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Matthew Draycott

Glyndwr University, m.draycott@glyndwr.ac.uk

David Rae

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Enterprise Education in Schools and the role of Competency Frameworks

Matthew Draycott Professor David Rae

Lincoln Business School, University of Lincoln, Brayford Pool, Lincoln LN6 7TS, United Kingdom.

Tel. 01978293074, Email: m.draycott@glyndwr.ac.uk

Purpose

The period 2002 - 2010 has seen significant growth in enterprise education in schools in England, accompanied by the growth of guidelines and frameworks to provide educational and assessment structures. This article explores these questions:

- 1. What does 'enterprise' mean in the context of 14-19 education?
- 2. What is the purpose and contribution of competence frameworks and related structures for the learning and assessment of enterprise education? How effective are they?
- 3. How might enterprise education frameworks evolve in response to changes in the post-recessionary economic, employment and educational landscape?

Methodology

The paper conducts a critical review of competency frameworks introduced in England to assist with enterprise education primarily for the 14-19 age group. These are compared on the basis of their educational purpose and rationale ('why?'), their content ('what skills and knowledge they include'), and the approaches to teaching, learning and assessment they recommend ('how?').

Findings

The analysis discusses the following questions to reflect on the progress and direction of enterprise education

- How broadly or narrowly should enterprise be defined? How useful is the term?
- Are the skills and related knowledge and attributes too broad or too soft?
- Is there too much emphasis on assessable outcomes, rather than how enterprising learning takes place?

Practical Implications

The paper contributes to the development of enterprise education for researchers, policymakers and practitioners in schools at an important point in the economic, educational and political cycle.

Value

Enterprise education in schools requires critique and reflection of what has been achieved, together with consideration of its future purpose, value, orientation and nature. There is a concern that the 'delivery' of enterprise education takes place in ways which are not 'enterprising' forms of learning, and that assessment drives the curriculum. Changes to definitions, frameworks and pedagogy are needed to clarify its future educational role.

Keywords: Enterprise, education, learning, schools, curriculum development.

Enterprise Education in Schools and the role of Competency Frameworks

Introduction

The period 2002-2010 saw significant growth in enterprise education activities in schools in England, arising from political and educational directives to enhance the business, enterprise, financial awareness and literacy of school pupils (Davies, 2002). This has been accompanied by the growth of guidelines, and frameworks aiming to provide educational and assessment structures.

The article explores three research questions:

- 1. What does 'enterprise' mean in the context of 14-19 education?
- 2. What is the purpose and contribution of competence frameworks and related structures for the learning and assessment of enterprise education? How effective are they?
- 3. How might enterprise education frameworks evolve in response to changes in the post-recessionary economic, employment and educational landscape?

It discusses theories, policies and practices relating to enterprise education in the English secondary school sector, contributing new ideas on enterprise education at an important time. It examines the literature surrounding enterprise education and reviews a range of competency frameworks introduced to assist enterprise education for the 14-19 age group.

These are compared using discourse analysis of their educational rationale ('why?'), ontology and content ('what enterprise skills and knowledge they include'), pedagogy of teaching, learning and assessment ('how can enterprise be learned?') and philosophy (how does enterprise benefit the learner?).

Critical Literature Review

The literature on enterprise education in schools comprises research papers, government and policy reports covering educational practice over two decades. This scholarship is summarised in Table 1.

Table 1: Review of the Enterprise Education Literature summarising key ideas (By Date)

Name, Date	Enterprise Education Concepts
Johnson, 1988	Enterprise education aims to develop wider business competences for self employment, employment or outside conventional jobs
Richie, 1991	Enterprise education has unproven links between education and economic performance.
Caird, Summarising Papers 1989-93	Proposes research to understand what it means to be enterprising and its links to entrepreneurship. No theory of enterprise behaviour meaning the term "enterprise education" may be flawed and A discussion of enterprise competencies which ends by concluding that there is still no clear understanding of what enterprise competency means
Hynes, 1996	Enterprise is activities which enable an individual to develop knowledge, skills, values & understanding beyond a narrow field of activity
Gibb 1987-2008	Conceptual models for enterprise learning and education pedagogy, learning outcomes and assessment.
Gorman, Hanlon & King, 1997	Distinguish entrepreneurship, enterprise & small business management education from management education
Shacklock, Hattam and Smyth, 2000	UK enterprise education is contradictory, reliant on business rhetoric
Dwerryhouse, 2001	Enterprise education blurred with other educational agendas such as Work Related Learning

