma BV.
- Buskermolen, F., & De la Parra, B. (1999). Een wereld in beweging [A world in motion]. In F. Buskermolen, B. de la Parra, & R. Slotman (Eds.), *Het belang van competenties in organisaties [The importance of competencies in organizations]* (pp. 17-28). Utrecht: Lemma BV.
- Commissie Buitenlands Gediplomeerden Volksgezondheid (CBGV) (2002). Vakbekwaanheid zonder grenzen [Comptence without borders]? The Hague: CBGV.
- Claassen, J., & Kaemingk (2005). Portfoliomethodiek voor vluchtelingen [A portfolio methodology for refugees]. Utrecht: Knowledge Centre EVC.
- Colardyn, D., & Bjørnåvold, J. (2004). Validation of formal, non-formal and informal learning: Policy and practices in EU member states. *European Journal of Education, 39,* 69-89.
- Colley, H., Hodkinson, P., & Malcolm, J. (2002). *Non-formal learning: mapping the conceptual terrain. A Consultation Report,* Leeds: University of Leeds Lifelong Learning Institute. Retrieved October,14, 2003 from http://www.infed.org/archives/e-texts/colley informal learning.htm
- Collins, A. (1991). Portfolios for biology teacher assessment. *Journal of Personnel Evaluation in Education, 5,* 147-167.
- Colo (2002). Samen werken aan leren. Naar een competentiegerichte kwalificatiestructuur voor het middelbaar beroepsonderwijs [Working together on learning: towards a competency-based qualification structure for secondary vocational education]. Zoetermeer: Colo.
- Council for Adult and Experiential Learning (CAEL) (n.d.) Retrieved January 14, 2000 from http://www.cael.org/index2.html
- Council for Adult and Experiential Learning (CAEL) (1998). A brief history of PLA. (excerpts from the CAEL Report on Prior Learning Assessment, 1998). Module Two of online training programme. Retrieved September 14, 1998 from <u>http://www.dlex.org/website/mod2ac2a.htm</u>
- Council for National Academic Awards [CNAA] (1990). Credit accumulation and transfer scheme. Credit for prior learning: A guide for candidates (draft). (copy).
- Council of Europe (2004). *Recognition 2010 and the role of the ENICS/NARICS*. 11th Joint Meeting of the ENIC and NARIC networks, 7 8 June 2004, Item 8.
- Credit Transfer Technical Working Group (2005). *European credit system for VET (ECVET)* (Draft). Brussels: European Commission.
- De Roij van Zuijdewijn, P. (2003). 2002-2003: EVC in uitvoering [2002-2003: EVC in practice]. Utrecht: LEMNA BV.
- Dierick, S., Dochy, F., & Van de Watering, G. (2001). Assessment in het hoger onderwijs [Assessment in higher education]. *Tijdschrift voor Hoger Onderwijs*, 19, 2-18.
- Dobbelaere, R. J. M. C., De Volder, M. L., Eisendrath, H. B., & Geens, D. L. C. (2002). Het elektronische portfolio [The electronic portfolio instrument]. In E. Driessen, D. Beijaard, J. van Tartwijk, & C. van der Vleuten (Eds.), *Portfolio's [Portfolios]* (pp. 107-117). Groningen/Houten: Wolters-Noordhoff bv.
- Dochy, F., & Janssens, S. (2003). Evaluatie en assessment [Evaluation and assessment]. In N. Verloop, & J. Lowyck (Eds.), Onderwijskunde [Educational science]. (pp. 374-411). Groningen/Houten: Wolters-Noordhoff.
- Driessen, E., Beijaard, D., Van Tartwijk, J., & Van der Vleuten, C. (2002) *Portfolio's [Portfolios]*. Groningen: Wolters Noordhoff.
- Driessen, E., & Bodewes, D. (2006) Portfolio Onderzoek in het Nederlandse hoger onderwijs [Portfolio research in Dutch higher education]. Utrecht: Stichting SURF.
- Driessen, E. W., Van Tartwijk, J., Overeem, K., Vermunt, J. D., & Van der Vleuten C. P. M. (2005). Conditions for successful reflective use of portfolio in undergraduate medical education. *Medical Education*, 39, 1230-1235.

- Driessen, E. W., Van Tartwijk, J., Vermunt, J. D., & Van der Vleuten C. P. M. (2003). Use of portfolio in early undergraduate medical training. *Medical Teacher, 25,* 14-19.
- Education Council (2003a). *Leren in een kennissamenleving [Learning in a knowledge society]*. The Hague: Educational Council.
- Education Council (2003b). Werk maken van een leven lang leren [Working on lifelong learning]. The Hague: Education Council.
- Education Council (2004). *Examinering in het hoger onderwijs [Examination in higher education].* The Hague: Education Council.
- Education Council (2005). *De helft van Nederland hoogopgeleid [Half of the Dutch population highly educated].* The Hague: Education Council.
- Education Council (2006). Examinering: Draagvlak en toegankelijkheid [Examination: Commitment and accessibility]. The Hague: Education Council.
- Ellström, P.E. (1998). The many meanings of occupational competence and qualification. In W. J. Nijhof, & J. N. Streumer (Eds.), *Key qualifications in work and education* (pp. 39-50). Dordrecht: Kluwer Academic Publishers.
- Elshout-Mohr, M., Oostdam, R., Snoek, M., & Dietze, A. (2000). Assessment in a competence-oriented dynamic curriculum. ECER, 20-23 September, 2000, Edinburgh, Scotland.
- Elshout-Mohr, M., & Van Daalen-Kapteijns, M. (2003). Goed gebruik van portfolio's in competentiegerichte opleidingen. *Velon, 24,* 5-13.
- ENIC/NARIC network (2001). Recognition issues in the Bologna process Final report. In *Compendium of basic documents in the Bologna process*. Steering Committee for Higher Education and research (CD-ESR), Strasbourg, 3-4 October, 2002.
- European Commission (2000). A memorandum on lifelong learning. Brussels: Commission of the European Communities.
- European Commission (2001). *Making a European area of lifelong learning a reality*. Brussels: Commission of the European Communities.
- European Commission (2004). Common European principles for validation of non-formal and informal learning. Brussels: European Commission.
- European Commission (2005). *Towards a European qualification framework for lifelong learning.* Brussels: Commission of the European Communities.
- Evans, N. (2000). Experiential learning around the world. *Higher Education Policy Series, 52.* London: Jessica Kingsley Publishers.
- Fullan, M. G. (2001). The new meaning of educational change. New York: Teachers College Press.
- Gipps, C., & Stobart, G. (2003). Alternative assessment. In T. Kellaghan, & D. L. Stufflebeam (Eds.), *International Handbook of Educational Evaluation* (pp.549-576). Dordrecht: Kluwer Academic Publishers
- Gonczi, A. (1994). Competency based assessment in the professions in Australia. Assessment in Education, 1, 27-44.
- González, J., & Wagenaar, R. (2003). *Tuning educational structures in Europe. Final report Phase One.* Bilbao: RGM, S.A.
- González, J., & Wagenaar, R. (2005). Tuning educational structures in Europe II. Universities' contribution to the Bologna process. Bilbao: RGM, S.A.
- Hager, P., Gonczi A. & Athanasou, J. (1994). General issues about assessment of competence. Assessment & Evaluation in Higher Education, 19, 3-16.
- Hager, P. J. (1993). Conceptions of competence. Retrieved January 16, 2004, from http://www.ed.uiuc.edu/EPS/PES-Yearbook/93_docs/HAGER.HTM
- Hager, P. J. (1995). Competency standards A help or a hindrance? An Australian perspective. *The Vocational Aspect of Education, 47*, 141-151.
- Herfs, P. G. P., Yari, P., Haalboom, J. R. E., & Kruijshoop, M. A. (2001). Onderzoek naar de loopbanen van "CIBA-artsen" [A study of the careers of CIBA medical doctors]. Utrecht: University of Utrecht.
- Hodkinson, Ph. (1992). Alternative models of competence in vocational education and training. *Journal of Further* and Higher Education, 16, 30-39.

- Hofstede, G. (1980). Culture's consequences. International differences in work-related values. Beverly Hills: Sage.
- Hofstede, G. (1991). Allemaal andersdenkenden. Omgaan met cultuur verschillen [Equally dissident. Dealing with cultural differences]. Beverly Hills: Sage.
- Hofstede, G. J., Pedersen, P. B., & Hofstede, G. (2002). *Exploring culture: Exercises, stories, and synthetic cultures*. Maine: Intercultural Press, Inc.

Huberman, M., & Miles, M. (1984). Innovation up close. New York: Plenum.

- Hyland, T. (1994). Experiential learning, competence and critical practice in higher education. *Studies in Higher Education, 19,* 327-337.
- ITS/IOWO (2004). De blik naar buiten [Looking outside]. The Hague: Educational Council.
- Janssens, S., Boes, W., & Wante, D. (2002). Portfolio: Een instrument voor toetsing en begeleiding. In F. Dochy, L. Heylen, & H. van de Mosselaar (Eds.), *Assessment in onderwijs* (pp 203-220). Utrecht: Lemma.
- Jochems, W., & Schlusmans, K. (1999). Competentiegericht onderwijs in een elektronische leeromgeving [Competency-based education in an electronic learning environment]. In K. Schlusmans, R. Slotman, C. Nagtegaal, & G. Kinkhorst (Eds.), Competentiegerichte leeromgevingen [Competency-based learning environments] (pp. 47-61). Utrecht: Lemma BV.
- Joint Committee on Standards for Educational Evaluation [JCSEE] (2003). *The student evaluation standards.* Thousand Oaks: Corwin Press, Inc.
- Johnson, B. (2002). Models of APEL and quality assurance. Essex: Cravitz Printing Company Limited.
- Kaemingk, E. (2003). EVC voor vluchtelingen en asielzoekers: projectplan [PLAR for refugees and asylum seekers: project plan]. Utrecht: Knowledge Centre EVC.
- Kaemingk, E., Mak, A. M. A., Geers, C., Goossen, M., & De Bar, E. (2005). EVC voor vluchtelingen en asielzoekers: Eindrapport [PLAR for refugees and asylum seekers: Final report]. Utrecht: Knowledge Centre EVC.
- Kessels, J. W. M. (1993). *Towards design standards for curriculum consistency in corporate education*. (Doctoral dissertation). Enschede: University of Twente.
- Kessels, J. W. M. (1999). Het verwerven van competenties: Kennis als bekwaamheid [The acquisition of competencies: Knowledge as capability]. *Opleiding en Ontwikkeling, 1/2-1999,* 7-11.
- Kessels, J. W. M. (2001). Verleiden tot kennisproductiviteit [Winning over to knowledge productivity]. Inaugural lecture. Enschede: University of Twente.
- Killen, R. (2003). Validity in outcomes-based assessment. Perspectives in Education, 21, 1-14.
- Klarus, R. (1998). Competenties erkennen: Een studie naar modellen en procedures voor leerwegonafhankelijke beoordeling van beroepscompetenties [The recognition of competencies: A research study into the models and procedures of curriculum-independent assessment of competencies] (Doctoral dissertation). Nijmegen: University of Nijmegen.
- Klarus, R. (2000). Competenties een plaats geven. In A. M. L. Wieringen, M. van Dyck, B. W. M. Hövels, & W. J. Nijhof, (Eds.), *Nieuwe aansluitingen tussen onderwijs en arbeid. Max Goote Jaarboek '99/'00* Den Haag: Elsevier.
- Klarus, R. (2002). Het portfolio in een PLAR-procedure voor zij-instroom in het leraarsberoep. In E. Driessen, D. Beijaard, J. van Tartwijk, & C. van der Vleuten (Eds.), *Portfolio's [Portfolios]* (pp. 59-74). Groningen/Houten: Wolters-Noordhoff bv.
- Klarus, R. (n.d.). Instrument voor competentiegericht toetsen en beoordelen [Instrument for competency-based assessment and evaluation]. Retrieved October 14, 2003, from http://www.kenniscentrumevc.nl/site.documenten/KC3.pdf
- Klarus, R., & Blokhuis, F. (1997). Een procedure voor EVK en leerwegonafhankelijke beoordeling [A procedure for PLAR and curriculum independent assessment]. 's Hertogenbosch: E²B/CINOP.
- Klaver, J., & Odé, A. (2003). De arbeidsintegratie van vluchtelingen [Labour market integration for refugees]. The Hague: Raad voor Werk en Inkomen.
- Klenowski, V. (2002). Developing portfolios for learning and assessment. London: Routledge Falmer.
- Knowledge Centre EVC (2003). Naar competente assessoren binnen de kenniscentra beroepsonderwijs bedrijfsleven [Towards competent assessors within the Vocational Education Business Community Knowledge Centre]. Utrecht: Knowledge Centre EVC.

- Knowledge Centre EVC (2007). Overzicht erkende aanbieders [Overview of accredited PLAR providers]. Retrieved March 25, 2007, from http://www.kenniscentrumevc.nl/evc nl/d57eaf577d0cf32b6edbb4352be30ed9.php
- Kouwenaar, C. T. M. (1994). *Higher education in Europe: Comparative studies on the recognition of degrees and diplomas.* The Hague: Nuffic.
- Kouwenhoven, G. W. (2003). Designing for competence: Towards a competence-based curriculum for the Faculty of Education of the Eduardo Mondlane University (Doctoral dissertation). Enschede: PrintPartners Ipskamp.
- König, E. (2004). Vooruit met hoogopgeleide vluchtelingen! [Forward with highly-skilled refugees]! Rotterdam: Veendam.
- Krathwohl, D. R. (1997). *Methods of educational & social science research*. New York: Addison Wesley Longman, Inc.
- Kuhlemeier, J. B., Van Weeren, J., & Van der Werf, M. P. C. (2006). *Scheiding van opleiden en examineren in Nederland en omringende landen.* Studie in opdracht van de onderwijsraad. Retrieved November 2, 2006 from http://www.onderwijsraad.nl
- Latham, A.S., & Pearlman, M.A. (1999). From Standards to Licensure: Developing an Authentic Assessment for School Principals. *Journal of Personnel Evaluation in Education*, *13*, 245-282.
- Linn, R. L., Baker, E. L., & Dunbar, S. B. (1991). Complex, performance-based assessment: Expectations and validation criteria. *Educational Researcher, 20,* 15-21.
- Lowyck, & Terwel (2003) Ontwerpen van leeromgevingen [Designing learning environments]. In N. Verloop, & J. Lowyck (Eds.), Onderwijskunde [Educational science]. (pp. 285-328). Groningen/Houten: Wolters-Noordhoff.
- Luken, T. P. (2004). Zijn competencies meetbaar? [Can competencies be measured?] Tijdschrift voor Hoger Onderwijs, 22, 38-53.
- Mak, A. M. A., Scholten, A. M., & Teuwsen, R. (2003). *IDW en EVC voor buitenlandsopgeleiden: Naar een structurele plaatsing in het inburgeringsproces [ICE and PLAR for highly-skilled immigrants: Towards a common place in the integration process].* The Hague: Nuffic.
- Mak, A. M. A., Scholten, A. M., Teuwsen, R., & Sikkema, F. (2005). *Portfolio for enrolment of refugee doctors in the Dutch medical science programme.* The Hague: Nuffic.

