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*DEVELOPING THE ACADEMIC LITERACY OF  
UNDERGRADUATES STUDYING BY DISTANCE  
EDUCATION IN SOUTH AFRICA*

BY  
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THESIS

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## SYNOPSIS

This research has been conducted at a time of major transformation in higher education, both in South Africa and internationally, which involves the re-engineering of education processes, such as content delivery, assessment and learner support, in order to meet the needs of lifelong learning in an information society. Distance education, as an important component of South African higher education, is a key to this transformation due to the convergence of traditional and more open and flexible forms of higher education and as such needs to respond to multiple challenges of enabling access to growing numbers of non-traditional higher education students; improving teaching and learning; implementing new information and communications technologies; articulating with new qualifications and quality assurance frameworks; and rationalising and optimising available institutional resources to respond to these challenges.

A review of the fields of distance education and academic literacy revealed that older 'transmission' type paradigms, epitomised by content based correspondence education in which the distance learner absorbs theoretical knowledge in isolation, are inimical to the development of academic literacy. Academic literacy is understood as that complex of knowledge, attitudes and values which allows meaningful and successful participation of the student in the academic culture and, more broadly, in developing personal and professional competencies which equip the student for productive involvement in the society at a high level. Constructivist orientations to learning are generally considered to facilitate meaningful development of academic literacy.

This study aimed to:

- **Illuminate the development of academic literacy** in students studying undergraduate courses through distance education in South African higher education;
- **Identify and describe effective practice** of distance education institutions, and effective learning behaviours of the learners themselves, in facilitating the development of academic literacy;

- Identify and **describe problem areas** in the development of academic literacy in undergraduate distance learners;
- Recommend improvements in practice and further research to facilitate the development of academic literacy in distance education.

A mix of empirical and theoretical methods was used in a cycle of deductive and inductive research to pursue these aims. Data was gathered using postal and e-mail questionnaires to distance learners and lecturers and this was supplemented by interviews.

The most important findings emerging from the study are:

- Transmission models of teaching and learning are still very much in evidence, although some innovation is taking place in the areas of support, communication and materials development;
- For many distance learners there is a critical lack of engagement with lecturers and with fellow students which precludes meaningful development of academic literacy;
- For the most disadvantaged students, access to sufficient learning support, a prerequisite for academic literacy development, is problematic.

Major conclusions drawn from the study include the following:

- Innovations in support, communication and materials developments need to be implemented more quickly if a significant number of students are to benefit;
- A critical threshold of involvement in the process of developing academic literacy, by means of constructive learning in a range of contexts, needs to be established in order to ensure acceptable learning outcomes in South African distance education;
- Learner support structures need to be made available to the majority of students to ensure equity, student retention and mission achievement;
- Sustained research by institutions of learner support needs, learning dynamics, and experience of services is vital to the successful adaptation of the sector.

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## ABBREVIATIONS AND ACRONYMS

ACRL	Association of College and Research Librarians
DE	Distance Education
EFL	English First Language
ESL	English Second Language
GDP	Gross Domestic Product
GNU	Government of National Unity
HBU/T	Historically Black Universities/Technikons
HEQC	Higher Education Quality Committee
HWU/T	Historically White Universities/Technikons
MOE	Ministry of Education
NADEOSA	National Association of Distance Education Organisations of South Africa
NCHE	National Commission on Higher Education
NQF	National Qualifications Framework
OBE	Outcomes Based Education
ODL	Open and Distance Learning
OLUSA	Open Learning University of South Africa
SADC	Southern African Development Community
SAIDE	South African Institute for Distance Education
TSA	Technikon South Africa
UCOSDA	Universities' and Colleges' Staff Development Agency - Higher Education Staff Development Agency (HESDA) from November 2000.
UCT	University of Cape Town
UNESCO	United Nations Education, Science and Cultural Organisation
UNISA	University of South Africa
UPE	University of Port Elizabeth
VUDEC	Vista University Distance Education Centre

# CHAPTER 1

## INTRODUCTION AND RATIONALE

### 1.1 INTRODUCTION

At the start of the new millennium higher education faces fundamental challenges to its structure and modus operandi. Perhaps the most fundamental of these changes is a shift away from the dominance of the institution towards more control by the learner. The phenomenon of open and distance learning gives individuals the freedom to choose between a far greater range of institutions, courses, study modes and technological media.

