

The perceptions of students and lecturers of some factors influencing academic performance at two South African universities

WILLIAM FRASER AND ROY KILLEN



WILLIAM FRASER was appointed Head of the Department of Teaching and Training studies at the University of Pretoria since 1997. He has received a number of awards and citations including the Barnes Trophy for a school textbook (1991), the EASA/Sanlam Research Medal (1994) and the Chancellors Prize for research in the Faculty of Education, UNISA (1997). His present research focuses on distance education, with specific reference to learning styles, learning style switching and learner preferences of teaching strategies in distance education.



ROY KILLEN is an Associate Professor in the Faculty of Education and Arts at the University of Newcastle, Australia. He is also an Extraordinary Professor in the Faculty of Education at the University of Pretoria. He has worked extensively in South Africa over the past seven years presenting seminars and workshops on assessment and outcomes-based education. He has been appointed Extraordinary Professor at the University of Pretoria.

Abstract

This article presents the results of two recent empirical investigations at universities in South Africa (University of Pretoria and University of South Africa) where an attempt was made to identify the pre- and post-enrolment factors that lecturers and students perceived as having the most important influence on students' success in their university studies. The opinions of lecturers were compared with those of various groups of undergraduate students within and across the two universities. Different genders, different years of study, different home languages, different languages of instruction, and different modes of study (contact and distance education) were considered.

The investigations revealed a strong level of agreement between lecturers and students concerning most factors that were identified as being likely to contribute to students' academic success. However, there was considerable diversity in the opinions of lecturers and students concerning the factors that were identified as being likely to contribute to students' failure at university. These differences were more pronounced at the distance education institution than at the contact university.

At both universities the results of the studies pointed to a number of instructional practices that seem to be limiting the opportunities for students to develop the levels of understanding and insight that lecturers expect of undergraduates. The studies also showed that some students were taking counter-productive approaches to their study.

Introduction

Since 1994 educational reforms in South Africa, including the National Plan for Higher Education (Ministry for Education 2001) have attempted to "provide a system of education that builds democracy, human dignity, equality and social justice" (Department of Education, 2001, 4). A central feature of these reforms was a deliberate attempt to broaden participation in higher education as one means of reducing the highly stratified race and class structure of the country. These changes were accompanied by a change in the focus of the senior years of schooling to emphasise preparation of all students for life, work and further education – rather than simply to prepare some students for university. The social, cultural and economic backgrounds of students now entering most South African universities give them very different life experiences. When these factors are combined with a diversity of abilities, attributes and motivations, the result is that students have vastly unequal levels of readiness for studies in higher education.

The long-term plan to increase the participation rate in Higher Education (HE) in South Africa from 15% to 20% (Ntshoe, 2002, 7) highlights the need for universities to take a fresh look at all the factors that determine whether or not their students are successful. There is little point in universities admitting students if there is not a reasonable probability that those students will be capable of successfully completing the programme in which they are permitted to enrol. To knowingly admit students who, for whatever reason, have no chance of academic success would be immoral (Killen & Fraser, 2002, 1). To admit students who have the potential to succeed and then treat them in ways that do not allow them to realise that potential would be equally immoral. This problem was clearly acknowledged when the government highlighted the need for HE institutions to "go beyond the 'numbers game' of merely opening formal access for disadvantaged groups into a static system (a process that became known as the massification of higher education) and set of institutional cultures (because) this only sets people up for failure" (Department of Education, 2001, 47). We support that view and argue in this article that attempts to address this issue should focus on the post-enrolment factors that influence student success.

While both the government and HE institutions acknowledge the changing profile and characteristics of those aspiring to attend university, the general entry requirements for undergraduate programmes in South African universities have changed little since 1994. Some attempts have been made to facilitate access for previously disadvantaged students (Potter & Van der Merwe, 1994) and to provide bridging courses that target language or mathematics deficiencies (De Villiers & Rwigema, 1998). However the traditional practice of using school matriculation results as the prime basis for university entrance is still dominant (Jawitz, 1995), and entrance to many university programmes is still determined primarily on the basis of matriculation results. The assumption that these results are adequate indicators of students' readiness for study in higher education is problematic. It is not surprising therefore that in these circumstances there are high drop-out rates and low graduation rates in many South African university courses (Wood, 1998; Paras, 2001; Tait, Van Eeden & Tait, 2002). This situation is by no means unique to South Africa; it also occurs in other countries that have shifted the focus of higher education from elitism to mass opportunity (McKenzie & Schweitzer, 2001). Higher education institutions should nevertheless be proactive in attempting to improve the success rates of their students, while at the same time striving to maintain or improve their academic standards. The blame for high drop-out rates and low graduation rates cannot simply be placed on the students.

Attempts to defend the traditional practice of using school matriculation examinations to

filter students out of further educational opportunities are usually based on the claim that school academic performance is a useful and reliable predictor of performance in higher education (Behr, 1985; Jawitz, 1995; McKenzie & Schweitzer, 2001; Potter & Van der Merwe, 1994). The evidence in support of this claim however, is by no means conclusive and there are many claims that school achievement has very limited value as a predictor of student success in higher education (Chase & Jacobs, 1989; Riggs & Riggs, 1990-91; Johnes, 1990; Graham, 1991; Larose & Roy, 1991; Bargate, 1999). In South Africa this debate is complicated by the newly introduced as well as proposed changes to the school curriculum. The Department of Education recently announced its new Grade 12 Further Education and Training (FET) policy for South African secondary schools, from which it has become apparent that the traditional university entry requirements, based on matric symbols only, will no longer apply. Universities will have to reassess their entry requirements to correspond with the new Grade 12 examination requirements. Since this new approach is untested, there is simply no evidence about how well the new curriculum prepares students for HE or how well the new matriculation procedures will operate. Until there is sound research evidence to suggest otherwise, it is inappropriate to assume that the new school matriculation examinations will provide anything other than a vague indication of learners' potential for success in HE. Quite clearly, there is a need to have appropriate entry requirements for HE, but there is also a need to pay more careful attention to other pre-enrolment factors such as cognitive ability and personality traits (Van Eden, De Beer & Coetzee, 2001), as well as to the post-enrolment factors that influence students' academic success.

