CHAPTER 1

FIRST-YEAR EXPERIENCE AS TERRAIN OF FAILURE OR PLATFORM FOR DEVELOPMENT? CRITICAL CHOICES FOR HIGHER EDUCATION

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Introduction

The traditional image of the first year at university is one of exciting intellectual and personal discoveries, independence in thought and behaviour, widening horizons, and growth in confidence. This is close to reality for some students, but for many others – in fact, perhaps the majority in South Africa – the experience is marred by failure, loss of confidence, and perhaps disillusionment. This has far-reaching consequences for the individual, for the development of South Africa's talent, and thus for social, economic and political well-being. If this situation is avoidable, surely all reasonable efforts should be made to avoid it.

Conditions in higher education in South Africa since the political transition are in some respects reminiscent of the post-World War II period of what was then unparalleled expansion of universities, taking place in the context of extensive social change. Many new universities were built in developed countries, particularly in the 1960s, in response to increasing demand for participation. (This was also a period of new universities in South Africa, but for a rather different reason: the grand-apartheid-driven need to establish separate facilities for each of the main ethnic or language groups.)

The sixties' inclusionary optimism was tempered relatively soon, however, when it became evident that university failure and drop-out rates were rising along with rising enrolments. It was in the 1970s, then, that specialised units dedicated to researching and addressing this problem were established in many higher education institutions, in the form of, for example, 'bureaux for university teaching' and 'teaching methods' units. There was a special concern about particularly high attrition rates in the first year. This led in time to the establishment and international growth of the 'First-Year

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Experience' (FYE) movement, as well as a research industry on student learning and factors affecting performance and persistence.

The last two decades have seen another surge in demand for participation in higher education around the world, often government-driven and associated with rapid economic and social change. The demand has been accommodated not only by some building of new institutions (particularly in developing countries and through growth in private higher education), but also by the restructuring of higher education systems and the conversion of many non-university institutions – such as polytechnics and colleges – into universities or universities of technology. In South Africa, after some false starts, higher education enrolment has almost doubled since the early 1990s (Council on Higher Education [CHE], 2004:65), and the institutional 'landscape' has been substantially reconfigured through mergers and the establishment of universities of technology and 'comprehensive' universities.

While there has been concern about student attrition in South Africa for decades, this has sharpened in recent years with the identification of high-level skills shortages as a key obstacle to development and with the production of the first system-wide longitudinal (cohort) studies of the undergraduate¹ intake by the Department of Education (DoE). As is discussed later, there is unfortunately ample justification for the concern, not least in relation to the longstanding issue of first-year performance.

In view of the importance of success in higher education, for development as well as the individual, this must raise the question of what has been achieved since the 1970s. How much have we learnt and what have we done about improving student learning and reducing attrition? A key underlying question is, given the exponential growth in research on teaching and learning and knowledge over the last thirty years, why does it seem so hard to bring about positive change?

Prima facie, there are some clear reasons for the difficulty of advancing the educational agenda in higher education. In the contemporary world, there is strong and increasing competition for academics' time, energy and creativity. While it is commonly asserted that teaching and research are integrally linked, many academics experience a direct tension between these core scholarly functions in their day-to-day lives. The forms of research that most readily bring reputational and material reward – that is, work leading to countable outputs such as short articles in specialised journals – often have little bearing on effective undergraduate teaching. Moreover, in the last century or two, valorising research over teaching has become embedded in academic culture and identity. At the same time, 'teaching' in all its facets has become more difficult, with major changes in student intakes and contestation over the purposes of higher education. Teaching itself, therefore, requires more knowledge and effort.

The regrettable dichotomising of teaching and research has the effect of forcing academics to make choices about what they give their time and scholarly effort to. In these circumstances, in view of the prevailing academic culture and reward system,

¹ For the sake of brevity, certain terms are used generically in this chapter. Thus 'undergraduate' refers to diploma as well as degree study.

it should not be surprising that it is hard to substantially improve the effectiveness of the educational process. In fact, it must be asked whether it is not unrealistic or naïve to expect any greater educational focus unless there is a compelling vision or need for change.

In South Africa and other developing countries, this question does not necessarily suggest defeatism, since there is a compelling need for change. In this sense, the severity of the problems in higher education may serve to focus attention on the challenges. If an alternative vision is to be developed, however, there is clearly a need for the big issues confronting the sector to be delineated as sharply as possible – for the state and the public as well as the academic community – and for tensions to be faced. This chapter is based on the contention that choices are continually being made within the sector that have critical implications for the nature and outcomes of the learning experience of the great majority of South African students. However, the choices are often implicit or unconscious, or based on a narrow view of what is at stake. To contribute to the debate, the chapter outlines an argument for the importance of improving the educational process in higher education, with particular reference to the first-year experience, as a basis for identifying and understanding the significance of some high-level choices that affect the role and contribution of the sector.