In addition to freedom of choice, individuals must manage themselves and their learning in a global environment which is characterised by rapid change:

*“Any society in which progress and change are common features requires its people to be independently capable. It should be a distinctive role of higher education, as opposed to intensive training, to prepare people with real capacity for managing and coping with change and uncertainty. The speed of technological, economic and social change means our jobs and circumstances change more frequently and less predictably than before. The explosion of specialist knowledge ... puts a premium on giving people confidence in their own ability and shows how futile it is to try to sustain the formal transmission of knowledge model of higher education” (Stephenson in Graves, 1993:20).*

#### 1.1.1 The research topic

This study considers the implications for the individual learner of these changes in the dynamics of teaching and learning. The study is concerned primarily with the development of academic literacy in undergraduate students studying at a distance

through South African higher educational institutions. For introductory purposes academic literacy is defined as that complex of behaviours, skills, attitudes and values which enable a student to function successfully in an academic environment. Because of the increasing onus on students to chart their own path through a programme of study, many of the traditional assumptions about the development of academic literacy need to be questioned. Current practice should be examined critically to assess whether the skills of students are being developed to cope with increasingly flexible and open approaches to teaching and learning.

### **1.1.2 Reasons for studying academic literacy in distance education**

The study was prompted by a conviction that for many, studying through distance education is at best a hit and miss affair and at worst a highly threatening experience akin to embarking on unknown waters without navigation instruments. This study attempts to check the validity of this conviction by the following general means:

- **Illuminating the development of academic literacy** in students studying undergraduate courses through distance education in South African higher education.
- Identifying and **describing effective practice** of distance education lecturers and institutions, and the learners themselves, in facilitating the development of academic literacy in such students.
- Identifying and **describing problem areas** in the development of academic literacy in distance learners.

The significance of the study lies in the possibilities for the improvement of practice in facilitating more effective development of academic literacy in distance education.

### **1.1.3 A synopsis of research methods**

The study employed the following qualitative and quantitative methods:

- A study of literature on teaching and learning in South African distance education and a study of literature on academic literacy.
- A questionnaire designed to gauge student perceptions of their development of academic literacy in distance education courses. Respondents were drawn from undergraduate students studying through the University of South Africa and Vista University.
- Interviews which probe intentions, feelings and motives of selected students.
- An analysis of content and methods used in a selection of learning materials from the courses studied by the subjects. In some cases it was possible to interview the tutors of students and assess their perceptions of the engagement of the student in developing academic literacy.

The gathering of data from these different sources makes triangulation (Cohen, Manion & Morrison, 2000:288) possible: the analysis of student perceptions was thus informed also by an analysis of evidence from materials and from tutors.

#### **1.1.4 Chapter map**

This chapter describes the background to the study by describing international and national trends in distance education at the higher level. This background provides the context for a motivation of the major reasons for the study.

The chapter proceeds to a statement of the research problem which identifies general aims, the object of the study, and the research problem and specific hypotheses. An overview of the research design and the methods and instruments employed follows this.

The rest of the chapter is devoted to a clarification of the major terms and concepts which are relevant to the study. The chapter ends with an overview of the content of subsequent chapters.

## **1.2 BACKGROUND AND RATIONALE**

This study has been undertaken against a background of far-reaching changes in higher education as a system. In particular, distance education is undergoing fundamental philosophical, methodological and technological change. There are particular challenges inherent in the South African context, with its history of systemic inequality and its relative isolation, for a considerable period, from the global mainstream of higher education. This section analyses these processes of change and presents a rationale for studying the development of academic literacy in South African distance education.

### **1.2.1 Change in higher education**

In most economies education ranks as one of the largest sectors. Higher education forms a highly significant part of the sector because it is seen as the agency which prepares people to lead the society intellectually, culturally and economically. Being such a complex and important field, there are many perceptions of the roles which higher education should play. The state wants to ensure the viability of the sector in terms of its contribution to broad national economic and social goals; academics have a strong interest in the development of their chosen discipline through teaching; students want qualifications, identity and lifestyle; parents want value for money; employees expect competent graduates with the potential to develop.

Higher education is a phenomenon that develops in response to these changing perceptions and to changing social and economic needs. For the purposes of introducing this study it will be sufficient to identify broad trends in higher education, both internationally and nationally, and to outline the most important policy directions which may influence the future of distance education in the South African higher education sector. This discussion will provide the context for describing and evaluating the development of academic literacy in this sector.