Mansfield, B., & Mitchell, L. (1996). Towards a competent workforce. Aldershot/Brookfield: Gower.

Marby, L. (1999). Portfolio plus: A critical guide to alternative assessment. Thousand Oaks: Corwin Press, Inc.

- MDW-werkgroep (2001). Nooit meer wachten [Never to wait again]. Den Haag: Ministerie van Economische Zaken.
- Metz, J. C. M., Verbeek-Weel, A. M. M., & Huisjes, H. J. (2001). Raamplan 2001 artsopleiding, bijgestelde eindtermen van de artsopleiding [Framework 2001 medical science programme, revised learning outcomes of the medical science programme]. Nijmegen: Mediagroep.
- Messick, S. (1994). The interplay of evidence and consequences in the validation of performance assessments. *Educational Researcher, 23*, 13-23.
- Ministry of Health, Welfare and Sports (1999). *Working in the Dutch health sector with a foreign credential.* The Hague: Ministry of Health, Welfare and Sports.
- Ministry of Health, Welfare and Sports (2005) New procedure. Retrieved December 12, 2005 from http://www.buitenlandsediplomahouders.nl/nieuweprocedure.
- Ministry of Social Affairs and Employment (2002). *Plan van aanpak arbeidsmarktpositie hoger opgeleide vluchtelingen [Action plan labour market position of highly-skilled refugees]*. Den Haag: Ministry of Social Affairs and Employment.
- Moss, P. A. (1994). Can there be validity without reliability? Educational Researcher, 23, 5-12.
- Mulholland J., & Leith, H. (1998). The development of accreditation of prior experiential learning in higher education: A vehicle for life long learning. In *Credit accumulation and transfer systems (CATS)* p.23-31. Proceedings of 'A UK, European and International Conference' at the University of Derby, the United Kingdom, 15-19 June 1998.
- Nieveen, N. (1997). Computer support for curriculum developers: A study on the potential of computer support in the domain of formative curriculum evaluation (Doctoral dissertation). Enschede: University of Twente.
- Nieuwhof, A. (2002). Al doende leert men [Learning in practice]. The Hague: Taskforce Inburgering.

- O'Grady, M. J. (1991). Assessment of prior achievement/assessment of prior learning: Issues of assessment and accreditation. *The Vocational Aspect of Education*, *115*, 183-189.
- Overeem, K., Driessen, E. W., Drenthe, A., Van Tartwijk, J., & Van der Vleuten, C. P. M. (2005). Kwaliteitscriteria voor portfoliobeoordeling van geneeskundestudenten [Quality criteria for portfolio assessment of medical science students]. *Tijdschrift voor Medisch Onderwijs*, 24, 64-71.
- Overeem, K., Driessen, E. W., Van Tartwijk, J., & Van der Vleuten, C. P. M. (2003). Portfolio om de basisarts-inopleiding te begeleiden [Portfolio use for the guidance of post-graduate medical science students]. *Tijdschrift voor Medisch Onderwijs*, 22, 268-276.
- Pinto, D. (1993). Interculturele communicatie. Drie-stappenmethode voor het doeltreffend overbruggen en managen van cultuurverschillen [Intercultural communication. A three-step method for effectively bridging and managing cultural differences]. Houten: Boh, Staflue & Van Loghum.
- Plomp, T. (1982). Building a four year post-secundary curriculum in education science and technology. Paper presented at the AECT convention, May 3-7, Dallas, USA.
- Plomp, T. (2002). Some reflections on development research (DR): Speaking notes for breakfast meeting with students Johannes Cronjé. Enschede: Internal document.
- Plomp, T. (2006). Educational Design Research: a research approach to address complex problems in educational practice. Paper presented at the fifth International Forum on Educational Technology, 29 & 30 October, Wuhan, China.
- Raanhuis, M., Kamphuis, A., & Pijls, T. (2003). Werken met een portfolio [Working with a portfolio instrument]. Den Bosch: CINOP.
- Richey, R. C., & Nelson, W. A. (1996). Development research. In D. Jonassen (Ed.), Handbook of research for educational communications and technology (pp.1213-1245). Macmillan: London.
- Ritzen, M., & Kösters, J. (2002). Mogelijke functies van een portfolio binnen een competentiegericht curriculum. [Possible functions of the portfolio instrument within a competency-based curriculum]. Onderzoek van Onderwijs, 31, 3-7.
- Schlusmans, K., Slotman, R., Nagtegaal, C., & Kinkhorst, G. (1999). Competentiegerichte leeromgevingen: Een inleiding [Competency-based learning environments: an introduction]. In K. Schlusmans, R. Slotman, C. Nagtegaal, & G. Kinkhorst (Eds.), *Competentiegerichte leeromgevingen [Competency-based learning environments*] (pp. 13-27). Utrecht: Lemma BV.
- Schlusmans, K., Van der Klink, M., Rutjens, M., Stalmeier, M., Joosten-ten Brinke, Desirée, & Van Dinther, M. (2006). Portretten van EVC-praktijken [Portrays of PLAR practices]. In M. van der Klink, & K. Schlusmans (Eds.), EVC voor velen [PLAR for many] (pp. 43-66). Heerlen: Open University, the Netherlands.
- Scholten, A. M., & Teuwsen, R., (2001a). Accreditation of prior learning: A background report. The Hague, Nuffic.
- Scholten, A. M., & Teuwsen, R., (2001b). Accreditation of prior learning: Flexible recruitment of foreign teachers. The Hagure, Nuffic.
- Scholten, A. M., & Teuwsen, R., (2002). Internationale diplomawaardering en EVC [Linking ICE and PLAR]. Utrecht: Knowledge Centre EVC.
- Scholten, A. M., Teuwsen, R., & Mak, A. M. A. (2003a). Portfolio in een opleidingsgerichte EVC procedure voor buitenlandsgediplomeerde geneeskunde studenten [Portfolio in an education-oriented PLAR procedure for foreign-trained medical science students]. The Hague: Nuffic.
- Scholten, A. M., Teuwsen, R., & Mak, A. M. A. (2003b). Portfolio-ontwikkeling door buitenlandse artsen [Portfolio development by foreign-trained medical doctors]. The Hague: Nuffic.
- Scholten, A. M., Teuwsen, R., & Mak, A. M. A. (2004). *Stilstaan bij portfoliogebruik voor buitenlandse artsen* [*Reflecting on portfolio use by foreign-trained medical doctors*]. The Hague: Nuffic.
- Schröder, R. E. V. M. (2002). The international student in the international classroom. In H. Teekens (Ed.), *Teaching and learning in the international classroom* (pp. 71-81). The Hague: Nuffic.
- Schuwirth, L., & Van der Vleuten, C. (2005) Ontwikkelingen in medisch onderwijs en in toetsing van medische competentie [Developments in medical science education and in the assessment of medical competencies]. Onderzoek van Onderwijs, 34, p41-45.
- Seegers, T. (n.d.). *Digitale portfolio's in het hoger onderwijs [Digital portfolio's in higher education].* Heerlen: Open University, the Netherlands.

- Simons, P. R. J. (1999). Competentiegerichte leeromgevingen in organisaties en hoger beroepsonderwijs [Competency-based learning environments in organizations and higher professional education].. In K. Schlusmans, R. Slotman, C. Nagtegaal, & G. Kinkhorst (Eds.), *Competentiegerichte leeromgevingen* [Competency-based learning environments]. (pp. 31-45). Utrecht: Lemma BV.
- Smith, K., & Tillema, H. (2003). Clarifying different types of portfolio use. Assessment & Evaluation in Higher Education, 28, 625-648.
- Spencer, L. M., & Spencer, S. M. (1993). Competence at work. Models for superior performance. New York: John Wiley & Sons, Inc.
- Stoof, A., Martens, R. L., & Van Merriërenboer, J. J. G. (2000) *What is competence? A constructivist approach as a way out of confusion.* Paper presented at the Onderwijs Research Dagen (ORD), Leiden.
- Straetmans, G. J. J. M., & Sanders, P. F. (2001). Beoordelen van competenties van docenten [Assessment of teachers' competencies]. Utrecht: EPS.
- Stoas (2000). Bewezen geschikt: Instrumentenmap [Proven competent: Assessment instruments]. Wageningen: Stoas.
- Swinerton, E. N., & Robinson, J. A. (1997). *The national guide to educational credit for training programmes.* United States of America: ACE/PONSI.
- Te Lintelo, L. (1999). Kenmerken van competentiegerichte opleidingen [Characteristics of competency-based study programmes]. In K. Schlusmans, R. Slotman, C. Nagtegaal, & G. Kinkhorst (Eds.), *Competentiegerichte leeromgevingen [Competency-based learning environments]*. (pp. 96-102). Utrecht: Lemma BV.
- Te Lintelo, L., Van Berkel, A., & Castelijns, M. (2002). Het erkennen van verworven competenties [The recognition of acquired competencies]. Utrecht: LEMNA BV.
- Teekens, H. (2002). A description of nine clusters of qualifications for lecturers. In H. Teekens (Ed.), *Teaching and learning in the international classroom* (pp. 35-52). The Hague: Nuffic.
- Thomas, E., Van Broekhoven, S., & Frietman, J. (2000). *EVC aan de poorten van het hoger onderwijs [PLAR for entry ro higher education]*. Nijmegen: ITS.
- Tigelaar, D. E. H., Dolmans, D. H. J. M., Wolfhagen, I. H. A. P., & Van der Vleuten, C. P. M. (2004). Using a conceptual framework and the opinions of portfolio experts to develop a teaching portfolio prototype. *Studies in Educational Evaluation*, *30*, 305-321.
- Tigelaar, D. E. H., Dolmans, D. H. J. M., Wolfhagen, I. H. A. P., & Van der Vleuten, C. P. M. (2005). Quality issues in judging portfolios: Implications for organizing teaching portfolio assessment procedures. *Studies in Higher Education*, *30*, 595-610.
- Tillema, H. H. (1998). Design and validity of a portfolio instrument for professional training. *Studies in Educational Evaluation, 24,* 263-278.
- Tillema, H. (2000) Leren van portfolio's [Learning from portfolios]. Velon, 21, 15-21.
- Tillema, H. (2001a). Assessment van competenties [Assessment of competencies]. Alphen aan den Rijn: Kluwer.
- Tillema, H. (2001b) Portfolios as developmental assessment tools. International Journal of Training and Development, 5, 126-135.
- Tillema, H. H., Kessels, J. W. M., & Meijers, F. (2000). Competencies as building blocks for integrating assessment with instruction in vocational education: A case from The Netherlands. *Assessment & Evaluation in Higher Education, 25*, 265-278.
- Toolsema, B. (2003). Werken met competenties: Naar een instrument voor de identificatie van competenties [Working with competencies: Towards an instrument for the identification of competencies]. (Doctoral dissertation). Enschede: PrintPartners Ipskamp.
- Travers, K. J. & Westbury, I. (1989). *The IEA Study of mathematics I: Analysis of mathematics curricula.* Oxford: Pergamon Press.
- UAF (2002). Het beste van meerdere werelden [The best of more worlds]. Utrecht: UAF
- Uhlenbeck, A.M. (2002). The development of an assessment procedure for beginning teachers of English as a foreign language. (Doctoral dissertation). Leiden: ICLON Graduate School of Education.
- Van Berkel, A., Hofman, K., Kinkhorst, G., & Te Lintelo, L. (2003). *Competentie-assessment [Competency-assessment]*. Utrecht: LEMNA BV.

