CHAPTER TWO

HIGHER EDUCATION AND ACCESS IN SOUTH AFRICA

This chapter aims to describe the context of access to higher education and access testing. Although these sections are addressed separately in this chapter, it is necessary to note the trends of higher education internationally, as well as locally, as a context within which access to higher education is then discussed.

2.1. Higher Education

Internationally, higher education (HE) has seen enormous growth in student participation rates over the past two decades or so. The general perception has thus been that growth is appropriate and contributes to enhanced skills development for students, improved job and career opportunities, improvements in society, the economy and communities, and a commitment to realizing the principles of life-long learning (Pascarella & Terenzini, 1998). In addition to this growth in participation rates, there has also been an increase in international and national recognition that such growth brings with it challenges regarding access to, and success in, higher education. Students who want to gain access to higher education are increasingly coming from diverse educational, socio-economic, cultural, language and life-experience backgrounds, and do not necessarily come prepared for participation in this sector (Cliff, 2003a).

According to Gladieux and Swail (2000), internationally, the roots of unequal educational opportunity are deep, and higher education alone cannot redress the social imbalances that appear to threaten the future of different countries. There are no guarantees in life, with or without a higher education. But the odds are increasingly stacked against those with the least education and training. Simply put, on average, the more education one has, the more one earns. More important, the earnings advantage of the most highly educated workers has increased during the 1980's and 1990's (Gladieux & Swail 2000). And such trends have become part of the conventional wisdom. People

understand that tertiary attendance more than ever determines who has access to the best jobs and the best life chances. In virtually every country of the world, participation in higher education – rates of entry and completion, as well as type and prestige of institution attended – is closely associated with socioeconomic status (Gladieux & Swail, 2000). It is against this background of a changing global scenario pertaining to higher education that the changes in higher education in South Africa must be understood. These changes not only reflect the global pattern of decreasing investment in higher education but also the fact that more and more people aspire for access to higher education.

Given the historical inequalities in our educational system, redressing the policy of higher education in South Africa becomes a challenging task. The socioeconomic status of majority of the people in the past in this country also poses a problem for access to higher education. The launch of the National Plan for Higher Education in South Africa (NPHE), however, provides a "framework and mechanisms for the restructuring of the higher education system to achieve the vision and goals for the transformation…" (NPHE, 2001). In view of the changes taking place in the South African Higher Education sector it is evident that particular emphasis is being placed on addressing matters of broadening access and furthermore, avoiding situations characterised by high dropout and failure rates (NPHE, 2001). As such, producing employable graduates who are equipped with the skills necessary to function in modern society (Strydom, 2002). Thus even though South African policy for higher education in undergoing changes, it seems that the problems that South Africa has experienced, and is experiencing, with regards to access to higher education, is not unique to only South Africa.

The traditional cohort of learners who enter higher education studies, here and elsewhere in the world, has remained predominantly school-leavers. While this reality must not detract from the goal of broadening access to adult learners, school-leavers nevertheless remain the major constituency. Higher education's interest thus relates to the imperative to narrow the gap between

the outputs of schooling and the entry expectations of higher education institutions (Griesel, 2003).

Furthermore, according to Griesel (2003), even though matric Senior Certificate pass rates have improved in recent years, the throughput and especially participation rates in higher education remain too low. Given the reality of vast disparities in provision and resources, the concern is that results reflect socio-economic inequalities and the legacy of apartheid rather than individual learners' intellectual ability or the potential to succeed with further study.

Higher education has its own particular challenges to face; amongst these, are to increase participation and to broaden access. According to Griesel (2003) as a sector higher education also has to:

- provide education that meets the needs of a knowledge-driven economy;
- Attain greater levels of efficiency in the delivery of education; and
- Undertake research that complies with international norms.

Higher education has an unmatched obligation, which has not been adequately fulfilled, to help lay the foundations of a critical civil society, with a culture of public debate and tolerance, which accommodates differences and competing interests. It has much more to do, both within its own institutions and in its influences on the broader community, to strengthen the democratic ethos, the sense of common citizenship and commitment for the common good (Higher Education Act, 1997).

The new higher education policies and frameworks in South Africa are underpinned by two fundamental goals, namely that the system should provide mechanisms for peoples' liberation and that it should improve the productivity of the South African workforce which in turn would improve the competitiveness of the economy (Badat, 1999).