It should be noted here that arguing for the importance of improving teaching and learning is not intended to imply that the universities' responsibilities for knowledge production are somehow less significant – which is patently not the case, particularly in emerging economies – but rather that it is in the country's vital interests that a productive balance should be found.

Undergraduate performance patterns in South Africa

The significance of the first-year experience

The first year of higher education is an educational stage with powerful influence on future success, for the individual student and the sector as a whole. The first-year experience, in terms of cognitive, personal and social development, largely determines students' first-year performance, which in turn is a key foundation for advanced study (including postgraduate study, which is vital to intellectual development in all spheres, including the future staffing of the universities). The quantity and the quality of the country's graduate outcomes have major implications for social, political and economic development, particularly in a context of scarcity of skills.

It follows that it is critical to the health of the sector that there is regular analysis of what is happening in the first year across the universities. Some key characteristics of the first year are discussed later but this section focuses on using quantitative data to shed light on student performance in the first year and what follows in undergraduate programmes.

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A note on sources

The quantitative data and some related analysis used in this chapter are drawn from a study of sector-wide undergraduate performance patterns that formed part of a research project commissioned by the CHE, the report on which was published by the Council as *Higher Education Monitor 6* (Scott, Yeld & Hendry, 2007). Aspects of the implications of the data, along with summaries of key points, are elaborated on in Scott (2009a, 2009b) and Yeld (2009).

The quantitative analysis undertaken in the CHE project was based on cohort studies of the 2000 and 2001 first-time-entering undergraduate intakes conducted by the DoE. This was the first sector-wide work of this kind in South Africa. In these studies, the performance of students is tracked for up to five years, until they graduate or leave their original institution. Cohort data of this kind are regarded as the most reliable longitudinal measure of student performance.

The brief summary of key data from the 2000 cohort study that follows is presented as necessary background to and evidence for the analysis in the body of the chapter. The 2001 study is not fully comparable because data are missing from some institutions, but the performance patterns it reflects are essentially the same.

Participation in higher education

One of the key characteristics that distinguish between different kinds of higher education systems internationally is participation rates. The measure used here is the Gross Enrolment Rate (GER) favoured by UNESCO, which is the total number of students in higher education (of any age-group) in a given year, expressed as a percentage of the 20 to 24 year-old age-group in the population.

South Africa's overall GER is 16%, which is lower than that of economically comparable countries and very low in comparison with the rates in developed countries, where the minimum is about 60%. This situation indicates the need for overall growth in higher education. The racial inequalities in participation indicate where that growth must predominantly come from: the white and Indian rates are 60% and 51% respectively, while the black African and coloured rates are both 12%. Since black and coloured enrolment has doubled over the last two decades to now comprise some 70% of the total (DoE, 2009), the continuing disparities in participation rates come as a surprise to many in the sector, but are nevertheless the most telling measure of access.

A key implication of the participation rates is that the black and coloured students who enter higher education are a highly selected group, representing by and large the top decile of their groups in terms of achieved performance. If intelligence or educability is randomly distributed across populations, the black and coloured intake must collectively have high potential to succeed. This contradicts the common view in the academic community that many (particularly black) students in the intake 'do not belong' in higher education. This anomaly is a critical aspect of the character of the South African higher education sector, and is discussed later.

Given the significance of improving graduate output, it is essential to know what becomes of the current intake, not only because this information is important in itself, but also because it must be taken into account in assessing prospects for future growth. The following sections offer a brief outline of current performance across the sector.

Performance in the first year

The cohort studies and other data sources (e.g. Letseka & Maile, 2008) show that about 30% of the undergraduate intake drop out or are excluded at the end of their first year. This means about 45,000 students from the present annual intake of about 150,000. If only 'contact' students are considered (that is, excluding distance education students), the attrition rate is over 20%.

It is true that there are high first-year attrition rates in many tertiary education systems, but particularly in developed countries this usually occurs in a context of high levels of participation in higher education. This is not the case in South Africa. Here a combination of low participation and high attrition, in an environment of scarce skills and major social and economic challenges, is a threat to development and a contributor to the widening of the North-South divide.

Moreover, the experience of failure in first year goes well beyond those students who drop out at this time. Many others fail one or more courses, or pass only very marginally. This indicates less than adequate grasp of their areas of study, which in many cases has a cumulative effect and leads to demoralisation and terminal failure in the senior undergraduate years, as reflected in the data that follows.