- Van Dam, E. (2003). Toepassingen EVC voor werkzoekenden en inburgeraars [PLAR practices for those who seek employment and those who need to integrate in the Dutch society]. Utrecht: Empowerment Centre EVC.
- Van den Akker, J. (1999). Principles and methods of development research. In J. van den Akker, R. B. Branch, K. Gustafson, N. Nieveen, & T. Plomp, (Eds.), *Design approaches and tools in education and training* (pp. 1-14). Dordrecht: Kluwer Academic Publishers.
- Van den Akker, J. (2003). Curriculum perspectives: An introduction. In J. van den Akker, U. Hameyer, & W. Kuiper (Eds.), *Curriculum landscapes and trends* (pp. 1-10). Dordrecht: Kluwer Academic Publishers.
- Van den Akker, J., Gravemeijer, K., McKenney, S., & Nieveen, N. (2006). *Educational design research*. London: Routledge.
- Van den Tillaart, H., Olde Monninkhof, M., Van den Berg, S., & Warmerdam, J. (2000). *Nieuwe etnische groepen in Nederland [New ethnical groups in the Netherlands]*. Ubbergen: Uitgeverij Tandem Felix.
- Van Tartwijk, J., Driessen, E., Hoeberigs, B., Kösters, J., Ritzen, M., Stokking, K., & Van der Vleuten, C. (2003). Werken met een electronisch portfolio [Working with an electronic portfolio instrument]. Groningen: Wolters-Noordhoff.
- Verhaar, C. H. A. (2002). Wat kan EVC opleveren? [What are the benefits of PLAR?] Utrecht: Lemma BV.
- Visscher-Voerman, I., Gustafson, K., & Plomp, T. (1999). Educational design and development: An overview of paradigms. In J. van den Akker, R. B. Branch, K. Gustafson, N. Nieveen, & T. Plomp, (Eds.), *Design* approaches and tools in education and training (pp. 15-28). Dordrecht: Kluwer Academic Publishers.
- Wade, R. C., & Yarbrough, D. B. (1996). Portfolios: A tool for reflective thinking in teacher education? *Teching & Teacher Education*, *12*, 63-79.
- Warmerdam, J. F., & Van den Tillaart, H. J. M. (2002). Arbeidspotentieel en arbeidsmarktloopbanen van vluchtelingen en asielgerechtigden: Een verkennend onderzoek naar ervaringen van nieuwkomers op de Nederlandse arbeidsmarkt [Labour market potential and careers of asylum seekers and refugees: an exploratory study into the experiences of newcomers to the Dutch labour market]. Tilburg: Organisatie voor Strategisch Arbeidsmarktonderzoek.
- Warren, K. (1999). Accreditation for Prior Learning (APL) in the United States. Internal report.
- Weinert, F. E. (1999). Definitions and selections of competencies. Concepts of competence. Munich: Max Planck Institute for Psychological Research. Retrieved January 23, 2004 from http://www.statistik.admin.ch/stat ch/ber15/deseco/weinert report.pdf
- Whitaker, U. (1989). Assessing learning: Standards, principles and procedures. Philadelphia: CAEL.
- Yin, R. K. (1994). Case study research: Design and methods. Beverly Hills, CA: Sage Publications.
- Zgaga, P. (2007). Conclusions and recommendation of the Bologna seminar new challenges in recognition: Recognition of prior learning and recognition between Europe and other parts of the world. Retrieved February 5, 2007 from http://www.aic.lv/bologna2007/presentations/P_Zgaga_Recommendations.htm

Deze studie onderzoekt de kenmerken van een portfolio-instrument voor hoogopgeleide immigranten met het doel hun feitelijke competentie zichtbaar te maken, te beoordelen en waar mogelijk te erkennen, zodat er richtlijnen gespecificeerd kunnen worden die het ontwerp- en implementatieproces van een portfolio-instrument kunnen vergemakkelijken. Twee onderzoeksvragen hebben het onderzoek geleid:

- 1. Wat zijn de kenmerken van het portfolio-instrument en het gebruik door hoogopgeleide immigranten die de identificatie, beoordeling en erkenning van hun feitelijke competenties vergemakkelijken?
- 2. Wat zijn de kenmerken van het ontwerp- en implementatieproces van het portfolio-instrument die de acceptatie en het toekomstige gebruik van het instrument in de huidige evaluatie- en erkenningspraktijk vergemakkelijken?

Het onderzoek is uigevoerd bij de Nederlandse Organisatie voor Internationale Samenwerking in het Hoger Onderwijs (Nuffic). In de periode 2000-2004 heeft de Nuffic vijf proefprojecten uitgevoerd: één voor leraren, drie voor artsen en één voor vluchtelingen met verschillende professionele achtergronden. Het doel van deze proefprojecten was te achterhalen wat de kenmerken van een portfolio-instrument zijn opdat voorgaande leerervaringen van hoogopgeleide zichtbaar worden. Op deze manier kunnen immigranten erkenningsinstanties (hogeronderwijsinstellingen, ministeries en werkgevers) de uitkomsten van alle leerervaringen formeel, non-formeel en informeel - meewegen in hun erkenningsbeslissingen. De proefprojecten zijn gebruikt voor het uitvoeren van een meervoudige casestudie. Een analyseraamwerk is afgeleid van vijf theoretische bouwstenen die betrekking hebben op:

- 1. de kenmerken van de context,
- 2. de productkenmerken van het portfolio-instrument,
- 3. de kenmerken van portfolio-ontwikkeling door de hoogopgeleide immigrant (de portfoliokandidaat),
- 4. de kenmerken van portfoliobeoordeling door de erkennende instantie (de portfoliobeoordelaar), en
- 5. de kenmerken van het ontwerp- en implementatieproces van een portfolio-instrument.

De cross case analyse heeft geresulteerd in een verfijning en aanpassing van het conceptueel raamwerk van portfoliokenmerken voor hoogopgeleide immigranten, een 'portfoliospinnenweb' dat tien kerncomponenten voor effectief portfoliogebruik voor hoogopgeleide immigranten bevat (zie Figuur 1 op pagina 364 en ook paragraaf 7.3) en twee ontwerpbouwstenen voor een portfolio-instrument.

De relevantie van dit onderzoek kan vanuit verschillende invalshoeken worden belicht. Vanuit een theoretisch perspectief draagt dit onderzoek bij aan het wetenschappelijke kennisbestand over portfoliogebruik door hoogopgeleide immigranten zodat de identificatie, beoordeling en erkenning van hun feitelijke competenties wordt vergemakkelijkt. Met behulp van literatuur over competentiegerichte beoordeling en het portfolio-instrument zijn vijf theoretische bouwstenen ontworpen. Deze bouwstenen vormden de input voor de analyse van de portfoliokenmerken in de drie casestudies. Op basis van de resultaten van de cross case analyse is een aangepast conceptueel raamwerk van portfoliokenmerken voor hoogopgeleide immigranten gepresenteerd. Bezien vanuit een praktische invalshoek is deze studie relevant omdat het 'portfoliospinnenweb' en de twee ontwerpbouwstenen gebruikt kunnen worden door andere ontwerpers die een begin willen maken met portfoliogebruik door hoogopgeleide vluchtelingen. Tot slot draagt deze studie bij aan het maatschappelijke en politieke debat over het effectief gebruik van 'human resources', een levenlang leren en de integratie van hoogopgeleide immigranten in de Nederlandse samenleving door (betaalde) arbeid of studie. Over het algemeen is men het erover eens dat alle vormen van leren erkenning behoeven maar hoe dit in de praktijk gerealiseerd moet worden is nog niet altijd uitgekristalliseerd.

Deze paragraaf geeft een samenvatting van het onderzoek. Het begint met een korte beschrijving van de context en de opzet van de studie. Daarna worden de vijf theoretische bouwstenen die de onderzoeksvragen vanuit een theoretisch perspectief benaderen samengevat. De theoretische bouwstenen zijn gebruikt voor de ontwikkeling van een raamwerk om de beschikbare data uit de vijf proefprojecten die door de Nuffic zijn uitgevoerd, te analyseren. Zoals eerder aangegeven zijn deze vijf proefprojecten gebruikt voor drie exploratieve casestudies, namelijk één lerarencasestudie, één artsencasestudie en één vluchtelingencasestudie. Elke casestudie is afgesloten met een raamwerk van empirische resultaten van portfoliogebruik door respectievelijk in het buitenland opgeleide leraren, in het buitenland opgeleide artsen en vluchtelingen. De belangrijkste aspecten uit elk raamwerk worden in deze samenvatting kort beschreven. Tevens worden de resultaten van de cross caseanalyse besproken op een manier waarop ook de antwoorden op de onderzoeksvragen gepresenteerd worden. Tot slot volgt een samenvatting van de reflectie op de onderzoeksaanpak en de substantieve uitkomsten. Dit geldt ook voor de aanbevelingen die op basis van de onderzoeksresultaten zijn geformuleerd.

Context en opzet van de studie

Tot op heden richt de evaluatie- en erkenningspraktijk van hoogopgeleide immigranten zich op het in kaart brengen van de formele competenties die worden afgeleid van het aantal jaren afgesloten formeel onderwijs. Het belangrijkste instrument dat wordt gebruikt is internationale diplomawaardering. De praktijk van internationale diplomawaardering neemt de leerervaringen opgedaan in non-formele en informele contexten, niet mee in het evaluatieproces. Dit onderzoek is rond de laatste eeuwwisseling begonnen toen debatten over de implementatie van een 'levenlang leren agenda' werden gevoerd op internationaal en nationaal niveau. De Europese Commissie (2002) geeft aan dat innovatieve vormen van evaluatie en erkenning nodig zijn om de uitkomsten van non-formeel en informeel leren mee te laten tellen in erkenningsbeslissingen. Als voorbeeld wijst de Commissie op systemen voor 'Accreditation of Prior Learning (APEL)' (Accreditatie van Voorgaande Leerervaringen) die reeds bestaan in landen zoals bijvoorbeeld het Verenigd Koninkrijk. Internationaal zijn er verschillende termen in gebruik die verwijzen naar het evaluatieproces van voorgaande leerervaringen. In Nederland wordt doorgaans gesproken over het Erkennen van Verworven Competenties (EVC). In dit onderzoek wordt de term 'Prior Learning Assessment and Recognition (PLAR)' (Beoordeling en Erkenning van Voorgaande Leerervaringen) gehanteerd om aan te geven dat beoordeling en erkenning twee aparte processen zijn. Het portfolio-instrument vormt vaak een onderdeel van een PLAR-procedure.

Deze studie is uitgevoerd bij de Nederlandse Organisatie voor Internationale Samenwerking in het Hoger Onderwijs (Nuffic). Nuffic heeft vele jaren ervaring met internationale diplomawaardering. In 2000 is door de Nuffic besloten om met portfoliogebruik te experimenteren om de identificatie, beoordeling en erkenning van de feitelijke competenties van hoogopgeleide immigranten te bevorderen. In de periode 2000-2004 zijn vijf proefprojecten uitgevoerd: één voor leraren, drie voor artsen en één voor vluchtelingen. Deze proefprojecten zijn gebruikt voor een *reconstructief ontwerpgerichtonderzoek* dat de kenmerken van een portfolio-instrument in kaart brengt evenals de kenmerken van het ontwerp- en implementatieproces. In reconstructieve

ontwerpstudies vinden de onderzoeksactiviteiten plaats nadat de interventie (in dit geval het portfolio-instrument) is ontworpen zodat in retrospect ontwerpspecificaties kunnen worden afgeleid (Van den Akker, 1999). Deze studie heeft gekozen voor een *meervoudige exploratieve casestudie*. Een casestudie is "an empirical enquiry that investigates a contemporary phenomenon within its real-life, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 1994, p.18). Literatuuronderzoek heeft geleid tot de ontwikkeling van vijf theoretische bouwstenen (TBBs) die de onderzoeksvragen vanuit een theoretisch perspectief benaderen. De onderwerpen die door de verschillende bouwstenen worden belicht zijn:

- 1. de kenmerken van de context (TBB1),
- 2. de productkenmerken van het portfolio-instrument (TBB2),
- 3. de kenmerken van portfolio-ontwikkeling door de portfoliokandidaat (TBB3),
- 4. de kenmerken van portfoliobeoordeling door de portfoliobeoordelaar (TBB4), en

5. de kenmerken van het ontwerp- en implementatieproces van een portfolio-instrument. (TBB5). De vijf TBBs zijn gebruikt voor de ontwikkeling van een raamwerk voor de gegevensanalyse van de casestudies. Hieronder wordt elk TBB kort samengevat.

Overzicht van de vijf theoretische bouwstenen

De contextkenmerken (TBB1)

De eerste theoretische bouwsteen belicht de contextkenmerken die naar alle waarschijnlijkheid een positieve invloed hebben op het implementatieproces van een portfolio-instrument dat de identificatie, beoordeling en erkenning van feitelijke competenties beoogt te bevorderen. Deze bouwsteen is ontwikkeld in hoofdstuk 3. In paragraag 3.1 komt de betekenis van de term competentie (*'competence*) uitgebreid aan bod. Om het onderscheid tussen de Engelse termen *'competence'*, *'competence'* en *'competencies'* te duiden is aansluiting gezocht bij Kouwenhoven (2003). Hij gebruikt de term *'competence'* in algemene zin om te refereren aan iemands bekwaamheid om de belangrijkste beroepstaken naar niveau uit te voeren. Hiervoor zijn verschillende attributen nodig waarvoor Kouwenhoven (2003) de Engelse term *'competencies'* reserveert. Een competentie (*'competency'*) is "the capability to choose and use (apply) an integrated combination of knowledge, skills and attitudes with the intention to realize a task" (Kouwenhoven, 2003, p.43). De conceptuele keuzes die gemaakt zijn ten aanzien van het begrip competentie zijn besproken aan de hand van zes dimensies die het begrip van 'binnenuit' benaderen (cf. Stoof et al., 2000):

- 1. Competentie als een persoonskenmerk versus een taakkenmerk: in dit onderzoek wordt uitgegaan van het eerste. Ellström (1998) maakt hierbij een nader onderscheid tussen 'formele competentie' die doorgaans worden afgeleid van het aantal jaren formeel onderwijs dat is gevolgd en de 'feitelijke competentie' die betrekking heeft op de potentiële capaciteit om bepaalde taken uit te voeren. Deze studie beoogt de feitelijke competenties van hoogopgeleide immigranten zichtbaar te maken met behulp van het portfolio-instrument zodat deze kunnen worden beoordeeld en waar mogelijk erkend.
- 2. *Individual competence'* versus *'distributed competence'*: in deze studie wordt het begrip competentie gezien als iets wat verder gaat dan het individu zelf. Er wordt aansluiting gezocht bij de *interactieve* benadering beschreven door Hodkinson (1992). Dit houdt in dat competenties context en cultuur specifiek zijn (cf. Hodkinson, 1992; Klarus, 2000).
- Specifieke competenties versus generieke competenties: deze studie spreekt een voorkeur uit voor competentiedefinities die gebruik maken van een *integratieve holistische* benadering waardoor competentie-uitspraken worden afgeleid die betrekking hebben op de 30 tot 40 beroepstaken die op niveau uitgevoerd dienen te worden (cf. Gonzci, 1994; Hager, 1993).

- 4. Competentie als een continuüm met verschillende niveaus versus competentie als een eigen expertiseniveau: deze studie beschouwt het begrip competenties als een *continuüm* dat verschillende niveaus kent. Dit houdt in dat competentiestandaarden gedefinieerd dienen te worden in relatie tot een ontwikkelingsschaal (Klenowski, 2002).
- 5. Competentie als een leerbaar begrip versus competentie als een niet-leerbaar begrip: in deze studie wordt competentie opgevat als een *leerbaar* begrip.
- 6. Competentie als een statisch begrip versus competentie als een dynamisch begrip: tot slot wordt het begrip competentie opgevat als een *dynamisch* begrip.