CEI Report, 2001	General review of enterprise education based on sample studies
Kirby, 2002	Traditional methods of education inhibit the development of entrepreneurial skills
Davies Report, 2002	Review of enterprise education policy
Rae, 2003 (a)	Opportunity-centred andragogical approach to entrepreneurial learning
Ofsted, 2004	Follows the Davies report; few schools saw enterprise as part of a coherent curriculum linked to Work Related Learning
Hytti and O'Gorman, 2004	Enterprise is broad and adaptable, often used to deliver entrepreneurial (business start) training rather than other more creative elements
Galloway et al., 2005	The emerging nature of enterprise in schools following the NFER base on teacher and student led assessment of enterprise
Jones, 2006	Enterprise education creates a learning environment mimicking an entrepreneurs way of life
Spielhofer, T. and Lynch, S. (2008).	Approaches for assessing enterprise capabilities
Report, Volkman et al. 2009	Rationale for enterprise education based on international 'best practice' evidence
McLarty et. al., 2010	Evaluation of Enterprise Education in England, focusing on funding.

Three themes emerge from reviewing these sources which were unresolved over 20 years (CEI, 2001): the ontological confusion surrounding enterprise as a distinct area of study from business or entrepreneurship; defining assessable competences for enterprise; and creating a pedagogy to provide this learning.

The earliest academic work on enterprise education (Caird, 1989a, 1989b, 1990a, 1990b, 1992; Caird and Johnson 1988) included specific papers examining enterprise competencies from Scotland and its national drive on encouraging enterprise education for economic growth. An early definition of enterprise competency was:

'Enterprise competencies consist of knowledge (about the specific project or business), specific projects skills and general capability; that is, the ability or predisposition to set up and run projects' (Johnson 1988 in Caird 1992 p7).

This was grounded in the discourse of business start-up, favoured by universities and business, but many training agencies and schools developed more broadly-based competencies and 'soft' skills: personal attributes linked to career development and work relationships, fitting a broader range of educational agendas (Garavan et al. 1995).

These variants contribute to the ontological confusion surrounding enterprise as: either a set of either 'soft' interpersonal skills (Davies, 2002) or functional entrepreneurship (Volkman et al., 2009). The term 'enterprise competency' operationalises these approaches into assessable curricula for implementation in schools. Caird (1992) categorised the range of 'enterprise' skills into seven groups, noting the breadth of skills, lack of specificity and rationale for the concept of enterprise competency.

- Personality Variables
- Communication Skills
- Managerial Skills
- Analytical Skills
- Career Skills
- Knowledge
- Attitudes

The Institute for Public Policy Research (IPPR) in 'The Entrepreneurial Society' (Gavron et al, 1998), argued for the introduction of enterprise and entrepreneurship into school and Higher Education curricula, based on the perceived importance of enterprise in education for the development of the UK economy. This advocated a practical 'Young Enterprise' (YE) approach using simulated experiences of starting and running businesses to develop young people's business and 'softer' skills:

- Practical Business Experience
- Team Working
- · Problem Solving and Negotiation
- · Communication of Ideas
- Enterprise Skills
- Planning and Presenting

Academics have worked to clarify understanding of the blurred boundaries between enterprise education and work related learning (Dwerryhouse, 2001), action learning (Revans, 1991), experiential learning (Kolb, 1984) and entrepreneurial learning (Rae, 2000). Allan Gibb, (1993, 1999) one of the foremost contributors, consistently argued for an holistic understanding of enterprise education with an explicit set of enterprising behaviours, skills and attributes (Gibb, 2008), and a learning environment which simulated the small business based on an andragogical rather than pedagogical approach to learning. He also emphasised a deep-rooted cultural conflict between control-centred and enterprising learning.

There is an orthodoxy that enterprise education should adopt the entrepreneurial process as a starting point (Gibb 1993, Gibb and Cotton, 1998), using action learning to deliver curricula (Leitch & Harrison, 1999; Jack & Anderson 1999; Fiet, 2000, Jones & English 2004). These approaches encapsulate the pedagogical debate: is enterprise best taught or learned? How effective is a curricular, teaching-led approach in comparison with an enterprising approach to learning through exploration and discovery learning in conditions of controlled risk and uncertainty?

In 2001 the CEI launched the first national investigation into enterprise education, concluding that enterprise was a confused field without distinct understanding and lacking in academic research, with few people other than Gibb making a useful contribution to the field of either enterprise or entrepreneurship education. Specific agencies such as YE, Prince's Trust and NatWest commissioned studies to evaluate their programmes (Hayward, 2000; Shutt, Sutherland and Koutsoukos, 2001; MORI, 2001, Schagen and Macdonald, 1998; Horne 2000).