Seen from an international perspective, recurring themes in the literature on higher education include the following:

- The phenomena of lifelong learning and open learning (Daniel, 1996: 103);
- Equity and access issues (Johnston in Tait & Mills, 1999: 39);
- Recognition of the diversity of student learning needs and styles (Johnston in Tait & Mills, 1999: 39);
- Meeting human resource needs for economic and social development in increasingly knowledge-based societies (UNESCO, 1998:2);
- The globalisation of higher education (Perraton in Murray-Harvey & Sillins, 1997: 162; Rumble, 2000; Kishun in Scott, 1998; Sadlak, 1998; Collis & Moonen, 2001);
- Rapid changes in information and communications technology which enable new ways of teaching, learning and research (Hazemi, Hailes & Wilbur, 1998; UNESCO, 1998: 1), termed virtualisation by Collis and Moonen (2001:30);
- Accountable and effective use of the limited resources available for higher education (Oates & Watson in Wisker & Brown, 1996:17; Daniel, 1996:103; UNESCO, 1998);
- Client orientation and personalisation (Collis & Moonen, 2001).

Not surprisingly, these themes are reflected in recent South African higher education policy documents. The National Plan for Higher Education in South Africa (Ministry of Education, 2001: section 1.1) describes the role of higher education as three-fold:

- **“Human resource development:** the mobilisation of human talent and potential through lifelong learning to contribute to the social, economic and intellectual life of a rapidly changing society.
- **High-level skills training:** the training and provision of person-power to strengthen this country’s enterprises, services and infrastructure.
- **Production, acquisition and application of new knowledge.”**

Mehl (2000) underscores the 'social imperative' embodied in the range of new legislation, arguing that it provides a coherent framework for social and economic transformation, without which the country will not thrive.

The National Plan (Ministry of Education, 2001) emphasis that these challenges have to be understood in terms of the global revolution in information and communications technology:

"At the centre of these changes is the notion that in the 21<sup>st</sup> century, knowledge and the processing of information will be the key driving forces for wealth creation and thus social and economic development" (Ministry of Education, 2001:1.1).

Responses to these challenges form part of a changing culture of higher education. The manner in which students are taught, how they learn, and more broadly, what constitutes academic literacy within this culture, is affected by changes in the culture. It is necessary, therefore, to examine some of the major trends in some detail in order to understand how each is related to, or contributes to the changing culture, and what the implications are for the development of academic literacy.

#### 1.2.1.1 *Globalisation*

Higher education takes place in societies which are subject to the processes of globalisation. For our purposes the term *globalisation* can be taken to include the following processes: international flows of capital and labour, increasing human mobility, rapidly expanding knowledge shared by fast global information technology networks and a high degree of cultural exchange (Castells in Cloete, Maasen & Sawyerr, 2001: 2). In higher education this has contributed to new dynamics of competition and collaboration (Daniel, 1996:103) in the quest for a share of the market. Bleak (2002) reports that estimates of the size of the on-line education market are in the region of \$25 billion worldwide by 2003. Rumble (2000) notes the emergence of new institutions



claiming to deliver courses globally and the responses of existing institutions in trying to adapt in order to compete in the global market.

It is likely that globalisation is contributing to a homogenisation of curriculum and content. For example, a British company, Boxmind, offers recorded lectures by eminent scholars such as Richard Dawkins and Sir Martin Rees (Chronicle of Higher Education, 03/08/01). The name of the company illustrates a significant dynamic: The best minds can be 'boxed' and delivered to a global market using information and communication technologies. The question for those interested in student learning is: To what extent can students interact with these minds? Does this technology enable students to learn in more effective ways or are developments like these driven simply by profit motives?

As Perraton (in Murray-Harvey & Silins, 1997:176) notes, globalisation can be seen as a threat or a promise. Mason (in Rumble, 2000:2) lists factors favoring global distance education:

- Benefits of interaction with others across the world;
- Access to high quality education where the student lives;
- Availability of top expertise to students anywhere in the world;
- A broader curriculum than one institution could offer; and
- Empowerment of students through the range of choices available to them.

Rumble (2000: 2) adds cost-efficiency as an advantage (in the sense that development costs can be shared globally) but counters this by warning of potential dangers of global systems:

- Increased learner isolation;
- Reduction of education to a packaged consumer good; and
- Loss of cultural diversity and richness as a result of globalisation of content.

Kishun (in Scott, 1998:61) echoes these concerns by noting the increased influence of a market ideology in higher education in which knowledge is manufactured, bought and sold. Students themselves can be seen as commodities to be traded in a global distance

education market. Currie (in Currie & Newson, 1998:2) argues that globalisation is not necessarily uniform, beneficial or inevitable and that it is important to remain critical of economic motives which drive globalisation trends (see also Bleak, 2002).

Distance education is the sector in higher education which is most directly influenced by globalisation processes. It can also be seen as an instrument of globalisation agendas or policies. Therefore, in the context of this study, it is necessary to examine, from the perspective of the student, how the nature of learning has changed with the development of increasingly open and technologically mediated modes of distance education.