Zie Table 3-1 op pagina 46 voor een meer gedetailleerde uitleg van de conceptuele keuzes die gemaakt zijn ten aanzien van het begrip competentie.

Paragraaf 3.2 belicht de kenmerken van competentiegerichte curricula in vergelijking tot de kenmerken van leerstofgerichte of disciplinegerichte curricula. Er wordt aandacht besteed aan het leerproces (paragraaf 3.2.1), het beoordelingsproces (paragraaf 3.2.2) en de kwaliteitsbewaking van de beoordeling (paragraaf 3.2.3). Elke subparagraaf sluit af met een samenvattend overzicht van de belangrijkste kenmerken voor beide paradigma's (zie respectievelijk Table 3-2 op pagina 48, Table 3-3 op pagina 52 en Table 3-4 op pagina 57). Paragraaf 3.4 benadert competentiegericht leren vanuit een mondiaal perspectief. Ballard en Clanchy (1992) hebben een model ontwikkeld dat de relatie weergeeft tussen onderwijs- en leerstrategieën en de culturele attitude ten aanzien van kennis (zie ook Figure 3-4 op pagina 61). Dit model is gebaseerd op de vooronderstelling dat er attitudes ten aanzien van kennis zijn die een nadruk op 'behoud' van kennis ('conservation') danwel op 'uitbreiding' van kennis ('extension') leggen. Ten tweede wordt aangenomen dat in elke nationale cultuur dominante tendensen zijn die een van de twee houdingen het meest geschikt maakt. Als een cultuur gekenmerkt wordt door een 'behoudende' attitude ten aanzien van kennis dan zal de onderwijscultuur veel overeenkomsten vertonen met een reproductieve leerbenadering. Als een cultuur gekenmerkt wordt door een 'uitbreidende' houding ten aanzien van kennis dan zal de onderwijscultuur meer overeenkomsten vertonen met een reproductieve leerbenadering. De analyse laat zien dat competentiegericht leren weinig gemeen heeft met de reproductieve leerbenadering. Er is dan ook geconcludeerd dat hoogopgeleide immigranten die afkomstig zijn uit een onderwijscultuur met een 'behoudende' kennisopvatting goed voorbereid moeten worden op deelname in een competentiegerichte leeromgeving aangezien er belangrijke verschillen zijn ten aanzien van onderwijs- en leersstrategieën, de rol van de docent, de rol van de student en de functie en aard van de beoordeling. Zie voor een uitgebreid overzicht van verschillen Table 3-5 op pagina 63.

De analyse van de kenmerken van competentiegericht leren versus leerstofgericht leren heeft tot de conclusie geleid dat de volgende twee factoren invloed hebben op de complexiteit van portfoliogebruik ten behoeve van identificatie, beoordeling en erkenning van feitelijke competenties:

- 1. de mate waarin de omgeving waarin het portfolio-instrument wordt geïntroduceerd overeenkomt met een leerstofgerichte leeromgeving danwel een competentiegerichte leeromgeving, en
- 2. de mate waarin het onderwijssysteem waarin de hoogopgeleide immigrant is opgeleid een voorkeur heeft voor de 'behoudende' kennisopvatting danwel de 'uitbreidende' kennisopvatting.

De eerste theoretische bouwsteen (TBB1) bevat contextkenmerken die naar waarschijnlijkheid een positieve invloed hebben op de introductie van een portfolio-instrument. Er worden drie onderwerpen aan de orde gesteld: competentiegericht leren, competentiegericht beoordelen en de kwaliteitsbenadering (zie ook Table 3-6 op pagina 66). Belangrijke vergemakkelijkende kenmerken zijn:

- een leeromgeving die gebaseerd is op de toekomstige beroepsuitoefening van de lerende,
- een leeromgeving die gebaseerd is op een uitwerking van beroepsprofielen en de identificatie van competenties die nodig zijn voor de uitvoering van de belangrijkste beroepstaken naar niveau,
- de beschikbaarheid van beoordelingsinstrumenten die competenties op een geïntegreerde manier meten, in een authentieke context ('multi-modaal'), en
- het gebruik van een contextuele, kwalitatieve benadering om de kwaliteit van de beoordeling te garanderen (e.g. een hermeneutische benadering).

De portfolioproductkenmerken (TBB2)

Hoofdstuk 4 voegt vier bouwstenen toe aan het conceptuele kader van deze studie. Paragraaf 4.1 begint met een korte introductie op de verschillende producten die in de literatuur gerekend worden tot het begrip 'portfolio'. De paragraaf sluit af met de classificatie van Smith en Tillema (2003) die onderscheid maken tussen twee typen beoordelingsportfolio's ('*assessment portfolios'*), namelijk een 'dossier portfolio' en een 'reflectief portfolio' en twee typen ontwikkelingsportfolio's ('*development portfolios'*), namelijk een 'persoonlijk ontwikkelingsportfolio' en een 'opleidingsportfolio'. De typen portfolio's worden besproken in relatie tot de 'beoogde doelen' van de hoogopgeleide immigranten:

- Het 'dossier portfolio' lijkt relevant als de hoogopgeleide immigrant formele erkenning van competenties beoogt; om toegang te krijgen tot een gereglementeerd beroep ('de jure' beroepserkenning) dan wel om toegang te krijgen tot een Nederlandse opleiding (academische erkenning);
- Het 'reflectieve portfolio' lijkt relevant als de hoogopgeleide immigrant sociale erkenning beoogt (e.g. voor het vinden van een baan in een niet-gereglementeerd beroep of vrijwilligerswerk);
- Het 'persoonlijk ontwikkelingsportfolio' lijkt relevant als de hoogopgeleide immigrant zich wil *oriënteren* op de (arbeids)mogelijkheden in de Nederlandse samenleving.

Figure 4-2 op pagina 73 geeft aan hoe deze drie typen portfolio's zich verhouden tot de algemene doelstelling voor competentiebeoordeling- en erkenning alsmede de algemene doelstelling voor de evaluatie en erkenning van buitenlandse diploma's.

In het resterende deel van paragraaf 4.1 worden de kenmerken van een ontwikkelingsportfolio besproken (paragraaf 4.1.2) alsook die van een beoordelingsportfolio (paragraaf 4.1.3). De paragraaf sluit af met een samenvattend overzicht van de belangrijkste kenmerken van beide typen portfolio's waarbij de volgende onderwerpen aan bod komen: de functie, de impact, de structuur en inhoud, de standaarden en het bewijsmateriaal voor competentieontwikkeling. Dit overzicht vormt de tweede theoretische bouwsteen (TBB2) die gepresenteerd is in Table 4-5 op pagina 81.

- Het ontwikkelingsportfolio beoogt het ontwikkelingsproces van de portfoliokandidaat te plannen en te sturen. Een ontwikkelingsportfolio draagt bij aan de bewustwording van de 'beoogde doelen', de sterke en zwakke punten in het huidige competentieprofiel en de stappen die gezet moeten worden om de beoogde doelen te bereiken. Het draagt ook bij aan de ontwikkeling van reflectieve vaardigheden. Over het algemeen is er sprake van een open structuur bestaande uit een dossier gedeelte en een reflectief gedeelte. Aangezien het portfolio bijdraagt aan de 'beoogde doelen' van de portfoliokandidaat, zijn de standaarden in veel geval 'intern' gedefinieerd (door de portfoliokandidaat). Een ontwikkelingsportfolio bevat vaak een variëteit aan bewijsmateriaal, bijv. gemiddelde prestaties, beste prestaties, reflecties, zelfbeoordeling, beoordeling door medecursisten ('peers'). De selectie van bewijsmateriaal wordt open gelaten.
- Het *beoordelingsportfolio* beoogt formele of sociale erkenning te bewerkstelligen. De directe opbrengsten (van portfolio-ontwikkeling) kunnen worden gematerialiseerd in termen van

'studiepunten' of geld. Erkenning leidt namelijk tot certificatie, toegang tot een opleiding, vrijstellingen of een baan. Over het algemeen wordt de structuur en de inhoud van een beoordelingsportfolio voorgeschreven door de erkennende instantie. Het bevat vaak een dossier gedeelte en een reflectief gedeelte. De standaarden die gebruikt worden ten behoeve van het expliciteren van leerervaringen zijn vaak extern gedefinieerd door de erkennende instantie. Het beoordelingsportfolio bevat bewijsmateriaal dat betrekking heeft op de beste prestaties. Meestal is er geen reflectieve informatie of bewijs van zelfbeoordeling bijgevoegd.

Het portfolio-ontwikkelingsproces door de hoogopgeleide immigrant (TBB3)

Paragraaf 4.2 gaat in op de kenmerken van het portfolio-ontwikkelingsproces door de hoogopgeleide immigrant. De paragraaf begint met een weergave van stappen en strategieën die de portfoliokandidaat door het proces van identificatie, selectie, zelfbeoordeling, reflectie en documentatie leiden. Er wordt aandacht besteed aan veel voorkomende stappen in een PLAR procedure in drie landen: de Verenigde Staten, het Verenigd Koninkrijk en Nederland. Portfolio-ontwikkeling is een cyclisch proces is dat vaak 'bottom-up' begint door het inventariseren van voorgaande leerervaringen. De volgende stappen zijn opgenomen in de derde theoretische bouwsteen (TBB3):

- 1. het inventariseren van voorgaande leerervaringen,
- 2. het selecteren van relevante ervaringen,
- het specificeren van leeruitkomsten (waarbij gebruik gemaakt kan worden van een 'vakken of module model' (*'college course model'*), het 'blok studiepunten model' (*'block credit model'*) and het 'competentiemodel' (*'competency model'*) (Whitaker, 1989),
- 4. het vergelijken van de leeruitkomsten met de beoordelingsstandaarden,
- 5. het verzamelen van bewijsmateriaal,
- 6. het schrijven van een persoonlijk ontwikkelingsplan of actieplan.

Portfolio-ontwikkeling is gebaseerd op enkele belangrijke leerprocessen, waaronder zelfbeoordeling en reflectief denken (Klenowski, 2002). Paragraaf 4.2.2 geeft aan dat deze leerprocessen waarschijnlijk nieuw zijn voor vele van de portfoliokandidaten, met name de hoogopgeleide immigrant, die opgeleid zijn in een reproductieve leeromgeving. Voortbouwend op het werk van Ballard en Clanchy (1992), Klenowski (2002) en Teekens (2002) zijn verschillende begeleidingsmaatregelen afgeleid ter ondersteuning van portfolio-ontwikkeling voor hoogopgeleide immigranten. Deze maatregelen zijn samengevat in TBB3 (zie Table 4-9 op pagina 92). Tot slot wordt in TBB3 aandacht besteed aan de rollen en verantwoordelijkheden van de verschillende personen die bij portfolio-ontwikkeling betrokken zijn:

- de portfoliokandidaat die eigenaar is van het portfolio en verantwoordelijk is voor de ontwikkeling van het portfolio,
- de portfolioadviseur die verantwoordelijk is voor de begeleiding en ondersteuning van de portfoliokandidaat. Hij voert een formatieve evaluatie uit alvorens het portfolio wordt voorgelegd aan de portfoliobeoordelaar,
- de portfoliobeoordelaar die verantwoordelijk is voor de beoordeling van het portfolio.

Het portfoliobeoordelingsproces door de erkennende instantie (TBB4)

Paragraaf 4.3 exploreert de kenmerken van het portfoliobeoordelingsproces en vat de belangrijkste samen in de vorm van een vierde theoretische bouwsteen (TBB4). TBB4 wordt weergegeven in Table 4-12 op pagina 100 en besteedt aandacht aan twee onderwerpen: het doel van portfoliobeoordeling en de criteria die gebruikt worden om de kwaliteit van portfoliobeoordeling te waarborgen. Portfoliobeoordeling kent een *formatieve* dan wel *summatieve* doelstelling. Als er een ontwikkelingsportfolio wordt gebruikt is het doel van de

beoordeling automatisch formatief (het sturen danwel monitoren van het ontwikkelingsproces van de kandidaat). Bij het gebruik van een beoordelingsportfolio kan het doel zowel formatief (gericht op het identificeren van competenties) als summatief zijn (gericht op beoordeling en erkenning van competenties).

Portfoliobeoordeling is een complex, interpretatief proces (Klenowski, 2002; Tigelaar, Dolmans, Wolfhagen & Van der Vleuten, 2005). Elk portfolio heeft zijn eigen unieke inhoud die door de beoordelaar geïnterpreteerd moet worden om tot een beoordelings- en erkenningsbeslissing te komen. Om de validiteit van deze beslissing te waarborgen is het belangrijk dat het bewijsmateriaal in het portfolio betrekking heeft op de beoordelingsstandaarden. Verder is het belangrijk dat er consensus is over de beoordelingsbeslissing tussen de portfoliobeoordelaars. Consensus wordt gewaarborgd door een dialoog tussen beoordelaars. De beoordelaars zijn experts op het beoordelingsterrein en getraind in het beoordelingsproces (Johnson, 2002; Klenowski, 2002; Moss, 1984). Het is belangrijk dat de beoordelaars hun eerste interpretaties proberen te weerleggen door op zoek te gaan naar tegenvoorbeelden in het portfolio. Daarnaast discussie plaatsvinden over de beoordelingsresultaten met andere moet er een portfoliobeoordelaars, de portfolioadviseur en/of de portfoliokandidaat (Tigelaar et al., 2005). Het is belangrijk dat de beoordelingsprocedure transparant is. Tot slot is van belang dat de beoordelingsuitkomst contextuele informatie bevat zodat anderen worden geïnformeerd over het doel van de beoordeling, de inhoud, het niveau, de beoordelingsprocedure en de maatregelen die getroffen zijn om de kwaliteit van de beoordelingsbeslissing te garanderen.