The Davies Report (2002) followed the CEI investigation, based on a review of 17 schools which offered some form of enterprise education, arguing the case for enterprise education as a driver in improving the economy, and defining enterprise competency as:

'The ability to handle uncertainty and respond positively to change, to create and implement new ideas and new ways of doing things, to make reasonable risk/reward assessments and act upon them in one's personal and working life.' (Davies 2002, p18).

It specified knowledge and understanding of concepts; skills; attitudes; financial literacy; and economic and business understanding. The key elements of the report are summarised in Table 2. The Davies report provided workable definitions, but while the concepts of financial literacy and economic and business understanding added breadth to enterprise; the knowledge, skills and attitudes presented were little different from those of twelve years earlier, retaining their tensions and ontological confusion.

Table 2: Key Themes in the Davies Report 2002

Page Number	Theme
21	Enterprise situated within Economic and Industrial understanding and Work Related Learning.
25	The possibility of enterprise "being lost" within citizenship specifically Personal, Social and Health
	Education (PSHE) which also delivers financial and economic understanding.
27	The limited experience of teachers in delivering enterprise education.
30	Children regard business people and entrepreneurs as generally positive role models.
36	Confusion and lack of agreed definitions limit the ability of schools, brokers and businesses to work together.
36	Little systematic, national monitoring of enterprise education
37	Schools are overloaded with initiatives and need to be convinced of the effectiveness of engaging in other activities
38	DfES must provide 'Clear guidance which explains what is meant by enterprise education'
40	Richest learning opportunities are offered by mini company schemes or community projects
51	Teachers need professional development of enterprise and industry knowledge and practice
53	Need to improve levels of business engagement in education
56	Need for better evaluation

The foregoing summary of literature suggests a confused agenda, fraught with tensions between ontology, pedagogy and assessment. The voices of educators in the school sector and of students are significantly absent in a discourse dominated by political ideology and educational policy guidelines and frameworks, addressed in the next section.

Policy Literature

There is a growing literature of official international publications focusing on enterprise and entrepreneurial education in the secondary sector (Gibb, 2008; Wilson and Mariotti, 2009). In the USA entrepreneurship has been seen as the key driver of economic growth, (Wilson and Mariotti, 2009) and education policy, supported by business, has been shaped to meet these demands. In Europe the picture is more complicated, and the topic has been the subject of extensive debate (European Commission 2002, 2006a, 2006b, 2006c) with countries such as Norway and Austria focussing on entrepreneurial development while Finland, for example, has chosen to pursue a national strategy centred on life skills and employability at all levels of education (McLarty et. al., 2010) to enhance an entrepreneurial spirit make entrepreneurship a more attractive career choice. Finland is exceptional, generally entrepreneurship education and training in schools internationally has received low ratings every year since expert surveys commenced in 2000 (Martinez et al., 2010) reflecting its priority in national educational policies.

Hytti and O'Gorman (2004) reviewed 50 enterprise education programmes over four countries. They argued that the definition of enterprise education was less important than the understanding of enterprise as a subject that encompasses elements of business and entrepreneurship but which requires training of specialist staff. One possible way to provide a clear definition of enterprise ontology coupled with pedagogy and assessable competencies was presented by the US based Network for Teaching Entrepreneurship (NFTE) (Volkman et al., 2009). It presents 12 'competencies' that every young person should learn about before leaving secondary

education (p31). These are rooted in the ideology of US, capitalist, free-enterprise, involving both formal and informal education systems, teachers, families and entrepreneurs; using the latest technology with real scenarios and experiences. This approach develops cognitive change with both theory and practice.

The UK, and Ireland, have distinctive national strategies for enterprise education in focusing on a broad, skills-based definition of enterprising behaviour, applicable not only to business venturing but also to increasing employability (Davies, 2002; McLarty et. al., 2010). This has influenced changes in policy at a European level, which have seen the rationale for enterprise education shift from the creation of employment via entrepreneurship to the improvement of international competitiveness, through the development of a skilled workforce, and an 'innovation-driven' approach to enterprise teaching and learning (Martinez et al., 2010). This is reflected in the UK's educational policy which has moved from the Technical and Vocational Education Initiative in 1982, through the Education Reform Act in 1988 and business engagement through the Education Business Partnerships (EBPs) in 1992 to focus on creating a more flexible, creative, opportunity seeking and free thinking workforce (Gibb, 2008). This is evidenced by the introduction of Personal, Social, Health and Economic (PSHE) education in 2000, vocational GCSEs in 2001, Personal, Learning and Thinking Skills (PLTS) in 2007 and new Diplomas in 2009.

Following the Davies Report (2002), the government made it mandatory from 2005 for every student in Key Stage 4 to receive the equivalent of five days of enterprise education per year, and committed £275 million to the development of enterprise education between 2005–2011, the majority being given directly to schools as non-ring-fenced funding.