It is of course also true that students drop out for a range of reasons, including financial and personal ones, which feature commonly in surveys of factors affecting retention. However, there is at present little if any systematic knowledge of the relationship between students' academic performance and the decision to drop out 'voluntarily'. A shortcoming of retention research that depends on anonymous responses and self-reported reasons is that it cannot verify any associations between drop-out and performance. It may be postulated that, as the cost of higher education rises, it is possible that students' perceptions of their likelihood of succeeding influence decisions on whether or not to continue investing in their studies. Research on this topic could make a significant contribution to understanding attrition patterns.

Overall undergraduate performance

The 2000 cohort study provides telling data on sector-wide student performance. After five years, only 30% had graduated, and 14% were still in the system. Even with fairly optimistic estimates of eventual success among the latter students and inter-institutional transferees, the cohort completion rate will not exceed 45%. In the contact university programmes – the best-performing sub-sector – only 50%

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of the cohort graduated within five years. Performance in the contact ‘technikon’² programmes was notably lower: after five years only 32% had graduated.

Disaggregating the data by qualification type and broad subject category shows that this kind of pattern is found in all the major qualification types – general and professional first degrees and national diplomas – and most of the broad subject categories. Even when distance education students are omitted, the five-year graduation rates in first degrees in key subject areas (e.g. Business and Management, Life and Physical Sciences, Engineering, Law, Languages and Social Sciences) are around or below 50%. In national diplomas in similar key subject areas the rates are below 35%.

The net effect is a ‘loss’ of about 65,000 of the then-intake of 120,000. This compounds the attrition in the first year, and is an indicator that many first-year survivors did not gain firm enough academic foundations to support them through their programmes. Failure to realise student potential on this scale is clearly highly damaging to the economy and the wider development agenda.

It is also damaging to the future of the academy itself in that the pipeline to postgraduate study, and thus *inter alia* to new generations of academic teachers and researchers, is seriously obstructed. South Africa’s increasing investment in postgraduate students – aiming to radically boost the output of PhDs because South Africa is far behind the developed world in this respect – is unlikely to gain an optimal return until the undergraduate base of the system is greatly strengthened.

Equity of outcomes

Arguably the most disturbing figure to emerge from the cohort analysis is that under 5% of the black 20 to 24 age-group succeed in public higher education and graduate with a recognised qualification.

The 5% black success figure arises from a combination of the low participation rate and high attrition. The latter is illustrated by the fact that while no student group is doing well – white first-degree graduation rates being commonly in the 60-70% range in first degrees and well under 50% in national diplomas in the main subject areas – black graduation rates are in almost all cases below 35%, even in contact institutions. The net effect is that the progress made in equity of access is effectively nullified by lack of progress in equity of outcomes.

The current situation means that equity in higher education remains a key goal, both in itself – in the interests of social justice and stability – and as a necessary condition for development. South Africa’s participation and performance patterns show clearly that equity will always have two components. The racially-skewed participation rates show that, despite growth in black enrolment, equity of access is still far from being achieved. Without equity of outcomes, however, equity of access is largely meaningless. It is the outcomes that count, for the individual and the society.

² Technikons were still in existence when the cohorts studied entered the system. Although the institutional form has changed, the programmes they offered have continued, so the term ‘technikon’ is used here to denote these.

A status quo in which under 5% of 20 to 24 year-olds in the majority population group are succeeding in the public higher education system is not sustainable. The participation and performance patterns have major implications for policy, priorities and choices in higher education in South Africa, as discussed in the body of this chapter.

Significance of the performance patterns

The following are some summary observations on what the participation rates and performance patterns mean for the education system and the country:

- ▣ The graduate output of the higher education sector is not meeting the country's needs in relation to economic growth or equity and redress, with consequences for all forms of development. Improving graduate output, in terms of numbers, mix and quality, is essential for South Africa's future.
- ▣ The central shortcoming is that the system has not managed to transcend the apartheid legacy and is still not successfully accommodating the previously disadvantaged majority.
- ▣ The performance patterns are persistent, so increasing enrolment without improving the effectiveness of the educational process will perpetuate or exacerbate the wastage of talent, and/or will result in compromising quality and standards.
- ▣ It is clear from the participation and performance data that graduate growth must come mainly from the black and coloured student groups. Since, as the figures show, the majority of the students from these groups are failing to progress through the current higher education system, equity of outcomes is the key challenge.
- ▣ It follows that systemic educational approaches that are designed to address equity and educational diversity are critical for substantially improving graduate output to meet national needs. Thus the 'equity' and 'development' agendas (Wolpe, Badat & Barends, 1993) have converged, one not being achievable without the other.