Portfolio-ontwerp en implementatie (TBB5)

De vijfde theoretische bouwsteen (TBB5) komt aan bod in paragraaf 4.4 (zie ook Table 4-15 op pagina 108). Deze bouwsteen bevat belangrijke kenmerken van het ontwerp- en implementatieproces van het portfolio-instrument. Paragraaf 4.4.1 legt uit dat portfolio-implementatie een verandering betreft die op verschillende niveaus betrekking heeft (*'multilevel'*) en verschillende dimensies kent (*'multidimensional'*) (cf. Fullan, 2001). De drie gebruikelijke fasen in een veranderingsproces worden beschreven: initiatie, implementatie en institutionalisering (Fullan, 2001). Deze reconstructieve studie heeft alleen betrekking op de initiatie- en implementatiefase van een verandering. Daarom zijn de factoren die het succes in deze fasen beïnvloeden kort beschreven. In paragraaf 4.4.2 is aandacht besteed aan twee ontwerpparadigma's: een communicatief ontwerpparadigma en een pragmatisch ontwerpparadigma (cf. Visscher-Voerman, Gustafson, & Plomp, 1999). Het portfolio-ontwerpproces kan een bijdrage leveren aan een succesvol implementatieproces. Fullan (2001) benoemt vier essentiële zaken die gewaarborgd dienen te worden door het ontwerpproces. Dit zijn:

- actieve betrokkenheid en participatie van stafleden die met de innovatie moeten werken,
- ondersteuning van en druk vanuit het centraal beleidsniveau (management),
- verandering van gedrag ('behaviour') en overtuiging ('beliefs'), en
- het creëren van een gevoel van eigenaarschap.

Overzicht van de drie exploratieve casestudies

In hoofdstuk 5 zijn de vijf theoretische bouwstenen gebruikt voor de ontwikkeling van een raamwerk voor de gegevensanalyse ten behoeve van de meervoudige exploratieve casestudies (zie Table 5-4 op pagina 121). Van elke TBB zijn een aantal 'analyse-onderwerpen' afgeleid om de empirische portfoliokenmerken in kaart te brengen. Daarnaast geeft hoofdstuk 5 een beschrijving van de opzet van de vijf proefprojecten die door de Nuffic zijn uitgevoerd en gebruikt voor de casestudies. Paragraaf 5.3 beschrijft het proefproject ten behoeve van de leraren en relateert de beschikbare database aan het analyseraamwerk (zie Table 5-9 op pagina 133). Paragraaf 5.4 doet hetzelfde voor de drie proefprojecten ten behoeve van artsen (zie Table 5-13

op pagina 147) en paragraaf 5.5 voor het proefproject ten behoeve van vluchtelingen (zie Table 5-17 op pagina 158). Hoofdstuk 6 presenteert de uitkomsten van de meervoudige casestudie. Hieronder volgt een samenvatting van elke casestudie.

Lerarencasestudie

De context van de lerarencase kan geclassificeerd worden als een competentiegerichte 2000 Ministerie omgeving. In heeft van Onderwijs een competentiegerichte beoordelingsprocedure geïntroduceerd om de competentie van toekomstige leraren in het primair en secundair onderwijs te beoordelen (cf. Stoas, 2000). In de lerarencase is het 'getrouwheidsperspectief' op verandering toegepast ('fidelity perspective') (cf. Fullan, 2001). De landelijke 'Zij-instroom procedure voor leraren secundair onderwijs' is gebruikt om te bepalen of de ontwikkelde instrumenten, inclusief het portfolio, de identificatie van de feitelijke competenties van in het buitenland opgeleide leraren kan bevorderen. De portfoliobeoordeling is uitgevoerd door een officieel assessmentbureau 'Educom' genaamd. De beoordelaars waren voorafgaand aan het proefproject al getraind in de beoordelingsprocedure en hadden ervaring met studenten met verschillende culturele achtergronden. De portfoliokandidaten hadden geen ervaring met het portfolio-instrument. Vier van de zes kandidaten hadden wel ervaring in de Nederlandse onderwijssector. Vier van hen waren geslaagd voor het staatsexamen NT 2 (Nederlands als tweede taal) op het hoogste niveau.

De beoogde en geïmplementeerde functie van het portfolio-instrument was *beoordeling*. De casestudie laat zien dat deze functie in de praktijk niet is gerealiseerd. De ontwikkelde portfolio's waren descriptief van aard. Ze gaven inzicht in de voorgaande leerervaringen maar bevatten nauwelijks bewijsmateriaal voor competentieontwikkeling in relatie tot de beoordelingsstandaarden. De belangrijkste oorzaken hiervoor zijn:

- 1. de feitelijke kenmerken van de portfoliokandidaten (onervaren portfoliogebruikers met onvoldoende begrip van de competentiestandaarden),
- 2. de wijze waarop het portfolio-ontwikkeling door de portfoliokandidaten was vormgegeven. Portfolio-ontwikkeling was een individuele activiteit waarbij de kandidaten geen verdere begeleiding hebben ontvangen. Indien er vragen waren konden ze contact opnemen met één van de toekomstige beoordelaars. Er was geen scheiding tussen de rol van portfolioadviseur en portfoliobeoordelaar. Geen van de portfoliokandidaten heeft contact gezocht.

De portfoliokandidaten bleken onvoldoende bekend met de 'assessmentcultuur' en de cognitieve processen die een belangrijke rol spelen bij portfolio-ontwikkeling: zelfbeoordeling en reflectief denken. Deze processen moeten worden geoefend in een leeromgeving. De portfoliobeoordelaars stelden daarom voor om portfolio-ontwikkeling onderdeel te maken van een oriëntatieprogramma. Dit oriëntatieprogramma zou de volgende mogelijkheden kunnen bieden:

- de kerncompetenties die het uitgangspunt vormden voor portfolio-ontwikkeling zouden betekenis kunnen krijgen;
- de portfoliokandidaten zouden kunnen oefenen met zelfbeoordeling en reflectie, en
- indien noodzakelijk, zouden de portfoliokandidaten de mogelijkheid hebben om bewijsmateriaal te reconstrueren of te verzamelen.

Ook is er op basis van de uitkomsten van de casestudie geconcludeerd dat er een strikte scheiding tussen de rol van portfoliobeoordelaar en portfolioadviseur moet zijn. De portfolioadviseur zou formatieve feedback op het portfolio moeten geven alvorens het portfolio ter beoordeling wordt voorgelegd. De portfoliobeoordelaars waren van mening dat de validiteit van de beoordeling in het geding was door de onbekendheid van de portfoliokandidaten met de beoordelingsstandaarden, de 'assessmentcultuur' en het ontbreken van

begeleidingsmaatregelen. Om die reden werd in de lerarencase de conclusie getrokken dat de beschikbaarheid van een landelijke beoordelingsprocedure met een wettelijke basis niet voldoende is om de identificatie van voorgaande leerervaringen te bevorderen. Van even groot belang is een goede begeleidingsstructuur. Zie voor een gedetailleerd overzicht van de resultaten in de lerarencase Table 6-8 op pagina 190.

Artsencasestudie

De context in de artsencase is gekenmerkt als een 'probleemgestuurde leeromgeving (cf. Schuwirth & Van der Vleuten, 2005). Zij geven aan dat de omslag naar competentiegericht leren geleidelijk plaatsvindt. Bij de competentiegerichte benadering worden vier rollen die de arts zou moeten vervullen beschreven: de arts als medisch expert, de arts als wetenschapper, de arts als medewerker in de gezondheidszorg en de arts als persoon (Overeem, Driessen, Van Tartwijk & Van der Vleuten, 2003). Op landelijk niveau zijn er geen competentiedefinities beschikbaar om het medische expertiseterrein te definiëren (cf. Metz, Verbeek-Weel & Huisjes, 2001). De helft van de twintig portfoliobeoordelaars die hebben deelgenomen aan de artsencasestudie hadden van het portfolio-instrument gehoord, maar geen van hen was getraind in de assessmentcultuur. De 53 portfoliokandidaten hadden geen ervaring met portfolio-ontwikkeling. De helft van hen had ervaring in de Nederlandse gezondheidszorg (maar niet als arts). Ongeveer een kwart van hen was geslaagd voor het staatsexamen NT 2 op het hoogste niveau.

In de artsencase was sprake van een 'evolutionair perspectief' op verandering *('evolutionairy perspective'*) (cf. Fullan, 2001). In 2001 heeft het Ministerie van Volksgezondheid de ontwikkeling van een landelijke beoordelingsprocedure voor in het buitenland gediplomeerden in de Nederlandse gezondheidszorg aangekondigd. De ontwikkeling van deze procedure vond parallel aan de uitvoering van de proefprojecten voor artsen uitgevoerd door de Nuffic plaats. Het geïmplementeerde ontwerpparadigma kan het best omschreven worden als een 'pragmatisch' ontwerpparadigma (cf. Visscher-Voerman et al., 1999). De betrokken faculteitsmedewerkers stelden voor het portfolio-instrument als informatiemiddel te gebruiken. Zij hadden de voorkeur voor een snelle start en stelden voor de uitkomsten van het eerste proefproject te gebruiken om de portfoliokenmerken nader te bediscussiëren. De Nuffic heeft als een 'externe innovatieagent' geopereerd (cf. Fullan, 2001) en speelde daardoor een belangrijke rol tijdens de implementatiefase van het portfolio-instrument. Bij de artsencasestudie werd geconstateerd dat de faculteitsmedewerkers met name betrokken waren tijdens het vooronderzoek en de evaluatie van het project. Om verandering van gedrag (en overtuiging) te bewerkstelligen is het belangrijk dat de portfoliobeoordelaars (en portfolioadviseurs) de mogelijkheid krijgen hun rol te oefenen.

De beoogde en geïmplementeerde functie van het portfolio-instrument was '*informatiegericht*'. De gerealiseerde kenmerken laten zien dat de waardering voor bepaalde inhoudselementen afhangt van het perspectief waarmee de beoordelaar naar het portfolio kijkt (beoordeling versus ontwikkeling). Om die reden werd geconcludeerd dat de functie duidelijker omschreven dient te worden dan 'informatie geven over voorgaande leerervaringen'. De portfoliostructuur veranderde van een open naar een gesloten structuur. Zowel de portfoliokandidaten als de portfoliobeoordelaars hadden behoefte aan een vast, voorgeschreven portfolioformulier. Elk onderdeel van het formulier had een specifieke functie. In deze casestudie werd geconcludeerd dat het nadeel van een voorgeschreven portfolioformulier is dat de portfoliokandidaten het formulier invullen zonder zich bewust te worden van het cyclische portfolio-ontwikkelingsproces dat er aan ten grondslag ligt. Het is om die reden dan ook belangrijk dat de portfolio-ontwikkelingsstrategieën tijdens de begeleiding aan bod komen.

De evaluatie laat zien dat men tevreden was over de geïmplementeerde kenmerken van het portfolio-ontwikkelingsproces door de portfoliokandidaat. In de artsencasestudie was een portfoliomodule ontwikkeld bestaande uit reflectieve groepsopdrachten, presentaties, individuele begeleiding en feedback, formatieve feedback en zelfstandig werken. Er werd geconcludeerd dat de portfolioadviseur meer kennis dient te bezitten van het portfoliobeoordelingsproces. In de artsencasestudie is portfoliobeoordeling onderbelicht gebleven ook omdat de beoogde en geïmplementeerde functie ' informatiegericht' was. De evaluatie laat zien dat het portfolio als beoordelingsinstrument gebruikt kan worden als aan de volgende voorwaarden wordt voldaan:

- het ontwikkelde portfolio dient meer objectieve informatie te bevatten,
- er dient een transparante set beoordelingsstandaarden te zijn,
- het portfolio moet een onderdeel vormen van een uitgebreidere assessment.

Zie voor een gedetailleerd overzicht van de casestudieresultaten Table 6-24 op pagina 234.

Vluchtelingencasestudie

In de vluchtelingencasestudie was de geïmplementeerde functie van het portfolio-instrument *ontwikkelingsgericht*; het beoogde de begeleiders van de vluchtelingen te informeren zodat zij het ontwikkelingsproces van de vluchteling beter kunnen sturen en monitoren. Er werd verwacht dat dit een versterkend effect op de vluchteling zou hebben ('empowerment). De contextkenmerken in de vluchtelingencasestudie laten zien dat de begeleidingsinstanties begonnen zijn met portfoliogebruik om de vluchtelingen te activeren, stimuleren en te sterken. De dertien portfoliobeoordelaars die hebben meegedaan in de casestudie zijn allen professionele vluchtelingenbegeleiders. Geen van hen had ervaring met portfoliobeoordeling. De portfoliokandidaten (110 aan het begin, 74 aan het eind) hadden ook geen ervaring met portfolio-ontwikkeling. Hun Nederlandse taalvaardigheid varieerde van geen kennis van het Nederlands tot een diploma NT 2 op het hoogste niveau. In de casestudie is geconcludeerd dat de complexiteit van de invoering van het portfolio-instrument is beperkt door alleen aandacht te besteden aan de ontwikkelingsfunctie van het portfolio-instrument (en niet zoals gepland, ook de beoordelingsfunctie te implementeren). Om de identificatie, beoordeling en erkenning van leerervaringen te bevorderen is het evenwel noodzakelijk dat de portfoliobeschrijvingen worden gekoppeld aan een externe set van beoordelingsstandaarden. Ook dienen er competentieclaims gedefinieerd te worden en moet bewijsmateriaal worden bijgevoegd om deze claims te onderbouwen. Om dit proces goed te begeleiden is het noodzakelijk dat er een portfolioadviseur beschikbaar is die afkomstig is van een erkennende instantie. Dit kon door de projectpartners echter niet worden gerealiseerd.

Het veranderingsperspectief dat in deze casestudie is toegepast is een combinatie van het 'getrouwheidsperspectief' en het 'evolutionair perspectief' (cf. Fullan, 2001). Het geïmplementeerde portfoliomateriaal is gebaseerd op een analyse van reeds bestaand portfoliomateriaal dat door andere organisaties al werd gebruikt, soms voor andere doelgroepen. In de casestudie is geconcludeerd dat het geïmplementeerde ontwerpparadigma een mix is van een 'systematisch' ontwerpparadigma (cf. Visscher-Voerman et al., 1999).