There are many post-enrolment factors that influence students' attitude towards studying in HE, their academic success and their decision to persist or withdraw. Factors such as the students' motivation (Talbot, 1990), approach to studying (Meyer, 1990), cultural expectations (Ginsburg, 1992), academic literacy (Amos & Fischer, 1998) and time management skills (Lahmers & Zulauf, 2000), as well as psychosocial factors (McKenzie & Schweitzer, 2001), the peer culture (Gainen, 1995), the quality of teaching (Bartz & Miller, 1991), the interaction between students and the academic and social systems of the university (Tinto, 1975), students' belief in their own ability (Kleemann, 1994; McKenzie & Schweitzer, 2001) and the student support structures offered by the university (Kleemann, 1994) have featured prominently in the research literature on this topic. The fact that so many post-enrolment factors can be important is one reason why previous academic success, particularly at school, is often not a strong predictor of success in higher education. Some of the most significant factors in students' academic success at university seem to be interest in the course, motivation, self-discipline and effort – none of which can be predicted directly from matriculation results (Schmelzer, Schmelzer, Figler & Brozo, 1987; Killen, 1994). In addition to these factors, high drop-out rates from distance education programmes can be attributed, at least in part, to inappropriately designed study guides, lack of formative assessment and insufficient student support systems (Fraser & Lombard, 2002).

The value of identifying and studying post-enrolment factors that influence student success in higher education is widely accepted, and there are two main approaches to this type of research. The most common approach is to measure one or more factors that are predicted to be related to academic success (e.g. self-esteem or time-management skills) and to correlate these measurements with some measure of actual success (such as examination results). A typical example of this form of research is the study by McKenzie and Schweitzer (2001) that investigated 13 such correlations.

Killen (1994) exemplifies an alternative approach that does not depend on the direct measurement of influencing factors or actual performance. He investigated lecturers' and students' perceptions of the likelihood that various factors might influence students' academic success. The main rationale for this and other similar studies is explained in Killen, Marais and Loedolff (2003) in the following terms: Students' approach to study is influenced by their beliefs about what will enhance their chances of success or diminish their chances of failure, as well as by motivational and personality factors. These beliefs and actions are not necessarily determined by the actual

influence of relevant factors (Tait, Van Eeden & Tait, 2002). For example, if students believe that attending lectures contributes to success, they will probably attend regularly even if they learn little from the lectures. However students who believe that success can be achieved without attending lectures may not attend on a regular basis even when this actually diminishes their chance of success. Likewise lecturers' perceptions of what factors contribute to student success influence their approach to teaching (Jacobs & Gravett, 1998). For example a lecturer who believes that attendance of lectures is important for students' success may provide information during lectures that is not available from any other source – an obvious disadvantage to students who do not attend. A lecturer who does not believe in compulsory lecture attendance will probably provide information and guidance to help students who choose to learn in other ways.

In situations in which lecturers and students have different views on the extent to which various factors might influence the latter's academic success, there is considerable potential for misunderstanding and conflict. When there are major differences in the social and cultural backgrounds of lecturers and students (as is often the case in South Africa), their differences in perception may render it difficult for lecturers to facilitate learning for all students and difficult for learners to approach their studies in ways that will optimise their chance of success. One way to minimise such problems is for lecturers and students to share their beliefs and expectations, and to develop jointly strategies for increasing students' chance of success. Recent studies at two large South African universities (one a distance education institution) attempted to achieve just this by first identifying the post-enrolment factors that lecturers and students see as having an important impact on student success in higher education (Fraser & Killen, 2003(a); Killen, Marais & Loedolff, 2003).

This article synthesises the results of the above-mentioned two studies by highlighting the similarities in their findings and by attempting to explain the differences between the two investigations. The purpose is therefore twofold: to gain insight into and understanding of the perceptions of students and lecturers with regard to academic success or failure in HE, and also to come to terms with the different results with regard to contact teaching and distance education.

Research methods

Lecturers' and students' perceptions of factors that influence students' academic success were investigated in two separate studies at South African universities with one of the authors of this article directing both studies. The first study was conducted at the University of Pretoria (UP) with data gathered from 675 full-time students (584 female and 91 male) and 38 lecturers (19 female and 19 male) in the Faculty of Education. Fraser and Killen (2003(a)) provided one analysis of the findings of that study. The second study was conducted at the University of South Africa (Unisa) with data gathered from 636 students (325 female and 311 male) and 32 lecturers (14 female and 18 male) in the Department of Business Management. Killen, Marais and Loedolff (2003) provided one analysis of the findings of that study.

Data for both studies were gathered by means of questionnaires similar to the instrument used by Killen (1994). Using a technique similar to that of Killen (1994), the instrument for the UP study was developed by asking 99 students and 61 lecturers in the Faculty of Education to respond freely to the question:

What five factors or variables related to (a) staff teaching and (b) student learning have, according to you, the most important influence on your/students' academic performance or achievement at university?

The responses obtained from the students and lecturers were used to create firstly a set of 52 statements that described factors that might contribute to students' success and, secondly, a separate set of 55 statements that described factors that might contribute to students' failure. These "success" and "failure" scales each incorporated 39 of the 40 items that had been used in

the Killen (1994) study conducted in Australia. This indicated a strong cross-cultural commonality in the views of lecturers and students and provided a rationale for the approach used in the second South African study.