In preparation, the Centre for Education and Industry at Warwick University (CEI) assumed the management of 151 'pathfinder' projects across '400 schools over two years (Ofsted, 2004) to evaluate potential methodologies for delivering enterprise education. This led to the development of enterprise education material on the 'teachernet' website, compiled by CEI to offer guidance and case studies to help schools develop programmes for enterprise education.

Two advisory bodies support the development of enterprise education: the Specialist Schools and Academies Trust (SSAT) who oversee the Enterprise Learning Partnerships (ELP's); and Ofsted, the schools' inspectorate. There is almost no research available on the impact of the ELP network making it difficult to assess how it has contributed to the field, other than acting as a secondary funding body, and there is little evidence that the ELPs have played a significant role in the development of enterprise education (McLarty et. al., 2010). Ofsted inspect enterprise as part of institutional, subject and survey inspections. These assess the shared understanding of enterprise; learning outcomes and assessment; provision for all students; evidence of achievement; and management of enterprise education. Ofsted reports on this topic (2004; 2005) have found a lack of consistency in the planning, delivery and assessment of enterprise education.

Other than the minimum requirement of engagement hours and the online guidance, there have not been explicit policy guidelines for schools on enterprise education, its application or monitoring, and it appears as an element in other agendas and policies, as one of six cross-dimensional themes in the wider curriculum (QCA, 2009) which is not of core interest to the schools inspectorate. The recent review of enterprise education in schools shows very little progress in the field (McLarty et. al., 2010) and recommends updating guidance on the implementation and assessment of enterprise educational strategies, improving local networks, and reviewing the role of Ofsted in assessing provision. Wales and England have a similar policy ethos, however in Wales there is a national Youth Enterprise Strategy which provides central guidance and resources, subject specialists in every institution and integration into the national inspection framework; Wales is commended as a leader in enterprise education in Europe (McLarty et. al., 2010).

In conclusion, the policy literature presents little more definitive guidance on enterprise than academic research. It is also very diverse, with many contributors and requirements for enterprise education to fulfil. It highlights that the policy ethos and its ideology is less to blame for the confusion over enterprise education in England than the implementation of policy which has failed to embed enterprise at the heart of the curriculum.

Having established an overview of the academic and policy literature, we move to review current practice in relation to two essential questions:

- What does 'enterprise' mean in the context of 14-19 education?
- What is the purpose and contribution of competence frameworks and related structures for the learning and assessment of enterprise education? How effective are they in enabling student learning?

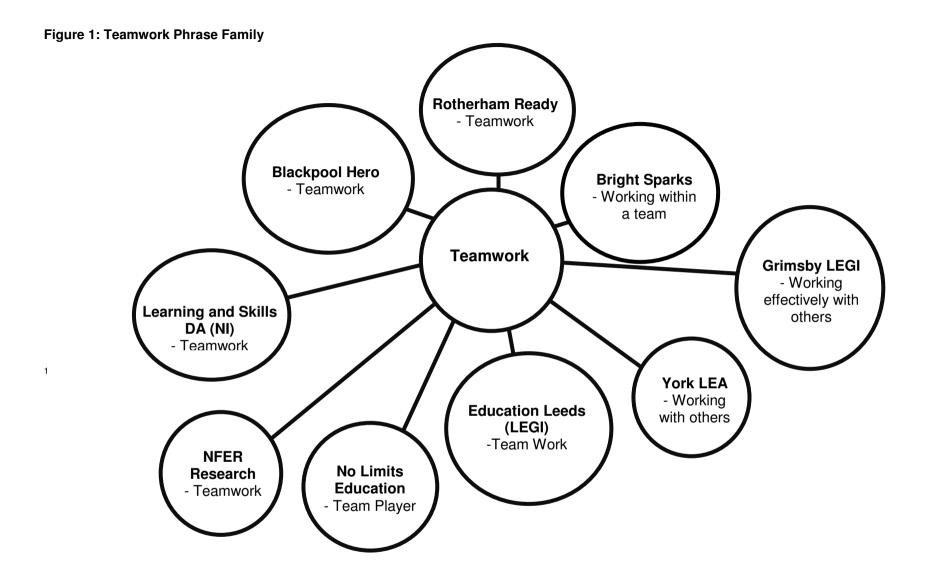
Research Method

The research consisted of desk research on the academic and policy debates, and data collection of a selection of enterprise competence frameworks. These aim to provide educational and assessment structures for enterprise learning and have seen increasing use since the formal introduction of enterprise education in 2005. The review aims to reveal whether enterprise education has developed a distinctive pedagogy which can be assessed for educational impact.