#### *1.2.1.2 Higher education and the economy*

The need for marketability of graduates and the need for the development of appropriate high level skills for the economy has led to a greater emphasis on career related programmes in higher education and a relative decline in the prominence of a general liberal education (Crittenden in Aspin, 1997:61). These changes are symptomatic of the development of post-Fordist societies in which rapid change and increasing amounts of information dictate flexibility and continuous training in a mobile workforce (Gultig, 1996:123).

Distance education is an effective vehicle for providing continuing education and training and for career development while allowing the student to remain economically active. Evans (1994:81) notes that there is a long-established relationship between distance education and work in that distance education provides opportunities for improving qualifications and skills which reflect "industrial, professional or work-place needs and issues" (Evans, 1994:82).

The survey of student perceptions conducted as part of this study brings to light the challenges and benefits of combining distance learning with work, in relation to factors such as motivation and commitment to study, and skills such as time management and

the ability to apply theoretical learning to practice. These factors are important components of academic literacy. The servicing of student needs in relation to workplace advancement also challenges distance lecturers and institutions to assess critically the tension between a purely instrumental curriculum and one which also engages with deeper normative values – the tension, in Harbermasian terms, between ‘system’ and the ‘lifeworld’ (Herman & Mandell in Tait & Mills, 1999:19).

### 1.2.1.3 *Information technology revolution*

Daniel (1996:109) records that it was Eisenstadt who introduced the term ‘knowledge media’ to describe the “convergence of telecommunications, computing and the learning or cognitive sciences”.

The knowledge media is having a profound impact on learning in both traditional and distance higher education. After decades of development of computer-based education, the convergence described by Eisenstadt (1995) has yielded a medium which is capable of transforming learning by putting at the learner and the teacher’s disposal a world of information through the world wide web, and the means to mediate and manage learning and communication through groupware systems such as Lotus Notes, Microsoft Exchange, Novell’s Groupwise (Hazemi *et al.*, 1998:14) and WebCT (McCormack & Jones, 1998:345; Hazemi *et al.*, 1998:15).

In the developed world the use of such systems is becoming increasingly widespread. 95% of state schools in the USA have internet access and 40% of US College classes use internet resources (Sunday Times, 4.03.01). Rumble (2000:4) reports that the Gartner Group predicted in 1998 that by 2003, 80% of traditional higher education institutions in the United States would be delivering 60% of undergraduate courses through distance learning. In August 2000 over 50% of US households had computers, and there were over 100 million Americans online simultaneously (United States Department of Commerce, 2000). The Dearing Report envisaged a change of ratio from 15 students to

one networked desktop computer to a ratio of 5:1 by 2005 in the United Kingdom (Hazemi *et al.*, 1998:18).

It cannot be uncritically assumed that such trends, significant as they are, apply equally in all regional or national contexts. Clearly, in less developed economies, access to these technologies is more difficult because of higher costs and less developed infrastructure. Rumble (2000:4) points out that the whole of Africa has fewer telephone lines than Manhattan and even then 80% of these lines are in six African countries. South Africa has relatively high rates of telephone and electricity usage of close to 35% and 70% of all households respectively (1999 Household Survey, in Pityana, 2002:4).

Notwithstanding the digital divide within and between countries, the learning of an increasing number of distance learners today is being mediated by information technology. Oates and Watson (in Wisker & Brown, 1996:19) argue that the essential significance of information technology for the learning process is that the learner now has efficient tools for editing, which in their view increases the willingness to rethink ideas and to think through problems which provides the basis for independent learning. To what extent SA distance learners have the necessary access and skills (both learning and technological) to engage effectively with the knowledge media is a question which is addressed in this study.

The virtual classroom, and by extension, the virtual university, is a fairly recent phenomenon which has been enabled by the rapid changes in information and communications technology. It could be argued that the emergence of the virtual university is an unavoidable consequence of changes in information technology. In a world where there is so much information available from so many different sources, does it make sense for students to be restricted to one site of learning? The virtual world, accessed primarily through the Internet, opens up a world of learning which more students are entering without leaving their homes or their offices.

#### 1.2.1.4 *Knowledge explosion*

The later part of the last century has been called the Information Age, a time during which human knowledge has grown exponentially and society has become increasingly knowledge based (UNESCO, 2001:2). The overwhelming mass of information available from multiple sources puts a premium on the serious student's ability to evaluate and select information which is appropriate. Lecturers and researchers face no less daunting a challenge of negotiating the sheer mass of information and the myriad of perspectives which contest the intellectual terrain of the postmodern world. Are students and lecturers in distance education engaging with this challenge or are curricula and learning narrowly selective?