The instrument for the Unisa study was developed by having a reference group of six distance education specialists modify the questionnaires used by Killen (1994) and Killen and Fraser (2002). Variables of particular importance in a print-based distance education course (such as ability to read and write in the language of instruction) were added, and the variables not relevant to distance education (such as regular attendance at lectures) were removed. The final questionnaire contained 39 statements that described factors that might contribute to students' academic success and another 38 that described factors that might contribute to students' failure. The questionnaire's "success" scale contained 27 and the "failure" scale 30 of the Killen (1994) items. The Unisa "success" scale had 34 items in common with the UP questionnaire, while its "failure" scale had 37 items in common.

For each study, two parallel-worded versions of the questionnaire were developed, one for students and one for lecturers. In all versions of the questionnaire, the respondents used a five-point Likert-type scale to indicate the extent to which they thought that each factor might influence student success or failure (1 = not at all, 5 = greatly). In both institutions, the students have a choice of language of instruction (English or Afrikaans) and the questionnaires were presented in English or Afrikaans according to the language preference of each respondent.

The data from each study were subjected to several forms of analysis to identify similarities and differences in the responses of the lecturers, students and subgroups of students. First, the mean ratings given for each item were calculated so that the "success" and "failure" items could be placed in rank order for each group. Table 1 shows the ranking given by students and lecturers on the 34 common items on the "success" scale and Table 2 shows the ranking given by students for the 37 common items on the "failure" scale.

Next, a univariate analysis of variance (ANOVA) was used to determine whether or not there were significant differences in the mean ratings for each group on each item. Because of the large number of students and lecturers who participated in the investigation, the samples were regarded as representative of the respective populations and also as reflecting a normal distribution. The latter was one of the requirements for deciding to conduct an analysis of variance on the data described in the paragraph that follows. Bartz (1976, 293), Guilford (1956, 282) and Minium (1970, 367) justify an ANOVA procedure when data are collected from normally distributed populations and the samples are drawn at random. The data sets met these requirements and one should take note of Howell's comment that "... substantial departures from normality may, under certain conditions, have remarkably little influence on the final result" (Howell, 1999, 303). It was decided not to apply the Kruskal-Wallis *H* Test to the responses as it was not the researchers' intention to determine whether the independent samples represented the same or different populations (Downie & Heath, 1974, 270). However, the Kruskal-Wallis test could have been an alternative measure when taking into consideration that the researchers had been dealing with four different and independent groups (Howell, 1999, 405; Mulder, 1989, 181). The results of these two steps were subsequently used to develop a qualitative description of the similarities and differences.

Main results of the two studies

Contact University

The results of the study at the University of Pretoria are reported in detail in Killen and Fraser (2002) and Fraser and Killen (2003(a, b)). The major findings of that study included the following:

1. A strong correlation (0.8063) between lecturers' and students' ratings of the factors that contributed to student success.

Table 1: Ranking of students' and lecturers' responses to variables that could contribute to success at university

	UNISA (Distance Education Institution)				UP (Contact Education Institution)			
	Mean		New rank		Mean		New rank	
	Lecturers	All Students	Lecturers	Students	Lecturers	All Students	Lecturers	All Students
Self-motivation AB	4.25	4.31	2	2	1	3	4.76	4.55
Self-discipline AB	4.22	4.23	4	4	2	1	4.61	4.61
Timely and regular examination preparation B	4.41	4.17	1	5	3	7	4.55	4.40
Effective study methods AB	4.09	3.98	7	12	4	5	4.44	4.42
Appropriate choice of course of study AB	4.06	3.89	8	14	5	8	4.34	4.35
Interest in the course AB	3.94	4.12	12	7	6	2	4.29	4.60
Effective written communications skills AB	4.13	3.62	6	29	7	27	4.29	4.09
Understanding what lecturers expect AB	4.03	3.64	9	28	8	15	4.27	4.24
Regular and comprehensive feedback on progress from lecturers AB	3.94	3.74	13	24	9	18	4.21	4.21
Willingness to accept a challenge AB	3.91	4.13	15	6	10	21	4.18	4.18
Ability to work independently AB	4.25	4.06	3	9	11	12	4.18	4.29
Ability to reason logically AB	4	3.94	10	13	12	26	4.16	4.10
Self-confidence AB	3.69	4.02	22	10	13	4	4.16	4.54
Willingness to ask for help from lecturers/tutors AB	3.53	3.43	29	30	14	16	4.16	4.23
Maturity AB	3.66	3.86	23	15	15	25	4.13	4.12
Availability of high-quality study resources AB	3.63	3.64	25	27	16	11	4.11	4.31
Study guides with clearly defined outcomes B	3.97	4.11	11	8	17	17	4.11	4.22
Creative or lateral thinking ability AB	3.56	3.84	28	16	18	31	4.08	4.01
Ability to apply the subject to a work situation B	3.61	3.83	26	17	19	24	4.05	4.14
Access to libraries AB	3.09	2.74	32	32	20	19	4.03	4.19
Access to the Internet B	2.84	2.66	34	33	21	20	4.03	4.19
Dedication to a career goal AB	3.84	4.27	19	3	22	6	4.03	4.40
Assessment tasks that are closely related to the module AB	3.91	3.80	16	20	23	29	4.03	4.02
Relevance of course B	3.87	4.01	18	11	24	22	3.97	4.15
A stable private life AB	3.44	3.70	30	25	25	14	3.97	4.24
Ability to manage stress AB	3.72	3.83	20	18	26	13	3.97	4.27
Consistent effort of learners AB	4.19	4.31	5	1	27	28	3.97	4.07
Appropriate balance between academic commitments and social life AB	3.72	3.76	21	23	28	9	3.92	4.33
Family support AB	3.59	3.78	27	22	29	10	3.82	4.32
Effective examination techniques AB	3.88	3.81	17	19	30	23	3.78	4.15
Ability to pay for my studies AB	3.66	3.66	24	26	31	32	3.7	3.95
General academic ability AB	3.94	3.79	14	21	32	34	3.66	3.49
Satisfactory accommodation AB	3.31	3.43	31	31	33	30	3.58	4.01
Study group support AB	3.06	2.40	33	34	34	33	3.39	3.69