Thirty organisations who had produced local frameworks for provision of enterprise education, definition and assessment were approached. These included Local Enterprise Grant Initiatives (LEGI), schools and colleges, enterprise education companies and Local Education Authorities (LEA's). They were asked to share their competency frameworks of lists of skills for enterprise education, or other literature specifying the enterprise skills their work aimed to develop. Other publicly available frameworks including the Small Firms Enterprise Development Initiative (SFEDI) and the Institute for Leadership and Management (ILM) award in preparing for business enterprise were included.

Fewer than one in three organisations responded and ten different frameworks were collected in total. However, these are reasonably representative of current practice. A comparison of the frameworks was conducted, using narrative analysis, based on the concept of phrase families, to identify points of consonance and difference. The use of phrase families stems from the principle that many of these frameworks use linguistic terms to convey similar or closely related ideas, such as skills which, whilst semantically different can be taken to represent very similar concepts, literally or ontologically, as shown in the example of teamwork presented in Figure 1. Sixteen phrase families were developed from the analysis of the frameworks.

It was evident in most cases there was little semantic difference between most of the skills in the frameworks, the differences tending to be in how the skills were grouped into categories. To illustrate this, the frameworks were shown in a grid (Appendix Table 1) using the 16 phrase families, using the longest list of competencies from Blackpool LEGI and comparing them with each other. They were also compared with the Davies, NFTE, SFEDI PE1 Standards and the ILM Level 2/GCSE Qualification in Preparing for Business Enterprise sets of skills. Those 'orphan' skills which had no direct match across the frameworks were included in Appendix Table 2 to allow for comparison. The next section discusses these findings in detail.



¹ While team working is not mentioned in the Davies Report, it is in the work of the CEI available on teachernet which superseded Davies

Findings

The first conclusion is that, whilst the terminology varies across the frameworks, in almost all cases there is a direct link to some, of the skills identified in the Davies and CEI reports; this results in most of the frameworks presenting competencies which are 'soft' skills-based, with connections to other educational agendas such as PLTS, PSHE or Work Related Learning (WRL), as noted by Davies (2002:21-25).

The term 'team' for example appears in all of the frameworks, it is also a skill explicit in PLTS, implicit in PSHE, and an explicit element (through enterprise) of the WRL education policy (DCSF, 2009).

This can be made more apparent by focusing on PLTS which has in recent years grown to become synonymous with enterprise teaching and learning. Table 3 shows the PLTS skill groups with examples of skills selected from some of the frameworks in this area.

Table 3: A Comparison of PLTS Skills and Enterprise Competencies

PLTS Skill Group	Enterprise Competencies & Agencies
Independent enquirers	Using initiative – Blackpool
	Independent – No Limits
	Initiative – Rotherham
Creative thinkers	Generating ideas and innovating – Blackpool
	Creativity and Innovation – Rotherham
	Coming up with ideas – Bright Sparks
Reflective learners	Setting targets and goals – Blackpool
	Developing and evaluating proposals – Grimsby
	Set Goals – No Limits
Team workers	Working within a team – Bright Sparks
	Working effectively with others – Grimsby
	Team player – No Limits
Self-managers	Managing Money 'and'? - Blackpool
	Plan and Manage – No Limits
	Organising and Planning – Rotherham
Effective participants.	Making the right choices for customers / clients –
	Grimsby
	Weighing up the situation – Bright Sparks
	Interprets and communicates information -
	Learning and Skills DA (NI)

This analysis of the relationship between enterprise and other agendas supports our conclusion that enterprise education is focussed primarily on the delivery of soft skills, raising the question of what 'enterprise' means in the context of 14-19 education. Is there a distinct ontology or an osmosis with other educational agendas?

The ten frameworks all refer to some form of teamworking and communication, most to creativity or problem solving as well as management and risk taking, and almost all address some form of independent inquiry. However, in most cases these skills do not relate explicitly to SFEDI or the NFTE competences, and neither team-working nor communication, which are the only commonalities between the collected data, appear in the SFEDI, NFTE or ILM frameworks.

Only four frameworks view managing money as a key skill, and only three hold any form of wider business, economic or enterprise awareness as important, even though these are highlighted as key elements by Davies (2002). This makes it apparent that in terms of skills, although there is heterogeneity in the language used, they tend to avoid the commercial distinctiveness of business-oriented enterprise is concerned.

The frameworks differ in the range of skills and competencies included: 16 skills from Blackpool and 6 in York. Given this variation, how can they be consistent and effective as the basis for educational practice? Much is dependent on the interpretation by teachers, because the wide range of 'soft skills' are not ontologically distinct, and can be delivered through a range of pedagogies ('how'). This repeated trend is shown in

Appendix 2, where the skillsets become more individualised to their respective products and more esoteric; there are some limited linkages to SFEDI, ILM and Davies and no direct links to the NFTE work.