The high stakes involved in addressing this situation justify concerted action. However, as there is contestation – explicit and tacit – about where and by whom such action should be taken, it is necessary to address this question before considering what is to be done, and what choices are involved.

Where does responsibility for improving student performance lie?

A key question that underlies attitudes to higher education performance is where responsibility lies for improving it. It is outside the scope of this chapter to discuss the merits of the various views on this issue in any detail, but the following is a brief outline of salient points.

It is widely agreed in South Africa that the performance of the school system, with its continuing inequalities associated with embedded socio-economic conditions, is the primary cause of students' being underprepared for conventional forms of higher education (e.g. Slonimsky & Shalem, 2005; Yeld, 2009). Universities commonly attribute the performance problems in higher education virtually exclusively to these

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factors, which are beyond their control, and do not see it as the responsibility of higher education to compensate for poor schooling.

However, if the academic community is relying on improvement in external conditions to raise performance in higher education, it needs to realistically assess the prospects for such improvement. The analyses can be complex but the following points are relevant:

- ▣ Poverty is not going to be eradicated in the foreseeable future, and socio-economic conditions that give rise to educational inequalities and disadvantage will remain.
- ▣ A range of analyses strongly indicate that there is little or no prospect of substantial improvement in the outcomes of schooling, at least in the medium term and at least of the order that would deliver a sufficient number of well-prepared school-leavers to meet higher education's recruitment needs (Bloch, 2008; Scott *et al.*, 2007:31-37).

It is argued that, in these circumstances, it is necessary on pragmatic grounds for the higher education sector to identify factors affecting student performance that are within its control, and to act on these to the best of its ability. There is also an argument that, on the grounds of principle, higher education should take a share of the responsibility for transformation by doing whatever is reasonably within its control to successfully accommodate talented but disadvantaged students.

Whatever the argument, the higher education sector has a fundamental decision to make on whether it is willing to review its own mainstream practices with the purpose of addressing the realities of students' prior learning experiences, or whether it accepts the status quo. The following sections offer an outline of what might be done in higher education, and some key choices involved.

What is to be done? The significance of the first-year experience

If we look at the performance patterns with the aim of determining what can be done to improve them, the first undergraduate year clearly emerges as a key area for intervention. Not only is it the stage of greatest attrition itself, but shortcomings in first-year students' development of fundamental conceptual knowledge, academic literacies and learning approaches are likely to have a cumulative effect that leads to poor performance or failure in later years.

Because it must allow for important changes in learning mode, the curriculum in the first year, more consciously than in any other phase, has to be Janus-faced, looking back and forward. It is therefore important that the first year should be treated as a special but not discrete stage of the educational process. Particularly in the realities of the South African context, the first year has to be a platform for developing students' academic potential in new modes of learning, and consequently carries unique opportunities and attendant responsibility to the individuals involved and to the country. However, the design of the first-year experience must be based as much on

understanding of the student learning experiences that come before it as on the need to prepare for what is to follow. It is a key section of the educational pipeline.

As the performance patterns show, however, the challenges for undergraduate education do not stop at the first year. In fact, concentrating exclusively on the introductory undergraduate phase – including foundational provision – can have the unintended and highly undesirable consequence of just deferring failure, if articulation with the senior years is not smooth and if the educational process in these years is not effective.

Given the high stakes involved, then, it is important that the design and delivery of the undergraduate curriculum (with special reference to the first year) – and the key choices underlying its nature – should be judged against the significance and wider purposes of undergraduate education in the South African context. The following sections identify and discuss three broad choices that have a fundamental bearing on the character and outcomes of the higher education system.

Choice One: Who belongs in higher education in South Africa?

In South Africa, the interface between secondary and higher education is the first point in the system where completing the preceding educational phase does not entitle the learner to enter the next one. Admissibility to higher education is controlled by minimum requirements stipulated in national legislation, but equally importantly by the right of higher education institutions – enshrined in the Higher Education Act (DoE, 1997a) – to individually set their own entrance criteria. This means that there is choice, on the part of the state and the universities, about who is accommodated in higher education. The choice is of course constrained by considerations of affordability in terms of student numbers; but how the enrolment is made up is influenced by a range of factors that – apart from external ones like supply-and-demand and the constitutional mandate for affirmative action – arise from choices made within the academic community, such as in institutional missions and admission policies.

Perhaps the most fundamental factor, however, is psychological ownership of the student intake – that is, the extent to which the academic community intrinsically accepts responsibility for accommodating the student body that is admitted to the sector. As outlined earlier, South Africa's participation rates indicate that the black and coloured intake represents a selected group that should have a high probability of succeeding in higher education, yet there is a widely-held academic view that many of these students are 'not university material' and should not have been admitted. This view either conflates preparedness and potential, or reflects a belief that the university should not be expected to take responsibility for developing the potential of underprepared students. Underpreparedness can be addressed, but this is unlikely to be undertaken successfully if responsibility for it is not accepted or 'owned' by the academic community.