Table 2: Ranking of students' and lecturers' responses to variables that could contribute to failure at university

	UNISA (Distance Education Institution)				UP (Contact Education Institution)				Means	
	Lecturers	All Students	Lecturers	New rank Students	Lecturers	New rank Students	Lecturers	All Students		
Poor exam preparation B	4.38	3.84	2	1	1	1	1	1	4.63	4.37
Lack of self-discipline AB	4.19	3.46	6	7	2	2	2	2	4.58	4.32
Lack of self-motivation AB	4.22	3.17	5	17	3	3	3	3	4.53	4.28
Inability to persevere AB	4.19	2.90	7	28	4	4	4	7	4.53	4.20
Insignificant effort (e.g. study, exam prep) AB	4.5	3.57	1	5	5	5	7	7	4.5	4.24
Inefficient time management AB	4.09	3.73	9	2	6	6	18	18	4.48	4.12
Poor study techniques AB	4.06	3.63	11	4	7	7	17	17	4.42	4.14
Inability to distinguish between important and unimportant information B	4	3.53	12	6	8	8	13	13	4.34	4.17
Failure to reach the depth of understanding required at tertiary level AB	4.34	3.35	3	11	9	9	23	23	4.27	4.04
Inability to use higher order thinking skills B	4	3.12	13	20	10	10	31	31	4.27	3.97
Poor literacy skills AB	4.34	2.63	4	32	11	11	24	24	4.27	4.04
Laziness or apathy AB	4.09	3.07	10	22	12	12	30	30	4.18	3.99
Inability to perform well in examination AB	3.91	3.25	15	15	13	13	6	6	4.13	4.25
Lack of a bridge between theory and practice B	3.47	3.31	25	12	14	14	11	11	4.11	4.19
Lack of insight into the field of study B	4.13	3.28	8	14	15	15	26	26	4.08	4.00
Low self esteem B	3.44	2.58	27	34	16	16	28	28	4.08	4.00
Inability to balance study and social commitments AB	3.69	3.29	16	13	17	17	4	4	4.05	4.27
Failure to approach lecturers/tutors for help AB	3.44	3.06	26	23	18	18	29	29	4	3.99
A perceived lack of relevance of course content AB	3.34	3.15	28	19	19	19	32	32	3.97	3.96
Lack of confidence AB	3.63	2.98	18	27	20	20	22	22	3.95	4.09
Inability to cope with stress AB	3.61	3.04	19	26	21	21	12	12	3.89	4.18
Lack of academic ability AB	3.94	2.86	14	29	22	22	36	36	3.89	3.75
Lack of a clear career goal AB	3.59	2.84	20	30	23	23	5	5	3.87	4.25
Assignments without clear standards or uncertainty about lecturers' expectations AB	3.66	3.43	17	9	24	24	35	35	3.76	3.77
Too many demands on students' time (work, travel, study, family) AB	3.56	3.71	21	3	25	25	8	8	3.74	4.20
Inappropriate assessment procedures used by lecturers AB	3.22	3.07	32	21	26	26	10	10	3.71	4.19
Lack of maturity AB	3.53	2.47	23	36	27	27	34	34	3.71	3.85
Personal or family crisis AB	3.53	3.04	24	24	28	28	19	19	3.66	4.12
Stress caused by financial problems AB	3.56	3.04	22	25	29	29	25	25	3.61	4.00
Heavy course workload AB	3.28	3.42	30	10	30	30	27	27	3.58	4.00
Fear of failure AB	3.34	3.15	29	18	31	31	21	21	3.58	4.11
Part-time job by full-time students AB	3.25	2.37	31	37	32	32	37	37	3.55	3.66
Uncertainty about relevance of course content AB	3.09	3.17	34	16	33	33	15	15	3.45	3.45
Textbooks available in only one language B	2.69	2.61	37	33	34	34	16	16	3.42	4.14
Inadequate university library facilities AB	2.72	2.52	36	35	35	35	33	33	3.36	3.91
Lecturers who do not understand the students' needs AB	3.06	2.75	35	31	36	36	14	14	3.34	4.16
Lecturers/tutors with unrealistically high expectations of students AB	3.13	3.43	33	8	37	37	20	20	3.29	4.11

2. A weak correlation (0.2703) between lecturers' and students' ratings of the factors that contributed to student failure.
3. A strong correlation (0.847) between the ratings given by first-year students and senior students with regard to factors contributing to success, and a reasonably strong correlation (0.632) on factors contributing to failure.
4. On the "failure" scale, the 21 items rated most highly by lecturers were all "student factors" (e.g. "inefficient time management"). However, the 21 items rated most highly by students included only nine "lecturer" factors (e.g. "boring presentations by lecturers").
5. Lecturers and first-year students rated regular attendance at lectures as highly likely to lead to success and irregular attendance as highly likely to lead to failure. Senior students, however, attached very little importance to the regular attendance of lectures.

Distance Education University

The results of the study at the University of South Africa are reported in detail in Killen, Marais and Loedolff (2003). The following major findings emerged from that study:

1. A strong correlation (0.8278) between lecturers' and students' ratings of the factors that contributed to student success.
2. A moderate correlation (0.4222) between lecturers' and students' ratings of factors that contributed to student failure.
3. On the "success" scale, very strong correlations between the ratings given by first-year and by second-year students (0.9686), between those given by first-year and by third-year students (0.9715), and between those of second-year and third-year students (0.9692).
4. On the "failure" scale, very strong correlations between the ratings given by first-year and by second-year students (0.9501), between those given by first-year and by third-year students (0.9444) and between those of second-year and third-year students (0.9617).
5. Similar strong correlations on both the "success" and "failure" scales for other student groupings based on language of instruction, home language and gender.
6. On the "failure" scale, "student factors" constituting all of the 16 items rated most highly by lecturers (e.g. "inefficient time management"), and four of the 16 items rated most highly by students being "lecturer" factors (e.g. "heavy course workload").