While there are inevitable trade-offs, a balance must be maintained between goals and objectives in order to maximise the overall outcomes and benefits of higher education. It is clearly important for higher education institutions to be able to build on a well-functioning school sector, and to rely on an adequate throughput of learners from schools. It is wholly in the interest of universities to promote access to higher education if they are to survive and meet their commitments to society and the state. Thus with a better understanding of the trends in higher education the next section describes access to higher education in the South African context.

2.2. <u>Access to higher education</u>

Access to higher education and training can be defined as providing learners with the possibility of gaining access to educational institutions where high quality education and training is provided preparing them for the world of work (Strydom, 2002).

According to Nettles, Perna, and Millet (1998) research into access trends in America showed that 62% of all high school pupils enroll in some form of postsecondary education, with only 46% completing their degrees in five years. However, Gladieux and Swail (2000) point out that even though entry into the postsecondary system has increased over the past 25 years, low-income 18- to 24- year olds attend college at much lower rates than those with high incomes. Thus, it is evident that participation gaps still exist internationally regarding financial factors, and that much needs to be done to address the financial dimension of access. According to Bamber and Tett (2000) there is a clear correlation between increasing access to poorer students and higher dropout rates. Access trends in South Africa over the last five years have reflected some positive change but unfortunately continue to mirror a higher education system largely differentiated along racial lines (File, Saunders & Badsha, 1994).

Access is a complex issue, resulting from several factors such as special groups that compete for access opportunities, continuous changes in societal

needs and political pressures that impact on policy (Nettes et al., 1998). There are many access challenges facing higher education institutions as well. For example, learners from the General Education and Training (GET) sector approach higher education with or without matric endorsement (in future FETC) for opportunities for life-long learning, employment and ultimate success. As school-leaving certification has a particularly unreliable relationship with higher education academic performance especially in cases where this certification intersects with factors such as mother tongue versus second language medium-of-instruction differences, inadequate school-backgrounds and demographic variables such as race and socio-economic status (Shochet, 1986; Badsha, Blake & Brock-Utne, 1986; Yeld, 2001a). Thus, school leaving certification may not be the best predictor of tertiary success. Secondary school-leaving examinations may on the national level have different functions, such as certifying secondary school achievements, confirming the 'maturity' of students, regulating entry into work or allowing access to higher education (Gabrscek, 2001). A common view is that the Senior Certificate fails to serve its various purposes successfully: as a school-leaving qualification it is not attained by the majority of learners; and is inadequate preparation for the majority who seek entry to higher education study, and the world of work (Griesel, 2003). There are major concerns related to the matriculation endorsement regulation as minimum threshold for entry to degree study. The views commonly expressed are, amongst others, that it skews the school curriculum; is not attained by sufficient numbers of learners; as minimum threshold is not a reliable predictor of success with degree study; is not a mechanism that allows for redress; and is restrictive and based on outdated school and technical college subject offerings (Griesel, 2003). The crux of the matter, according to Cliff (2003), is that when conventional school-leaving certification is used as the sole criterion for selection to higher education, there is a serious possibility of excluding some talented students who have not had adequate opportunity to demonstrate their potential for higher education study on the basis of school leaving results alone.

Taking the above perspectives as a baseline, the new curriculum and the future NSC have a formidable task: the curriculum must ensure improved participation and pass rates, the NSC must be a "reliable" exit qualification for entry into higher education study and for employment, that is, it must have recognised "currency"; and the curriculum and FETC must allow for the redress of historical inequalities (Griesel, 2003). However, until the first cohort of NSC learners has completed higher education studies, the predictive validity of the NSC remains a promise on paper and not an empirical fact. Yet, higher education institutions will be expected to make decisions based on NSC results long before such empirical validation is available (Foxcroft, 2004). This poses a dilemma for higher education institutions, as they need to justify the admissions criteria that they use, especially if they face legal challenges by unsuccessful applicants.