An educator could reasonably ask if any of these frameworks present the definitive list of competencies and look to the literature for guidance; Davies and the CEI's view would support almost any of the options presented; Caird's 1992 work would broadly cover a range of skills being classed within enterprise competency but not in a way which would provide helpful guidance to aid choice, as would Johnson (1988) and Hynes (1996). Gibb's (1987, 1993, 1998) work takes a more entrepreneurial direction towards enterprise education, as do Rae (2003) and Jones (2006), which might have more in common with SFEDI and NFTE, and less with the frameworks this paper has examined.

If asked which frameworks have most benefit for students, the data to assess this does not exist because assessing enterprise is driven by institutional competency not student impact. Since the types of enterprise skills that most of these frameworks assess are not ontologically unique, a student could become a better communicator through enterprise education or by changing a group of friends and experiencing different social interactions. A discrete pedagogy is elusive because of the drive to embed enterprise into agendas such as PLTS and WRL.

Most enterprise education projects have undertaken some form of evaluation, but few have conducted impact research. An exception is YE, whose 2009 Alumni Survey showed that by comparison to their peers, previous students engaged in YE achieved better job and career prospects. Perhaps the IPPR were right in 1998 when they suggested that practical entrepreneurship programmes may provide the best opportunities to develop enterprise education. Those competencies are used by the NFTE and SFEDI, but do not feature widely in the collected data.

The role of frameworks may be questioned as, if they do not define what enterprise education should be and educators cannot choose the 'best' framework, what useful role do they play in secondary education? An answer may be found in the distinction made by Gibb (1987, 2002) of the cultural divide between entrepreneurial small business and bureaucratic-corporate thinking; the latter pervades educational bureaucracy in England.

Allan Gibb's 2004 work on between Bureaucratic (Government / Educational) concerns and the characteristics of Entrepreneurial / Enterprising people is central to the argument here, as our analysis suggests that the competency frameworks exemplify a corporate-bureaucratic mindset which seeks to standardise, prescribe and control what is taught and learned. There is a danger it may strangle the creativity, spontaneity and flexibility which is at the heart of the enterprise experience. This point is not new - Gibb has emphasised it in his writings over more than twenty years - but it is nonetheless still valid. Penaluna and Penaluna (2009) also support this point, observing that 'not much has changed' in terms of the development of creative approaches in education. Viewed in this manner it is evident that the norming instinct of educational policy is to seek to impose through a prescribed curriculum, rules, order, and planning, frameworks which are inconsistent with enterprise education which is inherently untidy, informal and deeply intuitive.

Enterprise competency frameworks exist as means of operationalising and assessment of skills which are by their nature difficult to assess. Given the proliferation of these frameworks it must be suggested that there is a danger that the need to evidence and to assess takes precedence over the enterprising nature of the learning experience, but their lack of consistency means they do not achieve this very efficiently. This causes educators real difficulties practitioners; trying to educate people to be enterprising needs approaches which go beyond two-dimensional frameworks and skillsets which are required to be clearly defined, unique and assessable at set curricular and key stage levels. If educational policy had trusted educators to enable students to use their imagination, creativity and flexibility, it would require training, guidance and support rather than prescription. The most influential enterprise educators work with a flexibility and freedom which enables student learning through guiding the process, not by prescribing the outcome, as described for example by Penaluna & Penaluna (2009) and Jones (2009).

The next section provides a structured discussion which addresses the research questions in the altered context of the significant economic and political changes which are evolving, to provide a starting point for a new approach to enterprise in schools.

Discussion

What does 'enterprise' mean in the context of 14-19 education?

It is proposed that enterprise has been 'hijacked' by schools as a convenient vehicle for them to evidence a range of 'soft' skills which they cannot easily do in other ways. In some schools it is even the practice for 'less academic' or 'challenging' students to be directed towards enterprise, whilst academic 'high fliers' are steered towards attainment of qualifications which improve school league-table performance. Whilst we would hope that students who may be marginalised by their educational experiences may be energised by enterprising learning, it does seem wrong to steer 'the more able' away from enterprise, for, as argued below, they are as likely to need to be enterprising in their lives and careers.

It seems that the rationale and philosophy of enterprise is poorly articulated and understood in the educational policy literature: is it free-market political ideology, the development of soft skills or PLTS by another name, or the development of employable young people? Some of these positions would raise ideological and other difficulties for many educators.