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Beliefs about ‘who belongs’ in higher education have far-reaching consequences for institutional culture and how things are done in the design and teaching of the curriculum. There are of course critical differences within and between academic units and institutions, but the net effect of the choices determines much of the character and contribution of the institutions and the sector as a whole, thus powerfully influencing who benefits from higher education.

As the performance patterns and participation rates indicate, there are justified concerns not only about provision for the current intake but also about the capacity of the sector to accommodate future growth of the order needed to address pressing social and economic needs. This means that surfacing and publicly debating the choices being made is critical to the future direction of the higher education sector.

It is evident that the beliefs in the academic community about who belongs in higher education stem from deeply-held and possibly unarticulated ideology, values and world-views. However, notwithstanding insightful analyses of academic ideology (e.g. Becher & Trowler, 2001), there is a lack of research on relationships between values- or ideology-based academic attitudes and actual higher education practices in South Africa. Given the importance of the effects, such research is needed. In the absence of it, the following are observations arising from Academic Development (AD) experience in South Africa.

Broad clusters of beliefs in the academic community about who should be accommodated in higher education include the following:

- ▣ University education should be highly exclusive but there is inadequate or misguided control over admissions, so the first year in particular should function as a filter, rooting out students who are not university material. Associated with these views may be a pride in high failure rates as an indicator of high standards.
- ▣ In contrast, there are views, most frequently in institutional executive management, that espouse strong enrolment growth as a key means of increasing institutional income and prosperity. Such approaches are not necessarily accompanied by willingness to invest resources in facilitating the success of a wider student intake.
- ▣ A third cluster favours inclusiveness, for reasons of social justice and/or economic, social and cultural development. Where well-intentioned approaches are not followed through in institutional practices, however, there are usually unintended consequences that can negate the desired effects.

It is clear even at the surface level that these views and the interests behind them are in conflict. For example, the academic staff and management positions referred to in the first two clusters are in direct opposition when the staff see themselves as carrying the burden of growing enrolment without any worthwhile academic, professional or material *quid pro quo*.

Analysing the contrasting views depends on deeper exploration of the understandings and interests underlying them. For example:

- ▣ What ideas of intelligence or educability underlie strongly exclusive views, generally or in relation to specific areas of study? Is there acceptance that intelligence or intellectual capacity is randomly distributed across populations, or do views of differential capacities or aptitudes between ethnic groups remain, and if so, on what basis? Do these views distinguish between ‘ability’ (commonly regarded as a fixed attribute) and ‘potential’? If so, what should be the response to the skewed participation and success rates in South African higher education?
- ▣ Similarly, do exclusive beliefs involve the view that the parameters of higher education study, including entry levels and assumptions, are universally standard? Are there specific forms and levels of mediation that are acceptable or unacceptable in higher education? What may be the implications of this for dealing with different levels of preparedness for undergraduate study?
- ▣ What understandings of ideas, such as ‘academic potential’ and underpreparedness, inform inclusive views? Perhaps more importantly, what is the understanding of student diversity and how it may be catered for in the educational process? Under what conditions, if any, should students from different educational backgrounds be treated differently in the educational process?
- ▣ How do the various viewpoints respond to the idea of higher education having obligations to address national needs? To what extent do South African institutions and academics endorse the recently expressed ‘Oxbridge’ view that universities cannot be used as ‘engines for promoting social justice’ (Harris, 2008). Similarly, to what extent is it higher education’s responsibility to serve the needs of the economy?

The performance patterns suggest that the contending views on the identity and role of higher education in South Africa are not proving productive. Rather than leading to vibrant, generative debate and creativity, the conflicting positions seem to be embattled or resistant to informed argument. Given that these positions influence matters of great importance to many individuals and the country at large, their net effect should surely not be left in its current stasis. Clear leadership, informed by research and theorised argument, is needed to ensure that conflicting positions are identified and openly debated and their likely consequences confronted – not in the expectation that ideological differences will be resolved, but rather so that creative responses may be identified as a basis for transparent and justifiable policy-making and implementation.

The question of who belongs in higher education in South Africa is central in this. Likewise, what should drive the choice? Is it a traditional conception of who is prepared for standard forms of higher education, or a conception of what the country needs? There are tensions and risks in both.