Furthermore, in its National Plan (Department of Education, 2001), the Department of Education has expressed its concern that the retention rate in some higher education sectors is down by 10%, and that current drop-out rates (an average of 20% for all students and an average of 25% for first-time entering students) is 'unacceptable'. Although the reasons for these depressing statistics must be multiple, academic exclusion is undoubtedly one (Council on Higher education, 2001). In the context of these realities and shared consented values of policy the call for the increased participation rates to be complemented by increased graduation rates and, in the New National Plan of Higher Education remains the legitimate imperative. Opening and extending access by relaxing recruitment and selection criteria, making it more invitational and inclusive, signifies by definition the creation of relative agility in teaching and learning systems in a manner that affords learners extended choice and control over learning itself (Race, 1994). However, as observed by Singh (2001), the quality of provision has been placed in jeopardy as large numbers of diverse learners render educator student ratios significantly unmanageable as institutions revitalise from the verge of collapse through survival strategies in the face of fiscal austerity. This stance has been raised as a political concern in the National Plan for Higher Education (2001) where it is clearly stated that increased equity access should match success

rates. Thus the importance of this study, assessing the match between the quality of access testing and success rates. As the White Paper states, "equity of access must be complemented by a concern for equity of outcomes. Increased access must not lead to a 'revolving door' syndrome for students with high failure and drop-out rates" (DoE, 1997). Neither must the increased access of black students through distance education programmes and satellite campuses - students who are "neither seen nor heard", be allowed to parade as a commitment to equity of access.

Higher education policy, driven by access demands, require institutions to broaden access through defensible entrance testing procedures (selection and placement), to enhance success rates in higher education through academic development (bridging and foundation programmes) and through RPL (Recognition of Prior Learning). According to the New Academic Policy (2001) academic development programmes (AD) have developed in South African public higher education institutions in various forms since the early 1980s, when, as historically white institutions began admitting small numbers of black students from Department of Education and Training schools, it became clear that the majority of such under-prepared or disadvantaged students required additional learning opportunities to prepare them to succeed in higher education. RPL is a way of recognising what individuals already know and can do. RPL is based on the premise that people learn both inside and outside formal learning structures (including learning from work and life experience) and this learning can be worthy of recognition and credit. RPL is used extensively by those seeking: admission to a course; advanced standing for a course; or credits towards a qualification. It can also be used by those seeking entry to a particular field of employment; promotion or self-development (Council on Higher Education, 2001).

The present study will focus on the area of entrance testing, which will be discussed in the next section.

2.3. <u>Access Testing</u>

Questions of access to, and success in, higher education become really important when it is realised that many students are now seeking participation in the sector do not necessarily come from backgrounds that have adequately prepared them for this participation. According to Cliff (2003) it has long been realised that many first-time entering students may be under-prepared for higher education due to a number of factors. Thus, for example, students may not possess the language proficiencies necessary for them to engage meaningfully in learning in a language that may not be their mother tongue. Or they may have come from a school-background that was characterised by under-resourcing, inappropriate approaches to learning and teaching, or socio-economic inadequacies. Or they are attempting to access higher education without traditional school leaving certification or with certification that is difficult to benchmark. Thus, the reasons for additional assessment at entry levels to higher education study seem evident: on the one hand, not sufficient numbers of learners can be admitted on the strength of their school-leaving results; on the other, the predictive value of entry level assessments typically include language proficiency (cognitive academic language proficiency (CALP)) and levels of numeracy. Senior Certificate results, especially where such results fall below the top range scores, is increasingly questioned (Yeld, 2003).

Good access testing should enable decisions about admission (to a particular faculty), and should facilitate specific decisions about placement in foundation or other similar programmes. Good access tests should enable those making admissions decisions to consider the potential of a candidate without solely relying on matric performance and should not further disadvantage those that have had a less than exemplary secondary school experience (Coughlan, 2002).

According to Coughlan (2002), a good test is characterised by the following:

- Content should not be curriculum based so that the effects of different teaching practices in the schools is limited and so that the test is useful across a range of disciplines.

- Use should be made of practices such as scaffolding in testing to mediate prior instructional experience. (Scaffolding provides contextual keys and steps to the cognitive process, which the candidate then has to apply).

- Test items should be of real and sufficient complexity that they are useful indicators of cognitive ability.

- The test should be able to stand up to legal and academic challenge of its validity and reliability and should be supported by evidence of its usefulness.