De geïmplementeerde portfoliostructuur en -inhoud komen overeen met de geïmplementeerde functie van het portfolio-instrument. Er is gebruik gemaakt van een voorgeschreven portfolioformulier bestaande uit vier onderdelen en een appendix die elk een eigen functie kenden:

- een overzicht van ervaringen (Curriculum Vitae),
- gedetailleerde portfoliobeschrijvingen,
- een Persoonlijk OntwikkelingsPlan (POP), en
- het portfoliobewijsmateriaal.

Tijdens de portfoliobeoordeling (door de vluchtelingenbegeleiders) stonden de 'beoogde doelen' van de vluchtelingen (die gedefinieerd stonden in het POP) centraal. Om in de toekomst erkenning te bevorderen is het belangrijk dat deze doelen gerelateerd worden aan externe beoordelingsstandaarden die landelijk worden erkend. Deze stap heeft echter te weinig aandacht gekregen als gevolg van de geïmplementeerde functie (ontwikkeling). Hetzelfde gold voor het bewijsmateriaal. De evaluatie laat zien dat de ontwikkelde portfolio's de begeleider een goed beeld hebben gegeven van voorgaande leerervaringen en toekomstplannen. In enkele gevallen heeft dit geleid tot een bijsturing van het oriëntatieproces.

De portfolio-ontwikkelingsleerlijn die geïmplementeerd is werd goed beoordeeld door de portfoliokandidaten en de begeleiders. Het Centraal Orgaan opvang asielzoekers (COA) heeft besloten het portfolio-instrument voor alle cliënten te gaan gebruiken (ongeacht de onderwijsachtergrond). Als gevolg hiervan zijn er in 2005 train-de-trainer workshops georganiseerd zodat de COA-begeleiders de portfolioworkshops zelf aan de vluchtelingen kunnen geven. Zie voor een gedetailleerd overzicht van alle casestudieresultaten Table 6-39 op pagina 267.

Kenmerken van een portfolio-instrument voor hoogopgeleide immigranten

Hoofdstuk 7 beschrijft de resultaten van de cross case analyse en geeft antwoorden op de twee onderzoeksvragen. Hieronder worden de antwoorden op de eerste onderzoeksvraag samengevat die luidt: *Wat zijn de kenmerken van het portfolio-instrument en het gebruik door hoogopgeleide immigranten die de identificatie, beoordeling en erkenning van hun feitelijke competenties vergemakkelijken?*

Hiervoor wordt gebruik gemaakt van de resultaten van de cross case analyse met betrekking tot:

- de portfolioproductkenmerken,
- het portfolio-ontwikkelingsproces,
- het portfoliobeoordelingsproces.

Paragraaf 7.2 vergelijkt de theoretische kenmerken van een 'dossier portfolio' en een 'persoonlijk ontwikkelingsportfolio' met de empirische kenmerken. Er wordt geconcludeerd dat de ontwikkelde portfolio's meer 'descriptief' van aard zijn en niet direct gekarakteriseerd kunnen worden als zijnde een 'dossier portfolio' of een 'persoonlijk ontwikkelingsportfolio'. De oorzaken hiervoor hebben betrekking op:

- 1. de onbekendheid met de 'assessmentcultuur' waardoor de informatiefunctie van het portfolioinstrument is benadrukt door de betrokken faculteitsmedewerkers (artsencasestudie),
- 2. gebrek aan beoordelingsstandaarden die gebruikt konden worden voor de explicitering van leerervaringen, bijvoorbeeld in de vorm van competentieclaims (artsencasestudie en vluchtelingencasestudie),
- 3. gebrek aan begeleidingsmaatregelen ten behoeve van portfolio-ontwikkeling door de portfoliokandidaten(lerarencasestudie).

Voortbouwend op het werk van Smith en Tillema (2003), Tigelaar, Dolmans, Wolfhagen en Van der Vleuten (2004) en Tillema (2001) en de casestudieresulaten is besloten om TBB2, TBB3 en TBB4 te verfijnen door een aangepast conceptueel raamwerk van portfoliokenmerken voor hoogopgeleide immigranten te ontwikkelen. Dit raamwerk neemt de 'beoogde doelen' van de hoogopgeleide immigranten als uitgangspunt. Als de hoogopgeleide immigrant *formele erkenning* nastreeft dient een *beoordelingsportfolio* geïmplementeerd te worden. Onderscheidende kenmerken van dit type portfolio zijn onder andere:

1. een voorgeschreven structuur met daarin: een Curriculum Vitae, competentieclaims en portfoliobewijs.

- 2. Het portfoliobewijs is beperkt door voorschriften. Er dienen duidelijke richtlijnen te zijn voor de omvang en aard van het bewijs dat moet worden bijgevoegd in relatie tot de gebruikte beoordelingsstandaarden.
- 3. Portfolio-ontwikkeling door de portfoliokandidaat is een cyclische proces.
- 4. De begeleiding die wordt aangeboden aan de portfoliokandidaten dient aandacht te besteden aan de cognitieve processen die ten grondslag liggen aan portfolio-ontwikkeling (zelfbeoordeling en reflectief denken) als ook aan de productkenmerken van het portfolioinstrument (de definitie van de competentieclaims, de beoordelingsstandaarden, de selectie van het bewijsmateriaal).
- 5. Het doel van de portfoliobeoordeling is formatief; andere aanvullende beoordelingsinstrumenten worden gebruikt om een erkenningsbeslissing te nemen; portfolio is ingebed in een bredere, multi-modale beoordelingsprocedure.

(Zie Table 7-9 op pagina 301 voor een gedetailleerd overzicht).

Als de hoogopgeleide immigrant zich wil *oriënteren* op zijn kansen op de arbeidsmarkt in de Nederlandse samenleving dient een *ontwikkelingsportfolio* gebruikt te worden. Dit type portfolio onderscheidt zich van het beoordelingsportfolio op een tweetal punten.

- 1. De voorgeschreven structuur: deze bevat een Curriculum Vitae, de beoogde doelen gedefinieerd als competentieclaims, een analyse van de sterkten en zwakten in het huidige competentieprofiel, portfoliobewijs voor het huidige competentieprofiel en een Persoonlijk OntwikkelingsPlan (POP).
- 2. Het portfoliobewijs: dit is open. Er zijn echter wel duidelijke richtlijnen die verhelderen wat de omvang en aard van het bewijs dient te zijn om de competentieclaims te onderbouwen.

(Zie Table 7-9 op pagina 301 voor een gedetailleerd overzicht).

Kenmerken van een portfolio-ontwerp en implementatie

Hieronder worden de antwoorden op de tweede onderzoeksvraag samengevat die luidt: *Wat zijn de kenmerken van het ontwerp- en implementatieproces van het portfolio-instrument die de acceptatie en het toekomstige gebruik van het instrument in de huidige evaluatie- en erkenningspraktijk vergemakkelijken?*

Er wordt gebruik gemaakt van de resultaten van de cross case analyse met betrekking tot:

- de contextkenmerken, en
- de kenmerken van het portfolio-ontwerp en -implementatieproces.

Daarnaast wordt gebruikt gemaakt van de antwoorden op de eerste onderzoeksvraag.

Paragraaf 7.3 presenteert tien kerncomponenten voor effectief portfoliogebruik voor hoogopgeleide immigranten. Deze componenten zijn (direct of indirect) te relateren aan de onderwerpen die besproken worden in het aangepast conceptuele raamwerk van portfoliokenmerken voor hoogopgeleide immigranten.

1. Rationale van portfoliogebruik

De rationale van portfoliogebruik is nauw verbonden met het beoogde doel van competentieerkenning. In deze studie is onderscheid gemaakt tussen, 'formele erkenning', 'sociale erkenning' en 'oriëntatie' (cf. Europese Commissie, 2004). Voor de eerste twee doeleinden dient een beoordelingsportfolio gebruikt te worden, voor de laatste een ontwikkelingsportfolio. Aangezien beide typen portfolio's hun eigen specifieke kenmerken hebben vormt de rationale de kern van het portfoliospinnenweb.

2. Competentieclaims

De competentieclaims vormen een belangrijk onderdeel van de inhoud van het portfolio. In een ontwikkelingsgericht portfolio hebben de competentieclaims betrekking op de beoogde competenties. Portfolio-ontwikkeling helpt bij het nadenken over de wijze waarop deze competenties ontwikkeld kunnen worden. In een beoordelingsportfolio hebben de competentieclaims betrekking op de feitelijke competenties die al ontwikkeld zijn. Er dient bewijsmateriaal opgenomen te worden die de competentieclaims kunnen onderbouwen.

3. Beoordelingsstandaarden

De competentieclaims dienen betrekking te hebben op de beoordelingsstandaarden die het uitgangspunt vormen van het portfolio-ontwikkelingsproces door de kandidaat. Om zelfbeoordeling en reflectie te bevorderen is het belangrijk dat de beoordelingsstandaarden betrekking hebben op verschillende competentieniveaus.

4. Portfoliobewijs

Het is belangrijk dat er duidelijke richtlijnen zijn voor de aard en de omvang van het bewijsmateriaal dat bijgevoegd dient te worden als bewijs van competentie-ontwikkeling (ter onderbouwing van de competentieclaims).

- Begeleiding van de portfoliokandidaat
 De portfoliokandidaat dient goede begeleiding te krijgen bij de ontwikkeling van een portfolio.
 Deze begeleiding heeft betrekking op: a) de cognitieve processen die ten grondslag liggen aan portfolio-ontwikkeling (zelfbeoordeling en reflectie), b) het doel van portfolio-ontwikkeling, c) de beoordelingsstandaarden en d) het bewijsmateriaal.
- 6. Begeleiding van staf

Ook is het belangrijk dat de stafmedewerkers die een rol spelen bij portfolio-ontwikkeling danwel –beoordeling goede begeleiding krijgen om vertrouwd te raken met hun nieuwe taken en verantwoordelijkheden. Het is belangrijk dat zij een training volgen die hen vertrouwd maakt met de assessmentcultuur en het portfolio-instrument.

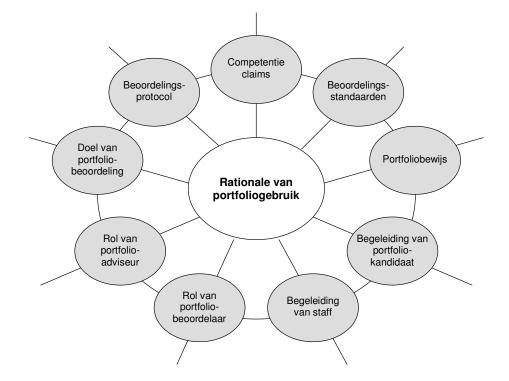
- Rol van de portfoliobeoordelaar De taken en verantwoordelijkheden van de portfoliobeoordelaar dienen duidelijk te worden vastgelegd.
- Rol van de portfolioadviseur
 De taken en verantwoordelijkheden van de portfolioadviseur dienen duidelijk te worden vastgelegd. De portfolioadviseur moet op de hoogte zijn van het portfoliobeoordelingsproces.
- 9. Doel van portfoliobeoordeling

Het doel waarvoor portfoliobeoordeling plaatsvindt, dient voorafgaand aan het portfolioontwikkelingsproces vast te staan en duidelijk gecommuniceerd te worden aan alle partijen (de portfoliokandidaat, de adviseur en de beoordelaar).

10. Beoordelingsprotocol

Om de transparantie van het proces te bevorderen en de kwaliteit te garanderen is het proces in een beoordelingsprotocol vastgelegd.

Om aan te geven dat alle componenten nauw met elkaar in verband staan en afhankelijk zijn van het doel van portfoliogebruik, wordt de metafoor van het 'spinnenweb' gebruikt in navolging van Van den Akker (2003). Het portfoliospinnenweb wordt in Figure 7-1 op pagina 305 alsmede in Figure 1 op de volgende pagina.



Figuur 1 Tien kerncomponenten voor portfoliogebruik weergegeven in een portfoliospinnenweb

De cross case analyse laat zien dat de contextkenmerken invloed hebben op het proces van portfolioontwerp en -implementatie. Het is om die reden belangrijk om in eerste instantie een contextanalyse uit te voeren waarbij aandacht wordt besteed aan de evaluatiestandaarden, de evaluatiebenadering en het evaluatieparadigma. Er zijn vervolgens twee ontwerpbouwstenen ontwikkeld: één die van toepassing is in een *leerstofgerichte omgeving* en één die van toepassing is in een *competentiegerichte omgeving*. Elke bouwsteen besteedt aandacht aan het ontwerpproces, het implementatieproces, inputgegevens voor de interventie en het proces van de interventie zelf. Samenvattend geeft de bouwsteen voor de *leerstofgerichte omgeving* ondermeer aan dat:

- 1. een pragmatisch ontwerpparadigma in overweging moet worden genomen (cf. Visscher-Voerman et al., 1999),
- 2. een actief initiatieproces noodzakelijk kan zijn om van start te gaan (cf. Fullan, 2001),
- het ontwerpproces er voor moet zorgen dat de resultaten van een eerste experiment worden gebruikt om een gemeenschappelijke betekenis te ontwikkelen ten aanzien van het doel van portfoliogebruik alsook de andere kenmerken,
- 4. ondersteuning van en druk vanuit het centraal beleidsniveau (management) om een verandering in het heersende evaluatieparadigma te bewerkstelligen. Portfoliogebruik voor een specifieke groep dient gekoppeld te worden aan een bredere, institutionele innovatie zodat de urgentie en prioriteit van de verandering gewaarborgd is.
- 5. de medewerkers een actieve rol dienen te spelen in elke fase van het ontwerp en implementatieproces,
- 6. de medewerkers getraind dienen te worden in de assessmentcultuur en portfoliogebruik,
- 7. er een helder beeld dient te zijn ten aanzien van de rationale van portfoliogebruik,
- 8. er een heldere set beoordelingsstandaarden dient te zijn, evenals duidelijke richtlijnen ten aanzien van het bewijsmateriaal,
- 9. de portfolioadviseur en portfoliobeoordelaar aangewezen en getraind dienen te worden,
- 10. de portfoliokandidaten een adequate begeleiding behoren te krijgen tijdens het portfolioontwikkelingsproces. (Zie Table 7-11 op pagina 309 voor een gedetailleerd overzicht).