Comparison of the results from the two studies

In general terms a comparison of the two studies revealed the following:

1. In both studies there was stronger agreement between lecturers and students on factors contributing to success than on factors contributing to failure.
2. There were similar correlations between lecturers' and students' views on "success" at the two universities.
3. There was a stronger correlation between lecturers' and students' views on "failure" at the distance education university than at the contact university.
4. In both studies, there was stronger agreement between first-year students and students in later years on the factors contributing to success than on those contributing to failure. This trend was however much more evident at the contact university.
5. The views of students in different study years were much more consistent at the distance education university than at the contact university.

6. In both studies, there was a strong tendency for the lecturers to "blame" students for failure – indicated by low rankings for all factors under the direct control of lecturers.
7. In both studies students' rating of the importance of "written communications skills" was much lower than the rating given by lecturers.
8. In both studies, students rated support factors (e.g. "family support" and "positive influence of friends") higher than did lecturers.
9. Lecturers and students at the distance education university placed a higher premium on "consistent effort" than did their contact university counterparts.
10. Students at both institutions shared a common concern that "too many demands on students' time" would contribute strongly to failure, a view not shared by lecturers at either institution.

The 34 "success" items and 37 "failure" items that were shared by the questionnaires that were used in the two studies provide a means of making some direct comparisons across the two institutions.

On the "success" scale, the correlation between the ratings of the lecturers from the two institutions was 0.6163, indicating a reasonable level of agreement. In contrast, the correlation between the ratings of the first-year students at the two institutions was fairly low at 0.3886 and slightly higher at 0.4910 for the final-year students. These results suggest that lecturers, and to a lesser extent students, tend to see the importance of many of the factors that influence success at university as being independent of the mode of study. However it does not deny that they also regard other factors, such as lecture attendance at the contact university as very important.

On the "failure" scale, the correlation between the ratings of the lecturers from the two institutions was 0.8927, indicating a very high level of agreement. The correlation between the ratings of the first-year students at the two institutions was 0.5267, and this figure dropped to 0.4005 for the final-year students. The results suggest very strongly that lecturers' perceptions of the factors that potentially lead to student failure are substantially independent of the mode of study, whereas the on-campus and distance education students have less consistent views on many of these factors.

Discussion

Learner characteristics

In both studies there was strong agreement between lecturers and students on the "success" items that were rated highly. The "success" items that both lecturers and students ranked highly paint a picture of a self-motivated, hard-working student who can learn independently, prepare well for examinations and who has made a wise choice of course of study. Similar findings were also reported by Fraser and Nieman (1995, 95) emphasising the fact that self-discipline and self-control should be regarded as two important variables impacting on the performance of students studying at a distance. However, students were more likely than lecturers to include in their top rankings items such as "dedication to a career goal" and "willingness to accept a challenge". It was Tinto (1975, 96) who wrote that

(s)ufficiently high commitment to the goal of college completion ... might not lead to dropout from the institution" and "... the lower the individual's commitment to the goal of college completion, the more likely is he to drop out from college.

Student self-efficacy also features prominently in attempts to explain student success (Kleemann, 1994; McKenzie & Schweitzer, 2001). Research conducted by Fraser and Nieman (1995; 1996) emphasises the fact that many learners engage in distance education programmes with the main intention of preparing for a better future and better career opportunities, a factor that strongly influences their academic performance.

On the other hand, lecturers in the current study were more inclined to include in their top rankings items such as "regular and comprehensive feedback from lecturers" and "lecturers who can inspire students". The low ratings that students gave to these items may have been because they were not accustomed to receiving such feedback — a factor that would align with work done by Fraser and Nieman in 1995. These authors named the lack of lecturer comments on assignments, poor responses from lecturers on assignments and late return of assignments as some of the most important criticism levelled at their courses by South African distance education students.

Similarly, the items on the "failure" scale that were ranked highly by both lecturers and students paint a picture of a student who lacks self-discipline, puts in little effort, is unable to manage time effectively, does not prepare well for examinations and uses poor study techniques. These findings once again coincide with previous results listed earlier in this article (Fraser & Nieman, 1995, 95). To this student profile lecturers tended to add characteristics such as poor literacy skills, lack of perseverance and laziness.

Locus of control

Although the lecturers and students in both studies agreed fairly strongly about the typical characteristics of successful or unsuccessful students, there were noticeable differences if the data were interpreted from the perspective of locus of control. There was a clear tendency in both studies for the students to see themselves operating in an environment that is not under their control. This was evident, for example, in the tendency of students in both studies to rate factors such as "too many demands on students' time" and "lecturers with unrealistically high expectations" as strong contributors to possible failure. The distance education students added "heavy course workload" to this list, an indication that students working full-time and part-time could experience problems when having to meet the requirements set by programme co-ordinators. The same would apply to contact learners – according to Perraton, Creed and Robinson (2002, 12) who explain as follows:

A significant proportion of students (referring to distance learners) give up along the way and do not complete their courses. But this is true of all students working part-time and not a distinguishing mark of students learning at a distance.

On-campus students on the other hand added "boring presentations by lectures", "unclear assessment criteria" and "poor language abilities of lecturers", all of which pointed to a perception among students that final control over success or failure in their study environment was not in their own hands.

These views may be quite realistic. If a variable such as "heavy course workload" is brought into context with a high occupational workload or responsibility, then it becomes obvious why the latter is also regarded as an important variable influencing distance students' chances of achieving success at university (Fraser & Nieman 1995; 1996). Potter and Van der Merwe (1994, 195) were close to the mark when they remarked that attributes such as the ability to cope with an enormous workload, the ability to stay up to date with work and to show persistence in the face of adversity were important to academic success.