Dolence and Norris (1995:23) predict that in a lifetime of employment in the 21<sup>st</sup> century, people will need to go through up to ten complete professional learning cycles to stay competitive and productive because of the explosion of information. They point out that academic disciplines and course and degree structures are taking strain due to the rapid explosion in the amount of knowledge available.

#### 1.2.1.5 *Quality, improvement and accountability*

Harvey (1997: 68-69) asserts that quality assurance initiatives in higher education have focussed on quality as accountability rather than on quality as transformation. That is, that efficiency considerations have tended to be more important than improvements in the nature and quality of student learning. Clark (1997:37) argues that "both the assessment of the quality of process and the monitoring of standards of achievement are essential to the evaluation of higher education". Halpern (1994:8-9) presents an argument that the development of teaching and research in higher education should be given greater emphasis and rewarded more explicitly. These perspectives are pertinent to the South African situation where the main effort seems to have gone into setting up quality assurance structures (such as the Higher Education Quality Committee) at

various levels from macro-governmental to micro-institutional (Strydom, 1997a: 195-198).

Of interest in the present study is whether quality assurance efforts in distance education have addressed issues of the quality of student learning and processes which enhance the development of academic literacy.

#### *1.2.1.6 Limited resources*

The decades leading up to 1990s saw substantial growth in the higher education sector in the developed world. For example, global higher education enrolments rose from 13 million in 1960 to 82 million in 1995 (UNESCO, 2001). This trend, often referred to as massification (see Kishun in section 1.2.1.7), was followed in developing nations as governments increased spending on higher education. In spite of the demand for places, this growth was not sustained as governments began to put pressure on institutions to become more efficient and to make do with more modest resources.

The most recent statistics which are available from UNESCO (UNESCO, 2001) are those from 1998. These indicate a high participation rate in higher education for developed countries. In spite of their higher level, participation rates are increasing in many of these countries.

Statistics for sub-Saharan Africa indicate low participation rates with a median gross enrolment ratio of approximately 2% of total population enrolled in higher education. South Africa's ratio of approximately 15% is the highest of these countries. It is nevertheless low in comparison with most developed countries. More detailed South African statistics are provided in section 1.2.2.2.

UNESCO makes the point that "the low level of participation in tertiary education can be a handicap in a region where the national economies have not yet taken off. On the

other hand, the development of this type of education is an extremely heavy burden on these countries' limited budgets".

#### 1.2.1.7 *Changing student populations*

Kishun (in Scott, 1998:61) argues that higher education has changed from a closed system to an open system. In such a system the social, political and economic needs to reduce inequalities and to promote opportunities for life-long learning are factors leading to massification, a process in which greater numbers of non-traditional students (older, minority group, special learning needs, variable prior qualifications) are involved in higher education. This has profound implications for teaching and learning. Lecturers can no longer count on homogenous classes with similar learning needs, prior experience and skills. The level of academic literacy in higher education is increasingly variable.

These issues are particularly pertinent in the distance education sector since it attracts proportionately greater numbers of non-traditional students. This is due perhaps to its greater degree of openness, but certainly to the greater flexibility inherent in distance learning.

#### 1.2.1.8 *Lifelong learning and open education*

The quote from Stephenson (*op. cit.*) is a useful starting point for discussing the trends of lifelong learning and open education because it cuts through the mass of terminology and jargon which is used to describe how education is changing. In summary, Stephenson argues that, because of rapid and unpredictable technological, economic and social change and because of explosive growth in specialist knowledge, people need to be prepared by higher education to deal with that change. His best advice on how to do this is to "find as many ways as you can for giving more students more opportunities to have more responsibility for their own learning" (Stephenson in Graves, 1993:21).

Rowntree (1992:38-39) expresses the need for lifelong learning concisely:

'Thirty years ago, it was possible to greet the fresh concept of "lifelong education" as a lifestyle option for an age of increased leisure. Now it is becoming a necessity for survival. Whether we are simply trying to understand the world or are trying to hang on to paid employment, we realise that there's no way but to keep on learning, throughout our lives.'

More recently the idea of lifelong learning has become incorporated into the missions of many state education and training departments (Ministry of Education:1.1). In the economy the ideal of a learning organisation, as one which adapts to rapid change in an information society, has taken root firmly as a means of promoting competitiveness (Infed, 2002). Field (in Infed, 2002) argues that continuous, lifelong learning has become routine in the behaviour of many individuals and that there is greatly increased participation in formal and informal learning activities throughout life.