Most institutions do not have a specific entrance testing policy. Most of the testing procedures were subsumed under the admissions policy of the university (Strydom, 2002). The programmes that appeared to be most involved in the redevelopment of university admissions policy was the Alternative Admission Research Project (AARP) at the University of Cape Town (UCT) and the Admissions and Placement Assessment Programme (APAP) at the University of Port Elizabeth (UPE). The AARP tests at UCT, consisting of three tests, namely; Placement Tests in English for Educational Purposes (PTEEP), Mathematics Comprehension Test and Mathematics Achievement Test, has a longer history and research record than the UPE system and appear to be influencing admission planning not only at UCT, but at least 22 other higher educations across South Africa (Coughlan, 2002; Strydom, 2002). The University of Witwatersrand (WITS), the institution under study, also adopted the AARP tests of UCT. These additional tests were adopted to eventually meet the daunting selection challenge and provides a rank order of results that would allow for discrimination amongst scores and thus make it possible the identification of students whose school-leaving results would not indicate their potential to succeed in higher education; and to use, as the basis for these individual tests, skill areas believed to be of general value in the curriculum (Yeld, Cliff, & Hanslo, 2002). According to

Yeld (2001a), students who have gained access from the AARP tests, who would not otherwise have been admitted to the institution (UCT) on the basis of their school-leaving results; had a substantially higher retention and graduation rate than that of comparable students who were accepted on the strength of their school results.

Access to a better life is widened all lifelong through access to quality education. The focus is not on the memorising of knowledge, but rather on how to select and apply global knowledge to local contexts and problems. Only by using knowledge and reflecting on its usefulness in their own context, will people grasp and make it their own and move towards transforming their own lives, after actively reflecting on and active experimenting with that knowledge. Their newly produced knowledge may help to identify and solve their immediate problems in new unique ways and to improve the quality of life for all. The challenge therefore, is to have an adequate instrument that can incorporate all of these skills and is a successful measure of these aspects.

Another challenge is the language that the test is administered in. The predominant trend in admissions testing in South Africa is to administer tests in the language of instruction, which in many cases is English. In the general field of testing and assessment in South Africa there is currently much debate around whether the practice of administering tests in the common language used in the business world or the language of instruction as opposed to the language in which the test-taker is most proficient in constitutes fair and ethical assessment practices (Foxcroft, 2004). A test of academic literacy has a very strong language component in it, thus, there is a very real danger that the level of proficiency that the test taker has in the language in which the test is administered could contaminate the test results. Furthermore, there is strong evidence, for example, that there are qualitative differences in the reading and processing skills used by first- and second- language English speakers (Enright, Grabe, Koda, Mosenthal, Mulcahy-Ernt, & Schedl, 2000). Even though this falls outside the scope of the present study, it is important to highlight that the language of instruction, English, may also affect the results of students who do not have English as their first language.

The present study proposes to measure the predictive validity of academic literacy of the entrance test, PTEEP, a sub test of the AARP tests at UCT. The PTEEP proposes to incorporate many of the ideas mentioned earlier, and was therefore, also one of the reasons that this instrument was chosen for the present study. The following section discusses in more detail the PTEEP measure, as it forms the basis of the proposed study. For this reason the researcher believes that the PTEEP test should be included and discussed under the literature review, while the properties of the test is further elaborated under the methodology (measure) section of the study.

2.4. <u>Placement Test in English for Educational Purposes (PTEEP)</u>

The PTEEP test is a non-curriculum aligned English language test that incorporates a combination of teaching, modelling, and practice elements and opportunities (Chalton, Yeld, & Visser, 2001). The purpose of the PTEEP test is to predict performance in a future setting in which language is one of many variables. It is evident from stated literature above, that because of the prevalence and severity of educational disadvantage in South Africa, and the adverse impact this has on the ability of candidates to demonstrate their underlying abilities, the PTEEP construct stresses the need to 'acknowledge the effects on cognitive functioning of the quantity and quality of learning opportunities experienced by an individual' (Yeld, Cliff, & Hanslo, 2002). This approach to testing, according to Haeck, Yeld, Conradie, Robertson and Shall (1997) is preferable both on grounds of theory of cognitive psychology and because it yields much better discrimination.

To date, the majority of correlational studies conducted by various institutions and projects over the years have not yielded information that adequately addressed the question of how confident can one be that students who meet traditional admissions criteria (e.g. the Faculty SC score and subject requirements) will graduate. According to a document by the University of Cape Town on the AARP project (2000) these studies tend to be based on very small data sets, and track performance in very specific programmes of study, which make it very difficult to generalise to other contexts. Where

predictive relationships do exist, they are extremely weak, and explain very little of the variance of performance. In addition they reveal little about overall progress through a degree, but focus on particular academic years as the overriding unit of investigation. In an attempt to move beyond these problems, the AARP project was developed, with the PTEEP as a predictor test.