Enterprise is about developing a mindset, goals (self-efficacy) and skills (personal capabilities) to equip young people for their futures. Enterprising learning is the process of learning in enterprising ways as well as becoming enterprising. It is conative and affective as well as cognitive (Gibb, 2008), but education is often most comfortable in the safety of cognitive learning.

Our view is that enterprise, in the context of secondary education (and beyond), can be defined as personal, situational, and economic:

- Personal: the development of self-knowledge and self-efficacy to be able to investigate, develop and act on ideas and opportunities.
- Situational: being enterprising is contingent on subjects and situations, hence learning and acting in enterprising ways will be different in, for example, performing arts, biological sciences, or mathematics; yet there is a role for enterprising learning in all of these, as there is in, or between, all subjects. Enterprise is also concerned with the practical applications of taught subjects, and can be usefully described as 'practical creativity', especially in situations where the term 'enterprise' is considered too value-laden.
- Economic: an outcome of enterprise is the creation of new value. That should be wider than simply financial value or the generation of personal profit, and include social, environmental, aesthetic and intellectual value which may be shared in a range of ways. Students have to survive in an economic world and an understanding of responsible enterprise should assist them in this.

What is the purpose and contribution of competence frameworks and related structures for the learning and assessment of enterprise education? How effective are these frameworks in enabling student learning?

We do not argue for the abolition of competence frameworks and the like, simply that they be regarded educationally as maps rather than manuals; that is, they can usefully create an understanding of the landscape of enterprise and the human capabilities which are found in it. But some maps are more accurate and reliable than others, and some of the frameworks reviewed should not be regarded as accurate or complete templates for enterprise skills. To understand a landscape one needs to go exploring or orienteering in it, with the risk of getting lost, bogged down, or muddy but eventually finding the destination (Penaluna et al, 2008); the journey, or process, is as important as the prescribed learning outcome. Conditions of risk, uncertainty of outcome and possible failure are inevitable and actually desirable in the enterprising learning experience.

The best enterprise educators work more as guides and coaches rather than experts or conventional teachers. Their practice is different from the orthodoxy of 14-19 education, yet not incompatible with it. Their students get their hands dirty and have fun. They learn by experimenting, doing, discovering unexpected outcomes. Teachers need professional development, trust, and the space to construct personal praxis and passion for enterprise. That will not be preferred by all, and slavish attention to a competence framework and assessment evidence is not the way to achieve it.

Enterprise needs to become an academically distinctive field, connected with practical entrepreneurship and organisations such as SFEDI and the NFTE. It is not simply the soft skills of PLTS revisited. A coherent progression from enterprising learning is the application of knowledge to innovation, venture creation, and the practise of small business skills in the workplace or marketplace. Enterprise is a stage of entrepreneurial development, as being an entrepreneur is a transitional, not fixed identity (a point missed in the lazy educational use of stereotypical media such as 'The Apprentice' and 'Dragons Den' as representations of reality). Being enterprising is a way of being and working, it is contextual, and entrepreneurship is one highly developed example of this.

How might enterprise education and such frameworks evolve in the light of major changes in the economic, employment and educational landscape of post 2008?

It can be argued that the financial and banking crisis of 2007-8, the recession, the economic and employment consequences for society in general and young people in particular, and the political changes following the UK General Election must cause us to rethink the role of enterprise in the curriculum and the way we approach it. It is not too extreme to say that enterprise educators face the greatest challenge of their generation in enabling school-leavers and graduates to start their working lives in a post-recession economy with increasing unemployment for young people (Rae, 2009).

There is a need for enterprise education to prepare young people with the new skills and ability to confront this new era; the questions is, as currently defined and taught, will it be able to achieve this? There is also a need for enterprise education to confront its ideological context. It was the beneficiary of substantial funding from the Labour administration, directly sanctioned by Gordon Brown for some twelve years. The new government also has enthusiastic rhetoric about local enterprise rebalancing the economy. How independent of political ideology can enterprise be?

As the economy, society and expectations of education change, enterprise should become an intrinsic part of the survival skills which young people need to be able to build their lives and portfolio careers in this new era, through flexibility, diversity and lifelong learning. There is a need to change the view that enterprise education and highly assessed soft skills, as they are currently defined, are sufficient to prepare young people for the post-recessionary economy. A narrow reading of profit-centred entrepreneurship alone is also be insufficient and an explicit grounding in social and community based enterprise is required, being present in some enterprise teaching but not fully understood or evident in all.

Conclusion: A proposed new approach to enterprise education

Enterprise education can be seen as simply a means of resolving the long-standing gap between education, at different levels, and the 'world of work' of the 'real economy'. There have been many previous attempts to achieve this and the current confusion in the definition, research and practice of enterprise education in schools needs to be addressed. Eight ideas are offered to facilitate this, based on what has been learned through enterprise education, adapted for the new economic and political era.