If lifelong learning is seen as the individual attribute of the learner committed to continuous learning then the institutional counterpart of lifelong learning can be seen as open learning or open education. Evans (1994:18) prefers to speak of open education rather than open learning, arguing that openness is a characteristic of the system or mode of education rather than of learning *per se*. Open education describes educational systems which are learner centred rather than producer (or educator) centred (Rowntree, 1992:38). Open education strives to maximise learners' choices in what they will study, when and where they will study and how they will be assessed and accredited. Open education is associated with accreditation of prior learning, credit accumulation and transfer, and the modularisation of courses (Rowntree, 1992:39).

The movement towards open education is akin to the move from pedagogy to androgogy, described by Laycock (in Graves, 1993:24) as follows:



“The move is from teacher-centred to learner-centred, from didactic to facilitative teaching, from dependent to autonomous study, from transmission to interpretation, from authoritarian to democratic.”

Open education is more an orientation than a mode of education. Although the terms open and distance are often juxtaposed, campus based education can have many features of ‘openness’ and it is possible to conduct distance education which is not at all ‘open’. Nevertheless, many distance education institutions, notably the Open University of the UK, have been at the forefront of changing higher education so that is more open in the sense described above.

Daniel (1996:103), in his analysis of challenges facing campus universities, lists as one of these, the phenomenon of lifelong learning and claims that it increases student diversity. This is true also of open learning, which seeks to minimise barriers to learning by focusing more on outputs than inputs to the educational system. Greater openness in the system, whether it is in campus-based universities or in distance institutions, will have the effect of allowing more students from different groups, culturally and age-wise, to attempt to gain a qualification.

In summary, the phenomenon of lifelong learning through open education has been a major outcome of factors inducing change in the system such as globalisation, ICT developments, knowledge explosion, limiting of resources and changing human resource development needs of the economy. Traditional, campus-based, transmission style education is making way for more efficient, just-in-time systems which allow the learner a greater degree of freedom. More detailed discussion of open learning is included in section 2.2.2. This study is concerned with the changing demands which this new mode of education places on students and how students accommodate these demands.

## 1.2.2 South African higher education context

The previous section showed how life-long learning, open educational systems and virtual learning are major new directions in higher education internationally. This section considers what pressures for change have acted on the South African higher education system, and how the system is responding.

### 1.2.2.1 *A divided past*

Over the past decade research projects and policy documents have described the effects of South Africa's apartheid history on its higher education system. Bunting (1994) documents inequalities in access, student outputs, employment opportunities, gender balances, and between different groups of institutions. The Green Paper on Higher Education Transformation (Department of Education, 1996a:10) describes the system as being divided and fragmented, with the following characteristics:

- Inequitable and insufficient resource allocation;
- Undemocratic governance structures;
- Racially skewed access;
- Lack of coordination, common goals and systematic planning;
- Inability to respond to economic and social needs of the majority of the population.

Following on from this analysis of systemic weakness, the National Plan for Higher Education (Ministry of Education, 2001:section 1.1) casts doubt on the overall effectiveness and efficiency of the country's higher education system, listing the following problems:

- Quantity and quality of graduate and research outputs;
- Management, leadership and governance failures;
- Lack of representative staff profiles;
- Institutional cultures that have not transcended the racial divides of the past; and

- Increased competition between institutions which threatens to fragment the higher education system.

The perceived inability of the system to respond to the needs of the majority due the factors listed above is most marked in the case of students entering higher education from relatively deprived secondary school experiences. These students are more likely to be poorly prepared for higher education studies, and to lack adequate learning and self management skills. This concern is even more pronounced in relation to distance education because of the increased onus on students to manage their own studies in this mode of study.

#### 1.2.2.2 *Demographic shifts*

After a period of rapid growth in student numbers in South African higher education in the 1980s and through most of the 1990's there has been a drop in enrollments over the last three years. The National Plan for Higher Education (Ministry of Education, 2001:section 1.3) cites growth rates of 5% between 1993 and 1998 and a decrease of 4% between 1998 and 2000. Figures from the CHE put these rates at 28% and 3% respectively (CHE, 2001:26-27). The number of first-time entering undergraduates seems to be constant at 120 000 of which 80 000 are in contact institutions and 40 000 in distance education institutions (UNISA, 2001; TSA, 2002; Ministry of Education, 2001:2.1.2).

Even though there are some discrepancies in the figures quoted in various reports a clear trend emerges - rapid growth in the early and mid-1990s followed by a leveling off from 1998. There is, however, a significant fall in retention rate of students in the system as a whole. 20% of all undergraduate and postgraduate students drop out annually without completing their studies, representing a loss of R1.3 billion in government subsidy (Ministry of Education, 2001:section 2.1.3).