Weiner's (1979, 1986) achievement-motivation theory provides another plausible explanation of why students' perceived control over their success and failure may be different from that of lecturers. When students experience success or failure, the ensuing causal attribution can be classified according to locus (internal, external), to stability (stable, unstable), and to control (controllable, uncontrollable). According to Weiner, the attributions accorded to a particular event determine its influence on subsequent academic outcomes including expectations, effect, perceived control and behaviour. From this point of view, students' perceived reasons for success or failure may have a stronger influence on their persistence (or withdrawal) than the actual reasons. If a student attributes failure to a personal, stable cause (such as lack of ability), this will result in

lower motivation and a feeling of less control than when failure can be attributed to a personal, variable cause (such as lack of effort) or to an external cause (such as poorly written study guides). This view suggests that the tendency of many students in these two studies to attribute success to their own efforts and failure to factors controlled by their lecturers is consistent with their efforts to maintain self-esteem.

It should also be acknowledged that similar reasoning could help to explain lecturers' views of why students are successful or unsuccessful in their studies. If a lecturer is convinced that students' failure is the result of deficiencies in the students (such as low academic ability) or to inappropriate student actions (such as lack of effort), then the lecturer can maintain self-esteem (being happy in the belief that he/she is not responsible for the lack of success of some students). In the two studies discussed here, there was a clear tendency among lecturers to express such views. On the "success" scale, they ranked the factors that are under their own direct control (such as "regular and comprehensive feedback") well below the factors that were under the control of students (such as "timely and regular examination preparation"). This trend continued in the "failure" scale where lecturers gave low rankings to factors such as "heavy course workload" that are under their direct control.

Lecturers' expectations

Many of the interactions between lecturers and students at university are influenced by the lecturers' expectations of students. For example, lecturers set assessment tasks in which they expect a certain performance from students. It was evident in both studies that students placed a low priority on understanding lecturers' expectations but nevertheless thought that the expectations were "unrealistically high". There is a potential problem here, particularly when some of the lecturers' expectations are not made explicit. The explicit criteria are the ones that students are most likely to consider 'unrealistically high', but these may have less influence on students' success than the implicit criteria. Explicit criteria tend to be essentially quantitative (e.g. how long an essay needs to be, or what system of referencing is to be used), but the implied criteria tend to be qualitative (how well the student argues a case, how clearly ideas are expressed, and so on).

These hidden criteria are the measures that lecturers use to judge the quality of students' work and their importance to lecturers in the studies reported on in this article is reflected in the lecturers' high ratings for items such as "effective written communications skills", "ability to reason logically", "insight into the field of study" and "use of higher-order thinking skills". These are all factors rated more highly by lecturers than by students. It goes without saying that students will have difficulty meeting lecturers' expectations regarding what they are required to do, and to what standard, unless students understand these expectations. Many students seem to be unaware of this simple fact. Perhaps the students are very naïve or perhaps they have been experiencing success despite being ignorant of or confused about what was expected of them. Or perhaps they have been failing even when they mistakenly thought they understood what the lecturers expected of them.

This latter possibility seems to be indicated when, on the "failure" scale, students considered "lecturers/tutors with unrealistically high expectations of students" as much more likely to contribute to possible failure than did the lecturers themselves. There are several possible interpretations of this result. Perhaps the lecturers' expectations are too high. This could be the case if, for example, a lecturer expected students to read too much resource material or to demonstrate levels of understanding that were beyond the level that could reasonably be expected of undergraduate students. On the other hand, the lecturers' expectations may be quite appropriate and the students may either not understand the reasons for these "high" expectations or they may simply be confused about what the expectations are. An alternative explanation is that students' expectations with regard to workload and depth of understanding are unrealistically low. Taken together, these findings suggest a strong need for lecturers to have appropriate expectations of

their students, to make these expectations explicit and to explain to students why the expectations exist.

Emphasis on examinations

The findings of both studies reflect the strong South African emphasis on examinations. Lecturers in both studies rated "timely and regular examination preparation" as one of the top three "success" items and "inadequate or poor exam preparation" as one of the top two contributors to "failure". There was strong agreement on these points from students in both studies, with the exception of senior students at the contact university who had apparently experienced success without "timely and regular examination preparation". In both studies "effective examination techniques" were seen to be less important than "timely and regular examination preparation". In an investigation conducted by Lombard (1999, 230) in 1999, distance education students emphasised the fact that the nature of the examination has a significant influence on the learning styles accommodated by learners to command the learning environment. Lombard's investigation highlighted the fact that the "planning of study time", the "discussion of subject content", the "reading of prescribed material" and the "integration of discussion class notes with prescribed material" are only a few variables related to examinations that could eventually impact on the performance of especially distance learners in the examination. These findings support the work done by Fraser and Nieman (1995, 109).

Self-discipline

In both studies, lecturers and students strongly agreed on the importance of self-discipline and self-motivation as factors contributing to success, and lack of self-discipline as a factor contributing to failure. The lecturers in both studies and the students at the contact university saw lack of self-motivation as a factor that contributed strongly to failure. However, students at the distance education university saw this factor as a less important contributor to failure, possibly because they needed to be highly motivated to even commence their studies. The view expressed by distance learners, namely that in order to succeed at university they had to have more self-discipline and self-control with regard to their studies than other (contact) students, is completely in line with the findings of Fraser and Nieman (1995, 196).

Conclusions

A possible reason for the fact that there was stronger agreement about the factors that have the potential to lead to success than there was about factors that have the potential to lead to failure can be found in the different life experiences of the lecturers and students. In general, the students in the two studies had earlier experienced a high level of success (relative to their peers) in order to gain entry to university. Likewise, the lecturers had all experienced success in their school and university studies. Many of the "success" factors on which there was strong agreement (such as "self-motivation", "consistent effort" and "willingness to accept a challenge") had probably played a role in the prior successes of the lecturers and students who were involved in this study. These factors would be expected to contribute to success in almost any academic endeavour. The lecturers had the added wisdom that comes from years of observing the successes and failures of students. Many of the students in the two studies (particularly those in their first year at university) had not experienced failure at university and, therefore, may not have appreciated the potential problems that could be caused by poor literacy skills, not understanding what lecturers expect, and some of the other factors to which they gave a low rating.