Whatever decisions are reached on who belongs, it is essential that they be followed through responsibly. As argued earlier, in circumstances of diversity linked to inequalities, focusing on access alone has strongly negative consequences for outcomes. Genuinely accommodating the diverse intake that is needed for development means ensuring that the educational process, in terms of design and teaching practices, is

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aligned with the students' legitimate learning needs, so that they have a reasonable chance of succeeding. Access without success is a hollow achievement, does little or nothing to meet South Africa's social and economic needs, and may erode public support for the higher education sector.

This chapter has argued, on the basis of the performance patterns, that it is essential for the higher education sector to accept responsibility for genuinely accommodating at least the current student intake. The choice made about 'who belongs' has profound consequences for the identity of the sector and its contribution, and for the approaches to teaching and learning needed to fulfil the sector's obligations. The following sections outline some key choices about the educational process that need to be made in order to follow this through.

Choice Two: The shape of the undergraduate curriculum

The curriculum – its nature, content and organisation – is fundamental to the educational process, enacting the faculty's educational philosophy and purposes. The broad structure and parameters of the formal curriculum constitute a framework that strongly influences what can be done in the teaching and learning process, which in turn strongly influences who succeeds and fails in it. The design of the curriculum framework is therefore enabling or limiting for different student groupings, depending on the extent of alignment between the assumptions of the curriculum and the preparedness, capabilities and orientation of the students.

Given the wide variation in curricula internationally, it is clear that the way they are constructed is subject to choice. In South Africa, the macro-structure – for example, the minimum duration, minimum entry level and basic credit system – is determined by the state through the qualifications framework, reinforced by the public higher education funding system. History, custom and social factors, such as what the labour market, professional bodies and the public are used to, have the effect of maintaining stability (or inertia) in the macro-structure. Changing the qualifications framework is thus a significant undertaking, but it is feasible if the will to change is sufficiently strong, as shown by the Bologna Process curriculum reform initiative in the European Union (see, for example, European University Association [EUA], 2008).

The performance patterns outlined earlier point to a mismatch between the existing system and the profile and learning needs of the majority of the student intake. This mismatch is most evident at the interface between secondary/further and higher education. The 'articulation gap', which is seen as a major cause of under-performance and failure at first-year level and beyond (DoE, 1997b; Scott *et al.*, 2007:42-43), is a systemic fault that is manifested in a range of ways, including a shortage of qualified candidates for key programmes, particularly high first-year attrition, and the fact that only a minority of contact students (well under one-third) graduate in the regulation time formally allocated to degree and diploma programmes.

The latter phenomenon is widespread across qualification types and subject areas. Leaving aside distance education, in the main subject areas the rate of graduation in

regulation time is largely in the 20-30% range in general three-year degrees, mainly under 35% in the 'elite' four-year professional degrees, and well under 20% in national diplomas. As in the other performance patterns, there are major disparities by race. Table 1.1 illustrates the generally low rates and the particular severity of the position in relation to black students.

Table 1.1 Graduated in regulation time (3 years): General academic first B-degrees, excluding UNISA

Subject area (CESM)	Black	White
Business/Management	11%	43%
Life and Physical Sciences	11%	35%
Mathematical Sciences	13%	33%
Social Sciences	14%	43%
Languages	13%	52%

Source: Scott, Yeld and Hendry, 2007:26

It is clear from the figures that the great majority of students, particularly black students, are not able to follow the standard degree and diploma curricula as they were planned and designed. In other words, the structure of South Africa's core undergraduate qualifications is not effective for the majority of the current intake. It will become increasingly less effective in future if there is growth in enrolment, which will mean a higher proportion of underprepared students being admitted.

Detailed discussion of curricular shortcomings is beyond the scope of this chapter but some summary points can be noted:

- ▣ Given South Africa's demographics and persistent inequalities, the student intake into many individual universities, as well as the sector as a whole, is necessarily highly diverse, to the extent that it is probably not possible for any inflexible, one-size-fits-all curriculum structure to meet the learning needs arising from such different educational and linguistic backgrounds.
- ▣ A key shortcoming is that the 'looking back' aspect of first year's Janus-like character has been neglected for a long time. The assumptions on which traditional first-year courses are based originated in a period when the intake was predominantly homogeneous and privileged, and have not changed to match the major diversification of the student body over the last three decades. The continuing emphasis on what prior learning experience entrants 'ought' to have gained disadvantages even the most talented students from different realities.
- ▣ Some encouraging success has been achieved with foundational provision and extended curriculum programmes, which directly address the systemic articulation gap through taking account of the realities of students' prior learning rather than the 'oughts'. Valuable lessons have been learned from this work over the last two decades, confirming the need to 'look back' but also underlining the importance

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of following through on well-designed introductory courses by reviewing the structure of the rest of the curriculum. Issues arising from student diversity do not disappear in the senior years.