The PTEEP test development process is particularly focused on developing methods of eliciting optimal performances from all candidates, irrespective of educational background. An approach, known as 'scaffolded instruction' is adopted as an attempt to provide opportunities for candidates to engage in activities that both encourage and reveal concept and skill development. Exercises (opportunities for action) are created which lead candidates to manipulate the material (e.g. tests) on which the test tasks are based. The test is theme based- the theme is not one which students would normally have been taught in school. The theme is one that allows for a variety of increasingly complex tasks based on modelled or mediated steps (Coughlan, 2002). The test includes multiple choice questions and various extended pieces of extended writing (Chalton, Yeld & Visser, 2001).

The test, reported by Cliff (2003), aims to assess the following reading and thinking approaches: students' abilities to (1) make meaning from texts that they are likely to encounter in their studies; (2) understand words and discourse signals in their contexts; (3) identify and track academic argument; (4) understand and evaluate the evidential basis of argument; (5) extrapolate and draw inferences and conclusions from what is stated or given; and (6) identify main from supporting ideas in the overall organisation of a text.

According to Chalton, Yeld and Visser (2001), the construct of the academic literacy test, the PTEEP, will:

- Aim to identify students who are likely to experience academic difficulties in future situations in which language will be an important, but not sole, variable. It will be based therefore on a notion of language-as-vehicle rather than language-as-target.

- Test academic literacy only in the reading and writing modes. It will not test listening or speaking.

- Assess the language proficiency of applicants to the institution irrespective of study area. It will thus not be discipline-specific.

- Make no distinction between first and second (or additional) speakers of English.

- Be based on a notion of knowing and learning which views learners as actively involved, as individuals and in collaboration with others, in creating and negotiating meaning in a wide variety of settings. The process of conceptual development is seen as highly dependant on specific areas of expertise involving knowledge and information, and on the connections between these. The test is therefore based on a theme which is complex enough (and tasks which are demanding enough) to provide real opportunities for cognitive engagement and for the demonstration of this.

- Include topical knowledge as an important component of the construct definition. This knowledge, however, will be limited as far as possible to information provided in the test itself. Prior knowledge of the topic of the test will not be included in the PTEEP construct definition.

- Be based on componential model of language ability, which comprises topical knowledge and language knowledge, mediated by strategic competence (meta-cognitive strategy use) and affective schemata.

- Be based on an understanding of language knowledge as comprising the following categories or kinds of knowledge: organizational knowledge (grammatical and textual) and pragmatic knowledge (functional and sociolinguistic).

- Not directly assess strategic competence, but will aim to ensure its inclusion in the design.

- Acknowledge the impact of affective schemata on performance, and will make efforts in the design and layout of the test, as well as in its administration, to minimize negative effects as well as to promote and harness positive effects.

- Acknowledge the effects on cognitive functioning of the quantity and quality of prior mediated learning opportunities experienced by an individual. In an attempt to address this, the tests will adopt an approach known as 'scaffolded instruction' (as explained earlier).

- Be based on an understanding of academic tasks drawn from relevant research as well as an interdisciplinary panel of experts. These tasks will require the ability to comprehend information presented in various modes, to paraphrase, to present information visually, to summarise, to describe (e.g. ideas, phenomena, processes, change of state), to write expository prose (e.g. argument, comparison and contrast, classification, categorization), to develop and signal own voice, to acknowledge sources, and to perform basic numerical manipulations. In demonstrating these abilities, candidates will be required to write expository prose in the form of a one-page essay in which they support a position, drawing on the information provided in the texts, to construct and read graphs, flow-charts, and diagrams, and perform simple numerical manipulations within the context of the test's theme. They will in addition be required to answer a number of questions assessing reading comprehension.

Results have shown that for "approximately 60% of the time candidates admitted with the PTEEP will have higher retention and graduation rates than comparable students (Yeld, 2001b). The WITS Faculty of Humanities makes use of the PTEEP test. In order to grant access and, as far as possible, contribute to success, higher education institutions are faced with the need to identify student applicants with at least a reasonable measure of potential for coping with the demands of academic study (Cliff, 2003).

2.5. Summary

Thus in describing the context of access to higher education in South Africa and access testing the need is evident for higher education institutions to open up access to students especially from disadvantaged backgrounds. The

need for sound access testing in this regard also becomes apparent. The test used in this study is the Placement Test in English for Educational Purposes. Having reflected on the characteristics of the PTEEP as an academic literacy test, it is important to contextualise this study within literature on academic literacy and the prediction of academic success, which follows.