It would be inappropriate to simply assume that lecturers' views are correct. It is more useful to consider the implications of the views held by both lecturers and students. Lecturers have a

responsibility to help all their students to be successful in their studies. To fulfil this responsibility, lecturers need to have a clear idea of why some students are successful in their studies while others are not. It seems from the results of the two studies discussed in this article that lecturers' perceptions of many of these factors are quite different from those of students. Unless lecturers know that their perceptions of factors influencing students' success are different from the perceptions of students, they can do little to address the problems caused by these differences. For example, if lecturers at the contact university do not know that many students consider the attendance at lectures to contribute little to their success, the lecturers may simply blame poor class attendance on student apathy. This will not help students at all. On the other hand, if lecturers know that students do not attend lectures regularly because they do not consider them to make a valuable contribution to their learning, the lecturers can try to address this issue. The first step would be for lecturers to identify why students perceive lectures to be unhelpful and then to try to address the issues that gave rise to the perceptions. The data in these studies provide some guidelines on how this task could be approached.

The students in both studies appeared to have realistic views on the factors that were likely to contribute to their success. They were also aware that certain factors, such as poor preparation for examinations, were likely to contribute to failure. However, there were several clear indications that students were underrating the importance of certain factors (such as effective communications skills) that are almost universally accepted (by lecturers at least) as important for success in higher education. This finding supports the results of other studies conducted in Southern Africa. For example, the importance of communications skills for distance education students was already emphasised by Fraser and Nieman in 1995 and 1996. More generally, the development of communication skills (especially for students whose mother tongue is not the language of instruction) has been found to contribute significantly to the improvement of the academic performance of university students (Ayaya 1996, 112). The present study suggests that this message is not getting through to students, so there is clearly a need for lecturers to help students develop a more realistic view of the importance of these factors.

It is the authors' view that the most important findings of the studies reported here are those that highlight differences in lecturers' and students' perceptions, because they have the greatest potential to deter lecturers and students from working collaboratively to maximise students' success. These differences therefore constituted the focus of the feedback provided to the participating universities. In each case, the recommendations focused on three issues: changes to teaching practices that might enhance the effect of positive factors on student learning and minimise that of negative factors (such as specifying outcomes and expected standards more clearly); guidelines for students to help them approach university studies in a way that will increase their chances of success (such as clarifying what lecturers expect of them); and changes to administrative practices that could result in a more supportive learning environment for students (such as reviewing assessment policies that mandate examinations, rather than permitting more appropriate forms of assessment).

Student success can never be guaranteed. However, if lecturers, students and administrators make the effort to develop a common understanding of the factors that contribute to students' academic success, they will make important progress towards that important goal. As Holmberg (2001, 44) suggests students who feel a strong personal connection with their learning institution are likely to be more motivated and to study more effectively. The studies reported here suggest that such personal connections might be difficult to establish unless students and lecturers enter into a dialogue that will lead them to a strong shared understanding of what might motivate students to engage persistently with their studies, and what might support their learning efforts.

References

- Aguti JN 2004. *A study of in-service distance education for secondary school teachers in Uganda: Developing a framework for quality teacher education programmes*. Unpublished PhD thesis. Pretoria: University of Pretoria.
- Amos TL & Fischer S 1998. Understanding and responding to student learning difficulties within the higher education context: A theoretical foundation for developing academic literacy. *South African Journal of Higher Education*, **12**(2), 17-23.
- Ayaya OO 1996. The prediction of academic performance in the first year: A case study at the National University of Lesotho. *South African Journal of Higher Education*, **10**(2), 101-113.
- Bargate K 1999. Mathematics as an indicator of success in first-year accounting programmes at Technikon Natal. *South African Journal of Higher Education*, **13**(1), 139-143.
- Bartz AE 1976. *Basic Statistical Concepts in Education and the Behavioural Sciences*. Minneapolis: Burgess Publishing Company.
- Bartz DE & Miller LK 1991. *12 teaching methods to enhance student learning: What research says to the teacher*. Washington, DC: National Education Association. (ERIC Document Reproduction Service No. ED340686).
- Behr AL 1985. The senior certificate examination as a predictor of university success. *South African Journal of Education*, **5**(3), 107-112.
- Chase C & Jacobs LC 1989. Predicting college success: The utility of high school achievement averages based on only "academic" courses. *College and University*, **64**(4), 403-408.
- De Villiers J & Rwigema H 1998. The effect of a bridging year on the graduation success of educationally disadvantaged commerce students. *South African Journal of Higher Education*, **12**(1), 103-108.
- Department of Education, 2001. *Education in South Africa: Achievements since 1994*. Pretoria: Department of Education.
- Downie NM & Heath RW 1974. *Basic Statistical Methods*. Fourth Edition. New York: Harper & Row Publishers.
- Fraser WJ & Killen R 2003(a). *Factors influencing academic performance at university: Perceptions of students and lecturers in education*. Paper presented at the Annual Conference of the Education Association of South Africa, Stellenbosch, January 2002.
- Fraser WJ & Killen R 2003(b). Factors influencing academic success or failure of first-year and senior university students: do education students and lecturers perceive things differently? *South African Journal of Education*, **23**(4), 254-263.
- Fraser WJ & Lombard E 2002. Prominent paradigms of performance and the dilemma of distance education to deliver. *Perspectives in Education*, **20**(3), 85-102.
- Fraser WJ & Nieman MM 1996. The diverse knowledge accessing modes of first-year distance students. *South African Journal of Higher Education*, **10**(2), 185-198.
- Fraser WJ & Nieman MM 1995. *The knowledge accessing modes, performance determinants and instructional preferences of first-year students at eight major distance education institutions in South Africa*. Research Report. Department of Didactics, Faculty of Education, University of South Africa. Pretoria: University of South Africa.
- Gainen J 1995. Barriers to success in quantitative gatekeeper courses. *New Directions for Teaching and Learning*, **61**, 5-14.
- Ginsburg E 1992. Not just a matter of English. *HERDSA News*, **14**(1), 6-8.
- Graham LD 1991. Predicting academic success of students in a Master of Business Administration program. *Educational and Psychological Measurement*, **51**(3), 721-727.
- Guilford JP 1956. *Fundamental Statistics in Psychology and Education*. Third Edition. New York: McGraw-Hill Book Company, Inc.
- Holmberg B 2001. *Distance Education in Essence. An overview of theory and practice in the early twenty-first century*. Studien und Berichte der Arbeitstelle Fernstudienforschung der Carl von Ossietzky Universität Oldenburg. Volume 4. Oldenburg: Carl von Ossietzky Universität Oldenburg.
- Howell DC 1999. *Fundamental Statistics for the Behavioral Sciences*. Fourth edition. Pacific Grove: Duxbury Press.
- Jacobs G & Gravett S 1998. University lecturers' conceptions of their teaching role. *South African Journal of Higher Education*, **12**(1), 54-60.