- ▣ Extended curriculum programmes have been used by most institutions as a means of extending access to students who do not meet regular admission criteria, rather than for improving the success rates of at-risk ‘mainstream’ students. The performance data show that there are large numbers in the latter category who fail or drop out, and it is this category in particular that would be most likely to benefit from a different curriculum structure.

In short, AD experience, supported by the performance patterns, indicates that because of failure to effectively address the diversity of the intake and systemic problems, such as the articulation gap, the traditional curricula are an obstacle to success for large numbers of students, arguably the majority. This points clearly to the need for mainstream curriculum reform, including extending the formal time allocated to core degree and national diploma programmes.

Curriculum reform of this kind – in shorthand, moving to the ‘four-year degree’ as the norm – must focus primarily on the central issue of successfully accommodating the majority. However, it would also be a unique opportunity to create curriculum space for meeting key contemporary needs, such as:

- ▣ allowing for diversity of educational background through a flexible structure;
- ▣ balancing breadth and depth through enabling students to experience a wider range of subjects – or fresh perspectives on apparently familiar ones – before having to commit themselves to a specific disciplinary direction;
- ▣ balancing the local and the international; and
- ▣ allowing for the development of capabilities in academic, quantitative and information literacies and in a local or foreign language.

Additional curriculum space is particularly important in the introductory phase of higher education. There are certain critical aspects of learning that are most effectively addressed at this level, including the development of concepts, skills and epistemological understandings that are foundational to successful tertiary study.

Choice Two comes down to a preliminary and a substantive question:

- ▣ In whose interests is it to maintain the status quo in the curriculum?
- ▣ Do we – the state and the academic community – have the vision and the will to make the effort necessary to change our inherited curriculum structures to meet contemporary South African needs?

Choice Three: Giving value and ‘attention’ to the educational process

As said earlier, the undergraduate years, especially the first year, are potentially a time of great intellectual stimulation and personal growth. However, it would be hard to claim that the higher education system is doing justice to the opportunities and responsibilities involved when so many students are diminished by the experience.

Perhaps the core challenge in this regard is for the academic community to accept that the way it chooses to do things in the design and delivery of the curriculum makes a material difference to outcomes. There is evidence locally and internationally that institutional ethos and approaches to the education process are a key variable in who succeeds and fails in higher education. An apposite example of a recent exploration of this topic is a study on the performance of minority students in American higher education institutions, undertaken by the Washington-based Education Sector (Carey, 2008). A central finding is expressed as follows: 'If there is a single factor that seems to distinguish colleges and universities that have truly made a difference on behalf of minority students, it is attention' (Carey, 2008:8).

What constitutes this 'attention'? It has much to do with effort arising from attaching due importance to undergraduate education. It goes beyond this, however, into valuing and undertaking sustained educational inquiry – the scholarship of teaching and learning. As the Carey report goes on to say of the successful institutions, 'Essentially, they apply the academic values of empiricism and deep inquiry to their own practices' (Carey, 2008:8).

In the South African higher education context, a major focus of attention needs to be on developing and implementing mainstream course design and teaching approaches that cater effectively for the realities and diversity of the student body. Along with establishing enabling curriculum structures, this is an essential condition for substantial improvement in the number, quality and mix of the country's graduates. Achieving it depends considerably on systematic knowledge of teaching and learning. The craft knowledge, on which so much higher education teaching has depended, has major limitations in meeting the challenges of contemporary South African teaching and learning conditions, which are more complex than the traditional settings that shaped the experience of many of our current academic staff. Finding fresh approaches calls for educational expertise as well as effort.

How then might this kind of attention be achieved in the South African context? The change strategy needed to influence the prevailing academic culture is clearly complex and multifaceted, calling for a coordinated approach. If educational effort and expertise are to grow, they must be accepted as being important in the sector. This in turn depends on conditions of the following kind:

- ▣ the establishment of reasonable and productive professional accountability for the outcomes of the educational process;
- ▣ increased status for educational expertise as a key expression of scholarship (Boyer, 1990), manifested in recognition and reward systems;
- ▣ recognition of the importance of different academic roles in enabling universities to meet their obligations to the country, respecting specialisation in teaching and social engagement as well as research;
- ▣ acknowledgement of education-related research as a valid and intellectually challenging field; and

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- ▣ the establishment of funding streams and nationally-supported structures for advancing professional development and educational expertise and innovation.

Embedded tensions in academic identity – such as the tension between teaching and research, and between a focus on local needs and participation in the international world of scholarship – frame Choice Three: Is the academic community willing to take its share of responsibility for producing the graduates that the country needs for its social, cultural and economic well-being, and to recognise and respect educational expertise as a key means to that end?