De ontwerpbouwsteen voor een competentiegerichte omgeving geeft ondermeer aan dat:

- 1. een communicatief ontwerpparadigma in overweging moet worden genomen (cf. Visscher-Voerman et al., 1999),
- 2. de medewerkers een actieve rol dienen te spelen in elke fase van het ontwerp en implementatieproces,
- 3. de medewerkers getraind dienen te worden in de assessmentcultuur en het portfoliogebruik,
- 4. er consultaties met collega's georganiseerd dient te worden voor de portfolioadviseurs, de portfoliobeoordelaars alsook dezen gezamenlijk;
- 5. er een helder beeld dient te zijn ten aanzien van de rationale van portfoliogebruik;
- 6. er een heldere set beoordelingsstandaarden dient te zijn, evenals duidelijke richtlijnen ten aanzien van het bewijsmateriaal;
- 7. de portfolioadviseur en portfoliobeoordelaar aangewezen en getraind dienen te worden;
- 8. de portfoliokandidaten een adequate begeleiding behoren te krijgen tijdens het portfolioontwikkelingsproces. (Zie Table 7-11 op pagina 309 voor een gedetailleerd overzicht).

Reflectie

In paragraaf 8.1 is gereflecteerd op de onderzoeksaanpak en de substantieve uitkomsten van het onderzoek. Met betrekking tot de onderzoeksaanpak wordt opgemerkt dat de opzet van de casestudie en de aard van de drie casestudies invloed hebben gehad op de uitkomsten van het onderzoek. De vijf proefprojecten die door de Nuffic zijn uitgevoerd in de periode 2000-2004 vormden het uitgangspunt voor de casestudie. Het ontwerpteam van de Nuffic kon slechts beperkt invloed uitoefenen op het verloop van deze proefprojecten. Als gevolg hiervan waren niet voor alle onderwerpen uit het analyseraamwerk evenveel data beschikbaar.

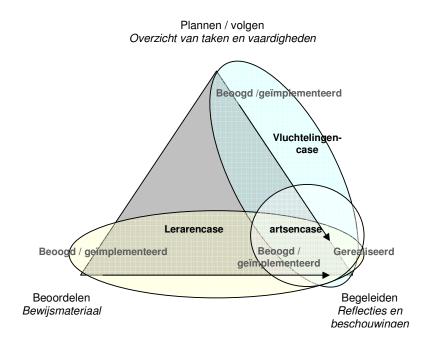
Yin (1994) legt uit dat het bij een meervoudige casestudie belangrijk is dat de cases nauwkeurig worden geselecteerd. Hierbij moet een zekere replicatielogica worden toegepast. Het kan gaan om 'letterlijke replicatie' (*'literal replicatie'*) of theoretische replicatie' (*'theoretical replication'*). Bij het eerste is er sprake van gelijksoortige cases die naar verwachting gelijksoortige uitkomsten opleveren. Bij het tweede gaat het om ongelijksoortige cases die ongelijksoortige uitkomsten opleveren, maar die verklaarbaar zijn op basis van de theorie. In dit onderzoek is er geen sprake geweest van selectie van cases. De proefprojecten van de Nuffic zijn als uitgangspunt genomen. Het betrof hierdoor drie ongelijksoortige cases. De bevindingen in de drie casestudies waren deels gelijk en deels verschillend, maar meestal verklaarbaar vanuit de theoretische bouwstenen. Er is sprake geweest van 'theoretische replicatie' (cf. Yin, 1994). Er wordt echter opgemerkt in paragraaf 8.2.1 dat de analytische generaliseerbaarheid van de uitkomsten groter zou zijn als er naast 'theoretische replicatie' ook sprake was geweest van 'letterlijke replicatie', dus meer gelijksoortige cases. Deze cases waren echter niet voor handen. De ervaringen met portfoliogebruik door hoogopgeleide immigranten is nog steeds beperkt.

Met betrekking tot de substantieve uitkomsten wordt aandacht besteed aan de volgende drie onderwerpen:

- 1. het doel van competentie-erkenning in relatie tot de portfoliokenmerken,
- 2. de relatie tussen competentiegerichte leeromgevingen en erkenning van voorgaande leerervaringen, en
- 3. de implementatie van procedures voor het Erkennen van Verworven Competenties (EVC).

Als onderdeel van de cross case analyse zijn de empirische kenmerken van het portfolioinstrument vergeleken met de theoretische kenmerken. Vanuit de theorie was te verwachten dat de kenmerken van het portfolio in de lerarencasestudie en de artsencasestudie overeen zouden komen met die van een 'beoordelingsportfolio' en die in de vluchtelingencasestudie met een 'ontwikkelingsportfolio' (cf. Smith & Tillema, 2003; Tillema, 2001). De onderscheidende kenmerken tussen deze twee typen portfolio werden in de praktijk niet direct waargenomen. De ontwikkelde portfolio's waren in alle drie de cases zeer descriptief van aard. Uitgaande van een Curriculum Vitae zijn uitgebreide portfoliobeschrijvingen gemaakt die inzicht geven in een aantal van tevoren vastgestelde onderwerpen. De portfoliokandidaten bleken slechts beperkt te beschikken over bewijzen van competentie.

Overeem, Driessen, Drenthe, Van Tartwijk en Van der Vleuten (2003), Seegers (ongedateerd) en Van Tartwijk, Driessen, Hoeberigs, Kösters, Ritzen, Stokking en Van der Vleuten (2003) maken een onderscheid tussen drie doelen van portfoliogebruik: beoordelen, begeleiden en plannen. Voor elk doel is er een kenmerkende inhoud van het portfolio te onderscheiden, respectievelijk: bewijsmateriaal, reflecties en beschouwingen en overzichten van taken en vaardigheden. Figuur 2 hieronder geeft aan hoe de beoogde, geïmplementeerde en gerealiseerde doelen in de drie casestudies zich verhouden tot het driehoeksmodel dat door Overeem et al. (2003), Seegers (ongedateerd) en Van Tartwijk et al. (2003) wordt toegepast.



Figuur 2 De beoogde, geïmplementeerde en gerealiseerde doelen van portfoliogebruik in de drie casestudies weergegeven in termen van de drie typen onderscheiden door Overeem et al. (2003), Seegers (ongedateerd) en Van Tartwijk et al. (2003)

In paragraaf 8.2.2 is geconcludeerd dat een portfolio met het oog op begeleiding eenvoudiger is te implementeren dan een portfolio met het oog op beoordeling of planning. Dit type portfolio neemt het Curriculum Vitae van de portfoliokandidaat als uitgangspunt terwijl bij de overige twee modellen de (onderwijs)instelling inzage moet geven in de gebruikte standaarden en ook het beoordelings- en/of volgsysteem op portfoliogebruik moet aanpassen.

Als tweede is in paragraaf 8.2.2 gereflecteerd op de relatie tussen een competentiegerichte leeromgeving en het beoordelen en erkennen van voorgaande leerervaringen. Uit de bevindingen van dit onderzoek zou afgeleid kunnen worden dat beoordeling en erkenning van voorgaande leerervaringen alleen mogelijk is als er sprake is van een competentiegerichte leeromgeving. In het portfoliospinnenweb wordt bewust gesproken over 'competentieclaims' en niet over

'leeropbrengsten'. Ook wordt in de ontwerpbouwsteen voor een leerstofgerichte omgeving uitgegaan van een verandering van het heersende evaluatieparadigma. Toepassing van de assessmentcultuur wordt als wenselijk ervaren omdat het meer mogelijkheden biedt voor het beoordelen van ervaringen die buiten het curriculum zijn opgedaan. Toch kan beoordeling en erkenning van voorgaande leerervaringen ook plaatsvinden in een andere leeromgeving dan een competentiegerichte leeromgeving. In hoofdstuk 3 worden de leerstofgericht benadering en de competentiegerichte als twee extremen van een continuüm besproken. De mogelijk tussenliggende paradigma's zijn niet aan bod gekomen in dit proefschrift, zoals bijvoorbeeld probleemgestuurd onderwijs, projectgestuurd onderwijs of onderwijs aan de hand van cases. Voor de erkenning van voorgaande leerervaringen is het belangrijk dat er een relatie is met de latere beroepspraktijk, dat het curriculum mogelijkheden biedt om deze in de beroepspraktijk te leren. Het portfolio-instrument is een uitermate geschikt instrument om bewijzen van 'kunnen' op te nemen. Een portfoliokandidaat kan in het portfolio bewijsmateriaal opnemen dat laat zien dat de kandidaat in zijn beroepscontext problemen heeft opgelost die ook centraal staan in bijvoorbeeld de probleemgestuurde leeromgeving. Hetzelfde geldt voor projecten als er sprake is van een projectgestuurde leeromgeving. Het portfolio is minder geschikt om aan te tonen dat men bepaalde kennis tot zich heeft genomen (in geval van een leerstofgericht benadering). Beoordeling en erkenning van voorgaande leerervaringen in een leerstofgerichte omgeving gaat vaak gepaard met examinering. De kandidaat krijgt dan de mogelijkheid om door middel van een examen te laten zien dat hij dezelfde standaarden heeft bereikt maar langs een andere weg. In de Verenigde Staten spreekt men in dit kader over 'course challenge examiniations'.

Voor de beoordeling en erkenning van voorgaande leerervaringen is het noodzakelijk dat leerwegonafhankelijke beoordeling mogelijk is (cf. Klarus, 1998; Onderwijsraad, 2003; 2005). De beoordelingsstandaarden die in en eventueel buiten het onderwijs worden gebruikt ten behoeve van examinering dienen te zijn afgeleid van het toekomstige beroepsprofiel (Mansfield & Mitchell, 1996). In het Nederlands hoger onderwijs kan met betrekking tot die transparantie nog wel wat verbeteren (cf. Onderwijsraad, 2006) In het advies *'Examinering: draagvlak en toegankelijkheid'* raadt de Onderwijsraad aan dat onderwijsinstellingen meer gebruik maken van externen bij de examencommissies. Ook wordt geadviseerd dat opleidingen in onderling overleg gemeenschappelijke eindtoetsen ontwikkelen. Voor de bevordering van EVC is het belangrijk dat deze eindtoets het karakter van een 'proeve van bekwaamheid' heeft. Een dergelijke proeve maakt het mogelijk om bewijsmateriaal uit andere contexten te overleggen in een portfolio. Om de toegankelijkheid van het onderwijs te vergroten beveelt de Onderwijsraad (2006) aan dat er een open exameninstelling komt in het hoger onderwijs. De beoordeling en erkenning van de feitelijke competenties van hoogopgeleide buitenlanders is gebaat bij een combinatie van deze voorgestelde maatregelen:

- transparante beoordelingsstandaarden die in termen van kunnen aangeven welk niveau bereikt dient te worden,
- toenemend gebruik van alternatieve beoordelingsinstrumenten zoals een 'proeve van bekwaamheid', en
- een open exameninstelling die beoordeling los van het volgen van onderwijs mogelijk maakt.

Als laatste wordt gereflecteerd op de snelheid waarmee EVC-procedures worden geïmplementeerd in het Nederlands hoger onderwijs. Het initiatief voor deze studie werd genomen in 2000. Op dat moment waren in het Nederlands hoger onderwijs verschillende initiatieven in opkomst die de toegang tot het hoger onderwijs op basis van EVC moesten verbeteren. De 'zij-instroom procedure voor leraren' is hier een voorbeeld van. In 2007 is het gebruik van EVC in het hoger onderwijs nog geen gemeengoed, zeker niet in de universitaire sector(cf. Schlusmans, Van der Klink, Rutjens, Stalmeier, Joosten-ten Brinke & Van Dinther, 2006). Dit geldt ook voor het gebruik van 'alternatieve' beoordelingsinstrumenten die vaak in

combinatie met een portfolio worden gebruikt. Onderzoek uitgevoerd door ITS en IOWO laat zien dat de traditionele beoordelingsmethoden het hoger onderwijs nog steeds domineren. Veel onderwijsinstellingen geven aan begonnen te zijn met het ontwikkelen van een portfolioinstrument, maar in de praktijk wordt dit instrument toch nog maar beperkt gebruikt (ITS/IOWO, 1994; Onderwijsraad, 2004). Er wordt echter wel vooruitgang geboekt, zo blijkt ook uit de implementatie van de *'Kwaliteitscode EVC'* (Kenniscentrum EVC, 2005).