- Jawitz J 1995. Performance in first- and second-year engineering at UCT. *South African Journal of Higher Education*, **9**(1), 101-108.
- Johnes J 1990. Determinants of student wastage in higher education. *Studies in Higher Education*, **15**(1), 87-99.
- Killen R 1994. Differences between students' and lecturers' perceptions of factors influencing students' academic success at university. *Higher Education Research and Development*, **13**(2), 199-212.
- Killen R & Fraser WJ 2002. *Success and failure in tertiary studies: Perceptions of students and lecturers*. Paper presented at the Annual Conference of the South African Association of Educators, Pretoria, South Africa, 26-29 September.
- Killen R, Marais A & Loedolff P 2003. Success and failure in distance education: Perceptions of South African students and lecturers in Business Management. *South African Journal of Higher Education*, **17**(2), 147-158.
- Kleemann GL 1994. Achieving academic success with ethnically diverse students: Implications for student affairs. *NASPA Journal*, **31**(2), 137-149.
- Lahmers A & Zulauf C 2000. Factors associated with academic time use and academic performance of college students: A recursive approach. *Journal of College Student Development*, **41**(5), 544-556.
- Larose S & Roy R 1991. The role of prior academic performance and nonacademic attributes in the prediction of success of high-risk college students. *Journal of College Student Development*, **32**(2), 171-177.
- Lombard E 1999. *'n Krities-opvoedkundige ondersoek na die akademiese onderprestasie van afstandsonderrigstudente aan die Universiteit Vista (A critical educational investigation into the academic underperformance of distance education students at Vista University)*. Unpublished DED thesis. Pretoria: University of South Africa.
- McKenzie K & Schweitzer R 2001. Who succeeds at university? Factors predicting academic performance in first year Australian university students. *Higher Education Research and Development*, **20**(1), 21-33.
- Meyer JHF 1990. Individual study orchestrations and their association with learning outcome. *Higher Education*, **20**(1), 67-89.
- Ministry for Education 2001. National Plan for Higher Education. Pretoria: Ministry for Education.
- Minium EW 1970. *Statistical Reasoning in Psychology and Education*. New York: John Wiley & Sons, Inc.
- Mulder JC 1989. *Statistiese Tegnieke in Opvoedkunde*. Pretoria: HAUM Opvoedkundige Uitgewery.
- Ntshoe IM 2002. National plan for higher education in South Africa: a programme for equity and redress or globalised competition and managerialism? *South African Journal of Higher Education*, **16**(2), 7-10.
- Paras J 2001. Crisis in mathematics education. Student failure: challenges and possibilities. *South African Journal of Higher Education*, **15**(3), 66-73.
- Perraton H, Creed C & Robinson, B 2002. *Teacher Education Guidelines: Using Open and Distance Learning. Technology – Curriculum – Cost – Evaluation*. Higher Education Division, Teacher Education Section. Paris: UNESCO.
- Potter C & Van der Merwe E 1994. Academic performance in Engineering. *South African Journal of Higher Education*, **8**(1), 193-215.
- Riggs IM & Riggs ML 1990-91. Predictors of student success in a teacher education program: What is valid, what is not. *Action in Teacher Education*, **12**(4), 41-46.
- Schmelzer RV, Schmelzer CD, Figler RA & Brozo WG 1987. Using the critical incident technique to determine reasons for success and failure of university students. *Journal of College Student Personnel*, **28**(3), 261-266.
- Tait M, Van Eeden S & Tait M 2002. An exploratory study on the perceptions of previously educationally disadvantaged first-year learners of law regarding university education. *South African Journal of Higher Education*, **16**(2), 177-182.
- Talbot GI 1990. Personality correlates and personal investment of college students who persist and achieve. *Journal of Research and Development in Education*, **24**(1), 53-57.
- Tinto V 1975. Dropout from Higher Education: A Theoretical Synthesis of Recent Research. *Review of Educational Research*, **45**(1), 89-125.
- Van Eden R, De Beer M & Coetzee CH 2001. Cognitive ability, learning potential and personality traits as predictors of academic achievement by engineering and other science and technology students. *South African Journal of Higher Education*, **15**(1), 171-179.

- Weiner B 1979. A theory of motivation for some classroom experiences. *Journal of Educational Psychology*, **71**, 3-29.
- Weiner B 1986. *An attributional theory of motivation and emotion*. New York: Springer-Verlag.
- Wood T 1998. Issues relating to the cognitive development of students at historically disadvantaged institutions. *South African Journal of Higher Education*, **12**(1), 87-94.