The decrease in head counts is attributed by National Plan for Higher Education (Ministry of Education, 2001:section 2.1.2) to

- high drop-out rates;
- mid-90s bulge moving out of system (between 1994 and 2000 number of matriculation exemptions decreased by 23%);
- fewer than normal students entering post-graduate study after first qualifications;
- increased cost of higher education: Government expenditure on higher education as a percentage of GDP is projected to decline to 0.68% in 2003/2004 from a high of 0.77% in the late 1990s (Ministry of Education, 2001:section 1.3);
- perceptions of a decline in the value of higher education;
- growing demand for short courses (particularly technical qualifications from private providers) which are directly linked to employment.

This decrease in head counts is a negative outcome for a country in which there is such a high demand for labour with higher qualifications, as outlined in the following section. Enrolments at distance education institutions have fallen from 37% of total higher education enrolment in 1995 to 30% in 2000, with the most significant decrease being at TSA (CHE, 2001:30). This significant decrease is offset by the fact that 'distance education head-counts in contact institutions grew by 492% between 1993 and 1999' (Ministry of Education, 2001:20). The combination of these trends would suggest that more students are looking for flexible ways of continuing their education. It is also a measure of diversification of distance education provision in the country.

#### 1.2.2.3 *Human resource needs*

The South African government's Human Resource Development Strategy (Asmal, 2001) aims to promote improvements in social infrastructure, decrease disparities between the rich and the poor, and improve the nation's international competitiveness. The objectives of the strategy include:

- 'Improvement in the supply of scarce skills;
- Increasing employer participation in lifelong learning;

- Supporting employment growth through industrial innovation, research and development' (Asmal, 2001).

A strategic objective of the National Plan (MOE, 2001:2) is to produce graduates with the skills and competencies to meet the human resource needs of the country (compare Assiter, 1995:11). The significant features of the National Plan's analysis of human resource development and labour market trends for the past three decades are as follows:

- Major decline in primary sector unskilled and semi-skilled jobs, particularly agriculture and mining;
- Major increase in service sector jobs, particularly in professional, managerial and technical occupations;
- Demand for labour with no education declined by 79% whereas demand for labour with higher education qualification increased by 2028%;
- Shortages are endemic in the science and economic-based fields: information technology, engineering, technological and technical occupations, economic and financial occupations, and accountancy and related occupations;
- Although total growth in new jobs is predicted at less than 1% between 1998 and 2003, new jobs in professional and managerial occupations are predicated to increase by 9.5% and 6.2% (Selected statistics from Ministry of Education, 2001:2.1.1).

Notwithstanding the caution expressed in the National Plan about the reliability of these statistics, they represent clear shifts in employment patterns which need to be addressed by higher education, as this is the sector responsible for producing professionals with high level qualifications.

The implications for student learning are clear. Those occupations which require higher order intellectual and personal skills are going to be increasingly in demand. The more effective South African higher education is at providing learning opportunities for

increased number of students to develop and enhance these skills, the greater will be the contribution of the sector to meeting the human resource needs of the country.

Open and distance education has a particularly important role to play because of its effectiveness as a medium for high level professional development and workplace-linked education and training.

#### 1.2.2.4 *Financial resources for higher education in South Africa*

Figures reported by the National Commission on Higher Education (NCHE, 1996) indicate that during the 1990s government expenditure on higher education increased in real terms at rates (5.9%) above the real GDP growth rate (1.2%) but commented that this growth rate would not be sustainable. Subsequent figures support this claim. As a percentage of total government expenditure, higher education has received an amount increasing from 2.6% in 1995/6 to 3.0% in 1999/2000. There is a projected stabilisation of this figure at 2.8% until 2003/2004 (CHE, 2001:63).

As financial resources become more limited and bearing in mind the need to increase participation rates in South African higher education (MOE, 2002:section 1), there is a greater need for efficiency in the higher education system. This means that graduation rates need to be increased. More effective academic literacy development will contribute to this and thus to a more efficient higher education system. Graduation rates (Dodds *et al.* in Harry, 1999:103; Pityana, 2002:5) have traditionally been low in distance education so this need is all the more pressing for the continued well-being of the sector.

If it is accepted that the nation's economic and social development depends significantly on developing high level human resources through higher education, then there will need to be a commensurate increase in the resources allocated to achieving targets in this area.