This is not a central prescription for enterprise education, but a means of starting to develop a curriculum for enterprising learning in schools which is more coherent in mediating between educational and economic requirements, more relevant to the post-recession economic and employment era, and likely to be more effective and meaningful for students than the very variable existing situation.

1. Enterprise should be defined above the level of political and economic ideology, since equating enterprise with free-market capitalism is simplistic and problematic. Creating new value through opportunities brings social, environmental and ethical responsibilities, which can be addressed through sustainable, social and community venturing.

- 2. There is a distinction, which needs to be articulated clearly, between enterprise as personal development, connected with 'soft', transferable skills and entrepreneurship as activities of opportunity and venture creation.
- 3. Enterprising learning is an exploratory process, or journey, in which the value of the learning is seen through the students experiencing and reflecting on the process, moving from the academic into the external world in a range of ways, physically and digitally.
- 4. Accurate and reliable frameworks, which enable educators and students to understand and explore enterprise, displaying a useful range of skills and attitudes, should be used to assist the learning process.
- 5. Assessment, rather than being defined against outcome frameworks, should reflect the personal learning and conative, affective and cognitive changes which students express, contributing to self-discovery, awareness and enhanced understanding of their world.
- 6. Enterprise should be seen as intersubjectival, in which applied creativity, problem-solving and opportunity exploration take place to enable students to transfer and apply a wide range of academic and vocational subjects to different contexts, which can be assessed as above.
- 7. This change of approach should take place through developing and empowering teachers as enterprising educators; staff development should enable them to create learning situations for students, in which degrees of risk and uncertainty arise.
- 8. Evaluation of this approach to enterprising learning should take place, for example through projects which combine formal and informal learning.

This approach to enterprising learning offers a distinct, learner-centred journey of exploration and self-discovery of 'who am I?' and 'what do I want to achieve?', with key themes mapped onto a learning landscape in which students explore conative, affective and cognitive change. It focuses on the 'who, how and why' as well as the 'what' offered by which a framework-driven approach. Being value- rather than assessment-driven, it can demonstrate impact by changing the way young people view the world around them. The policy of 'control' through institutional audit should shift to foster development and creative learning by training enterprise educators to work in schools. We hope this will encourage debate among policymakers, academics, practitioners and students, and enable ideas of practical value to be taken forward through experimental work with schools and practitioners.

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Appendix Table 1: Showing the Comparison of Collected Enterprise Competency Frameworks

LEGI : Blackpool Hero	Rotherham Ready	Bright Sparks	LEGI: Grimsby inc.	York LEA	LEGI: Education Leeds	No Limits Education (Itd)	NFER Research	Learning and Skills (DA) NI	SFEDI PE1	ILM IvI 2 Cert Prep Enterprise	Davies Report	Educating Entrepreneurs (NFTE)
Adapting to change		X				x			X		X	
Analysing and evaluating		X								X	X	
Communicating	X	X	X	X	X	X	X	X			X	
Decision Making	Х	X	X			X	х			Х	Х	
Enterprise Awareness			х							Х	Х	
Financial, business and economic understanding	x									x	x	x
Generating ideas and innovating	х	Х		Х	х	х	х			x	Х	х
Leadership	Х	X			Х						Х	х
Managing money and resources			х		х		х			X	Х	Х
Negotiating and compromising	X					х			X		Х	
Planning and organising	X	X	Х			X		X	X	X	X	X
Setting targets and goals										X		
Solving problems		X	X	X	X		X			Х	Х	X
Taking calculated risks	х	X	х			x	Х		Х	х	Х	
Teamwork	Х	X	X	X	Х	Х	Х	Х				
Using initiative	х	х			Х	Х				Х	Х	

Appendix Table 2: Showing the Residual Skills from the Comparison of Collected Enterprise Competency Frameworks

LEGI : Blackpool Hero	Rotherha m Ready	Bright Sparks	LEGI: Grimsby inc.	York LEA	LEGI: Education Leeds	No Limits Education (ltd)	NFER Research	Learning and Skills (DA) NI	SFEDI PE1	ILM IvI 2 Cert Prep Enterprise	Davies Report	Educating Entrepren eurs (NFTE)
	Positive Attitude				Having a positive outlook	Think Positively			х			
		Keep going when it's tough		Resilience		Be determined			Х		X	
			Operating honestly and with integrity					Honesty and integrity				
	Product or service design		Delivering a quality product or service					Customer service awareness				
			Getting the right information					Acquires and understand s information		x		
						Self confident			Х		X	
				Self awareness					X	x		