In summary

Three broad conditions that are within the power of the higher education sector (the state, the institutions and the academic community) to put in place are:

- ▣ understanding who belongs in higher education in South Africa on the grounds of potential, social justice and national development needs;
- ▣ aligning the design of the system with the learning needs of the full range of the intake that the sector should accommodate, with particular reference to the still-marginalised majority;
- ▣ dealing creatively with the diversity of the student body through teaching approaches that are effective in the South African context.

The three choices underlying the establishment of these conditions are clearly interdependent: curriculum renewal, for instance, will have diminished value if the academic community does not collectively take psychological ownership of responding to the country's needs, or is not prepared to 'apply the academic values of empiricism and deep inquiry' (Carey, 2008:8) to the educational process in higher education.

The argument in this chapter advocates which way the choices should go. Whether they are made consciously or unconsciously, the choices have far-reaching implications for the nature of the higher education sector and who benefits from it. They affect national policy, and it is important to assess what direction current policies are taking us in. To what extent are they focused on the priority of improving graduate output? To what extent are recent policies or initiatives (such as the conversion of technikons to universities of technology, the push for PhDs, moves towards institutional differentiation or 'de-differentiation', the funding of teaching and research, the Department of Science and Technology (DST) chairs) consistent and 'joined up'? What is likely to be their net impact on the effectiveness of the sector ten years hence?

Just as importantly, the choices apply to institutions, departments and individual academics. The aggregated results of these choices make up the contribution of the sector as a whole, so are critical to social justice, stability and development.

In conclusion: Why is it so hard?

The choices delineated here are clearly not regular strategic ones but involve deep-seated matters of values and identity. They are affected by enduring tensions, not only the high-level ones mentioned earlier, but also those between inclusive and exclusive private ideologies and between personal advancement and public service. Given the nature of the academy, they cannot be successfully engineered or replaced by diktats.

The choices that are being made in the higher education sector at present, and which are resulting in the disturbing shortcomings in educational opportunities and achievement discussed in this chapter, suggest that prevailing academic values and identity are tilting away from inclusiveness and serving local needs. Can the compelling need shown up in the performance analysis produce attitudinal change that will lift the value of education in higher education, and facilitate a constructive Boyerian balance between the main academic roles?

The difficulty of meeting this challenge is increased by the wedge between research and undergraduate teaching that is being driven by aspects of international academic culture and institutional and individual self-interest that undervalue public service. However, there are some countervailing possibilities as well. For example, well-articulated national policy and funding can make a significant difference to what is accepted as important. Also, the critical issue of how research and undergraduate teaching can be mutually enriching rather than dichotomised is gaining attention – and increasingly sophisticated analysis – in a range of settings, albeit mainly in developed countries (see, for example, Marwell, 2007). Perhaps most significantly, contemporary pressures on developing countries, arising particularly from democratisation and economic globalisation, may add new dimensions to thinking about the purposes of higher education, and impel a fresh understanding of the importance, feasibility and intellectual challenge of realising academic potential in marginalised groups. This kind of consciousness is present in a range of countries, including South Africa, but needs to be formulated into a comprehensive and theorised position, going beyond dependence on rhetorical argument, if it is to offer a credible alternative to the Oxbridge stance that sets access to university education apart from developmental needs (Harris, 2008).

The extent to which academic conservatism is entrenched in the South African academic community is not known. Its apparent prevalence may be because the key choices reflecting the higher education sector's identity and values have not been made explicit, and their likely consequences remain largely unanalysed. The true test will come only when the choices are clear.

Given the high stakes involved, it is critical that the options for policy and practice, including possible compromises as well as hard choices, should be delineated, analysed and openly debated. Initiating this is in the first instance the responsibility of the state and national higher education bodies. However, the institutions and the academic

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community owe it to the country to give attention to the issues and the consequences of their choices.

Referring predominantly to the developed North, Stephen Rowland (2006, 2007) argues that contemporary pressures on higher education, exerted through phenomena, such as market forces, managerialism and wider social developments, have fragmented the core academic project, and that it is vital for conditions to be created that make it possible for academics to choose, for reasons intrinsic to their identity, to return to a holistic understanding and practice of their disciplines, which would remove dividing lines between teaching and research. Integrity, in its two senses of 'bringing together' and 'soundness of moral principle' (Rowland, 2007:2), is central to academic identity and resolving tensions between the core academic roles of teaching, research and social responsiveness. Given the shortcomings in higher education discussed in this chapter, Rowland's central question, 'How can academic work be conducted with integrity?', is pertinent to South Africa as well.

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