Aanbevelingen

Op basis van de onderzoeksresultaten en de reflectie worden tot slot aanbevelingen gedaan voor verder onderzoek alsook voor beleid en praktijk. De aanbevelingen voor vervolgonderzoek zijn de volgende:

- Het is interessant om *aanvullende casestudies* te doen die de huidige onderzoeksuitkomsten kunnen valideren en mogelijk versterken. Bij de selectie van de nieuwe casestudies kan, indien mogelijk, het principe van 'letterlijke replicatie' worden toegepast (cf. Yin, 1994). Ook is het interessant om casestudies te selecteren die het portfolio-instrument inzetten ten behoeve van 'sociale erkenning' van competenties en niet zoals in de gehanteerde casestudies 'formele erkenning' (cf. Europese Commissie, 2004)
- Ook is het interessant nader onderzoek te doen naar de ervaringen met portfoliogebruik door hoogopgeleide immigranten *in andere landen* dan Nederland. In Frankrijk, maar ook in Canada bestaan vergevorderde systemen voor het erkennen van voorgaande leerervaringen (cf. Beaudin, 2007; Feutrie, 2007; Kuhlemeier, Van Weeren en Van der Werf, 2004).
- 3. Aanbevolen wordt *internationaal vergelijkend onderzoek* te verrichten naar de werking van de tien kerncomponenten die een onderdeel vormen van het portfoliospinnenweb. Deze studie laat zien dat de hoogopgeleide immigrant slechts beperkt beschikking hebben over bewijsmateriaal. Het is interessant te achterhalen hoe dit probleem in andere landen wordt aangepakt. Ook kan de rol en de functie van de portfolioadviseurs en de portfoliobeoordelaars in andere landen anders worden ingevuld.
- 4. De onderzoeksuitkomsten kunnen ook gevalideerd worden door *formatief ontwerpgericht onderzoek* te doen. Het is interessant om te weten of de opbrengsten van deze studie (het aangepaste conceptueel raamwerk met portfoliokenmerken, het portfoliospinnenweb voor effectief portfoliogebruik en de twee ontwerpbouwstenen) voldoende houvast geven om een kwalitatief hoogwaardig portfolio-instrument te ontwerpen en te implementeren.
- 5. In een later stadium, als het portfolio-instrument op goede wijze wordt gebruikt, is het interessant om onderzoek te doen naar de *lange termijn uitkomsten*. Draagt het portfolio-instrument daadwerkelijk bij aan 'formele erkenning' van de feitelijke competenties van hoogopgeleide immigranten? Krijgen de portfoliokandidaten versneld toegang tot een gereglementeerd beroep (de lerarencasestudie), wordt hun vrijstelling geboden in een Nederlandse studie (de artsencasestudie) of zijn de portfoliokandidaten beter in staat goede keuzes te maken ten behoeve van hun integratieproces in de Nederlandse samenleving (de vluchtelingencasestudie)?
- 6. Tot slot wordt aanbevolen nader onderzoek te verrichten naar het gebruik van een *elektronisch portfolio* en hoe deze vorm van portfoliogebruik invloed heeft op de uitkomsten van deze studie.

De aanbevelingen voor beleid en praktijk zijn:

- Aan de Nederlandse overheid wordt aanbevolen om de mogelijkheden voor het ontwikkelen van sectorspecifieke oriëntatieprogramma's voor in het buitenland gediplomeerde professionals nader te onderzoeken. Deze oriëntatieprogramma's zouden de immigrant de mogelijkheid moeten geven om onder supervisie werkervaring op te doen, de Nederlandse taal te leren en een portfolio te ontwikkelen als voorbereiding op een assessment.
- 2. Aan de hoger onderwijsinstellingen wordt aanbevolen om de *standaarden* die gebruikt worden bij de toelating en inpassing in het onderwijs *transparanter* te maken en bij voorkeur te definiëren in termen van competenties. Dergelijke competentiegerichte standaarden spelen een belangrijke rol bij de explicatie van leeropbrengsten uit voorgaande leerervaringen.
- 3. Aan de Nederlandse overheid wordt aanbevolen om samen met de Nederlandse hoger onderwijsinstellingen zorg te dragen voor de verdere invoering van het Bologna-proces. Het Bologna-proces speelt een belangrijke rol bij de transformatie van het hoger onderwijs in Europa. In het Berlijn-Communiqué wordt aandacht gevraagd voor de ontwikkeling van nationale kwalificatiestructuren om de transparantie van het onderwijs te bevorderen en op die manier erkenning en mobiliteit te verbeteren. Nationale kwalificaties dienen in termen van *werklast, niveau, leeruitkomsten* en *profiel* te worden beschreven. Op internationaal niveau zijn er verschillende instrumenten ontwikkeld ter verbetering van de erkenning van nationale diploma's, zoals de Lissabon-Erkenning verder te verbeteren is het belangrijk dat deze instrumenten hun weerslag vinden in de nationale en institutionele kaders.
- 4. Het netwerk van nationale erkenningscentra (het ENIC/NARIC netwerk) wordt aangeraden om meer in detail na te gaan hoe de erkenningscentra de informatie over de leeropbrengsten van curricula kunnen gebruiken. Het competentiegericht onderwijs verovert langzaam het Europees hoger onderwijs mede als gevolg van het *Tuning* project. Dit biedt kansen voor de internationale erkenning van alle vormen van leren, maar roept ook vragen op zoals: hoe verhouden de leeropbrengsten uit leerstofgerichte curricula zich tot de leeropbrengsten uit de competentiegerichte curricula? Dienen dergelijke verschillen in onderwijsparadigma's geclassificeerd te worden als 'substantiële verschillen' (de terminologie uit de Lissabon-Erkenningsconventie gebruikend)? Of mogen de verschillen in onderwijsparadigma erkenning niet in de weg staan, maar moeten onderwijsinstellingen schakeltrajecten ontwikkelen om buitenlandse studenten die met name bekend zijn met leerstofgericht onderwijs voor te bereiden op een competentiegerichte leeromgeving?
- 5. Tot slot wordt aanbevolen aan de Nuffic om aandacht te blijven vragen voor de identificatie. beoordeling en erkenning van de feitelijke competenties van hoogopgeleide immigranten zowel nationaal als internationaal. Op internationaal niveau zou het ENIC/NARIC netwerk de ambitie kunnen uitspreken om competentiegerichte erkenningspocedures te ontwikkelen. De mogelijkheid om in navolging van het Franse systeem voor de erkenning van voorgaande leerervaringen, te werken met een onafhankelijke (beoordelings)jury (cf. Colardyn & Bjørnåvold, 2004; Feutrie, 2007) zou nader onderzocht moeten worden. Ook moet bepaald worden of competentiedefinities die een onderdeel vormen van het Europese kwalificatiesystemen (EQF) voldoende houvast bieden voor de identificatie, beoordeling en erkenning van competenties. Tot slot wordt opgemerkt dat de Nuffic, maar ook de andere NARIC's en ENIC's moet waarschuwen voor 'dubbele beoordeling'. Een mogelijke nadelige consequentie van de opkomst van competentiegerichte erkenningsprocedures is dat een erkenningsinstantie in het buitenland gediplomeerden opnieuw beoordelen in plaats van de beoordelingsbeslissing uit het andere land te erkennen. Het is dan ook belangrijk dat beoordelingsinstanties transparante informatie leveren over de inhoud en aard van de beoordelingen die hebben plaatsgevonden. Deze informatie kan opgenomen worden in een portfolio.

APPENDIX 1 Outline portfolio development courses

Group meeting	Theme	Content
1.	Introduction and life line	The purpose of pilot project and the use of portfolio for the identification of competencies was explained. Portfolio participants were asked to introduce themselves using the 'life-line assignment' as a guideline. After the presentations, important issue that help to explain ones educational and professional background were identified and written down. These items became part of the next portfolio assignment, make an extensive curriculum vitae.
2	Make an extensive curriculum vitae	The participants received a home work assignment by post. They were asked to make an extensive CV and sent it to Nuffic. The group meeting started with a presentation on prior learning assessment and the use of portfolio in the process. Next, the participants were divided into two groups to reflect on one of the CV's that was received as home work. They were asked to judge the CV's by noting which parts they find relevant, irrelevant, and what information they are still missing. The outcomes were discussed at plenary level. The meeting closed with a presentation on the lay-out and structure of the portfolio, and the importance of valuable evidence that can be used as a back-up for the information provided.
3	Explain work experience as medical doctor, explain professional development, and explain scientific background	The participants received a home work assignment by post. The group meeting started again with a presentation about the purpose of portfolio and the steps in the portfolio development process. It was explained how the assignments relate to these steps. Further attention was given to the types of evidence that are admissible for inclusion in the portfolio. The participant reflected on each other work and difficulties were discussed at plenary level. The group meeting was closed by a central presentation that highlighted the key issues of the third portfolio assignment.
4	Compose a well- structured document	The participants received a letter and another portfolio assignment by post. The fourth group meeting took place in a computer room. First a presentation was given on how the portfolio document could be organized. Thereafter the participants could continue there work on a computer and ask for guidance and feedback on an individual basis.
Feedback	from course leader (form	native evaluation)
5	Finalizing the document and evaluation	The participants were asked to send their portfolio to Nuffic one week before the group meeting. It was reviewed by the trainers and feedback was given with regard to the structure and content. During the group meeting, the course participants could reflect on each other work in small groups. Furthermore, they could ask questions about the enrolment procedure and the further use of the portfolio instrument in this procedure. For this purpose one of the admission officers was present. Last, the portfolio course was evaluated.

Outline of the portfolio development course in the first medical doctors' pilot project

Group meeting	Theme	Content
1.	Introduction and making of CV	The main purpose is to get acquainted and explain the purpose and programme of the portfolio development course. The course material is handed-out and the portfolio assignments are explained. A group assignment
	Lecture hall	is done to explain the added value of portfolio in comparison to a CV. Two exemplary portfolio are shown to give the participants an impression of the final product. The homework assignment for the next group meeting is explained in detail (portfolio assignment 1 (CV).
2	CV and formal and non-formal education and training	The meeting starts with a short review on the purpose of portfolio development. Then the homework assignment is discussed. In small groups one is invited to reflect on each others CV. All suggestions for improvement were written on a flap-over. It became clear that one found it difficult to
	Lecture hall	structure the information. There was a clear need for a more prescribed structure. Next, the second homework assignment was explained.
3	Work experience as a medical doctor / experience in scientific research	The meeting starts with a plenary discussion of the new computer format for portfolio development. To provide more structure to the portfolio development process, the portfolio assignments were included in a fixed computer format. This format was handed out on a floppy disk as well as on paper. It was explained how one should work with the format where after everyone could
	Computer room	start working on the third portfolio assignment (work experience as a medical doctor and/or experience with scientific research, chapter 3 and 4 in the format). Individual guidance was given during the rest of the meeting.
4	Experience in the Dutch health care sector, reflection and future prospects	The meeting started with a group assignment to practice reflection skills. They were asked to think about possible dilemmas when working in the Dutch health care sector and how one should cope with these. The answers were discussed at plenary level. Then, the fourth portfolio assignment was explained (chapter 5 in the portfolio format) and people could start working on
	Computer room	the assignment behind the computer. Individual guidance was given during the remaining part of the meeting.
5	Professional development	The meeting started with question round giving everyone the opportunity to address the difficulties they have encounter during the portfolio development process so far. Then the fifth portfolio assignment was explained (chapter 6 of
	Computer room	the portfolio format). In addition, attention was given to the types of portfolio evidence that could be included to document their prior learning experiences. During the remaining part of the meeting everyone could work behind the computer individually. The meeting concluded with the announcement that everyone should send a copy of their concept-portfolio by email or post to the trainers of Nuffic for feedback before a given date.
Feedback	from course leader (forma	ative evaluation)
6	Discussion feedback and evaluation	The concept portfolios were discussed on an individual basis. Thereafter the general items were plenary addressed. The remaining part was spent on evaluation of the portfolio course. All course participants received a
	Lecture hall	questionnaire.

Outline of the portfolio development course in the second medical doctors' pilot project

Group meeting	Theme	Content
1.	Introduction and making of CV	The main purpose is to get acquainted and explain the purpose and programme of the portfolio development course. A group assignment is done to explain the added value of portfolio in comparison to a CV. The course material is introduced and explained (course manual and digital format). Portfolio candidates make a start with chapters 1 (CV) and 2 (education and courses) under supervision.
2	Work experience and scientific research	Discussion of chapters 1 and 2 (home work). A group assignment is done that explains how tasks and responsibilities in previous positions can best be described. Portfolio candidates start working on chapters 3 (work experience as medical doctor) and 4 (scientific research) under supervision.
3	Experience in the Dutch health care sector	Discussion of chapters 3 and 4 (home work). A group assignment is done to enhance the reflection on the differences between the healthcare system in the Netherlands and their home country. Portfolio candidates start working on chapter 5 (experience in the Dutch health care) under supervision.
Feedback	from course leader (forma	tive evaluation)
4	Expertise development and future plan	Discussion of chapters 5 (home work) and the feedback (issues that related to more than one person were discussed plenary). A group assignment to encourage portfolio candidates to think about their future plan and what needs to be done to realize this. Portfolio candidates start working on chapters 6 (expertise development and maintenance) and 7 (future plan) under supervision.
5	Finalizing the document and evaluation	Discussion of chapters 6 and 7 (home work). Discussion of final questions, comments needed to finalize the portfolio. Independent work and opportunity for individual feedback. Evaluation of the course.
Feedback	from course leader (forma	

Outline of the portfolio development course in the third medical doctors' pilot project

Workshop	Theme	Content
1.	Introduction and part 1: basic data	 The main purpose is to get acquainted and explain the purpose of portfolio development. The set up is as follows: Introduce each other (short assignment) Presentation (oral ad visual) to explain the purpose of portfolio development. The portfolio materials are handed out and introduced Reflective group assignment to explain the difference between a portfolio and a Curriculum Vitae Computer instruction to get started Independent work to start with part 1
2	Part 2: portfolio descriptions	 The main purpose of the workshop is to think of those aspects that are worth mentioning in the portfolio descriptions. The set up is as follows: Reflection on part 1 (plenary) Reflective group assignment during which the portfolio candidates question each other about prior learning experiences Independent work to start with part 2
3	Independent work	The main purpose of this workshop is to complete part 1 and 2 The set up is as follows: Reflection on part 1 and 2 (plenary) Independent work to complete part 1 and 2
4	Part 3: reflect on personal qualities	 The main purpose of this workshop is to stimulate and support the analysis of the personal strengths (qualities). The set up is as follows: Reflective group assignment which is a game to identify personal qualities. Before the game starts one reads each other portfolios carefully The game stimulates the identification of someone strengths Independent work to start with part 3
5	Part 3: develop personal development plan	 The main purpose of this workshop is to stimulate an support the analysis of the targeted objectives (future prospects). The set up is as follows: Reflection on part 3, personal qualities (plenary) Presentation to explain the purpose of a personal development plan and the remaining parts in the portfolio (portfolio evidence, logbook and network cards) Reflective group assignment to think of the current situation, the dream scenario and the steps that can be taken to reach this 'dream' Independent work to start with definition of personal development plan
6	Use of portfolio in practice and evaluation	 The main purpose of this workshop is to explain how the portfolio can be used in practice. The set up is as follows: Reflect on part 3 (plenary); two portfolio candidates give a presentation of their PDP Presentation of Europass CV (as a summary of the portfolio) Questions Evaluation

Outline of the portfolio development workshops in the refugees' pilot project