#### 1.2.2.5 *The learning culture*

It is commonly accepted that there are significant problems in the learning culture at every level in the South African education system (Cilliers, Kirschner & Basson, 1997). Rote learning has been a scourge in primary and secondary education which persists in many schools, in spite of the state's determination to implement a philosophy of outcomes-based education. At the higher education level there has been a high drop out rate of students from disadvantaged backgrounds due to difficulties experienced by these students in assimilating the academic culture and in developing a functional level of academic literacy which would result in successful higher education studies (MOE, 2001:2.1.3).

Angélil-Carter (1998:109) uses the phrase 'contextual disjuncture' to refer the difference in students' experience of an academic university culture and their school or home environment. Students who experience this disjuncture may feel marginalised and unable to participate fully in assimilating the new culture. According to Angélil-Carter (1998:111), these students experience difficulties with the transition to university study in a number of areas: increased workload, increased independence, functioning in a second language, changes in living conditions and even diet.

Drawing together the threads of the argument in the preceding section, it is clear that:

- Past structural inequalities in the higher education systems, which in some cases persist, have discriminated against the majority of people, limiting their chances of a university education;
- Limited resourcing of the system is inhibiting growth in participation rates, almost certainly affecting economic and social development of the society adversely;
- There is a lack of a dynamic, meaningful, learner-centred learning culture in many institutions.

Returning to the global changes and responses to change discussed in section 1.2.1 it would seem that new forms of higher education provision, which combine an open education philosophy with the positive potential of new technological modes of disseminating information and supporting meaningful learning, hold the key to improved high level human resource development. It seems self-evident that the present dedicated distance education providers will play a major role in developing these new forms of provision. They therefore feature prominently in this study.

#### *1.2.2.6 The development of distance education in South Africa*

A detailed discussion of distance education in South Africa is presented in section 2.4. For introductory purposes it will suffice at this point to sketch some general features of the system, to outline quality assurance issues and to trace the major policy recommendations which have been made in relation to the sector.

The importance of the distance education sector for future provision of higher education in South Africa stems from the following main considerations:

- Distance education accounts for some 30% of total higher education enrolment in South Africa (CHE, 2001:30);
- Distance education is seen to be a sector which can respond to growth needs more quickly and cost-effectively than campus-based education;
- Distance education is seen to be a mode of education which is in line with transformations in technology, new learning styles and organisational structures.

The sector is dominated by the University of South Africa (UNISA) and Technikon South Africa (TSA) which have large enrolments by international standards, with UNISA being included in the literature as one of the world's mega-universities (Daniel, 1996). Vista University's distance education centre (VUDEC) is the third dedicated distance education provider. There is growing diversity in distance education provision with new national and international providers competing for a share of the market. These include traditionally campus-based universities like Rand Afrikaans University



(RAU) and Pretoria University as well as private distance education colleges like Damelin which concentrate more on vocational training. See section 2.4.1 for more detailed institutional overviews.

Distance education has featured prominently in government policy for higher education provision, being seen as a sector with the flexibility and growth potential to address the higher education expansion needs which have been outlined in section 1.2.2.3.

There have, however, been concerns for some time in government and agencies like SAIDE about the quality and efficiency of the programmes offered by the traditional providers of distance education in South Africa. Briefly, these concerns include the view that the model of distance education prevalent in these institutions has not progressed much beyond the traditional correspondence model. In addition, learner support structures and programmes have been considered inadequate. Graduation rates have been criticised as being unacceptably low (Pityana, 2002:4).

In addition to the concerns outlined, the diversification of the sector and the participation of new providers has brought with it attempts to regulate quality and access to the market, the rationale being that an unregulated approach will exploit the market for commercial gain without due regard to national education goals. Section 2.5 provides a more detailed discussion of the evaluation of distance education.

Government's concerns have culminated in policy directives for the sector, most notably the proposed merger between UNISA, TSA and VUDEC to form a single national distance education provider, under whose umbrella distance education offerings can be coordinated and tailored to national priorities in higher education. The details of government policy and institutional responses is documented in section 2.6.

The introductory discussion of distance education is relevant to the present study at this point in that it provides a framework for discussing the research problems and the research design of the study.

### 1.2.3 Reasons for the study

The preceding discussion has described the general context of higher education, distance education and the unique characteristics of these in the South African setting. The importance of this field of study has been indicated by showing its contribution to social and economic development. The present section deals with more specific reasons for studying the development of academic literacy in South African distance education.

#### 1.2.3.1 *Gauging underpreparedness*

Because of the problems inherent in South African primary and secondary education a significant number of students are under-prepared for university study. Since distance education is generally more affordable and is relatively unselective in its student intake, it is hypothesised that economically and educationally disadvantaged students are over-represented in distance education. Under-preparedness is likely to be more acute in distance education where students have to rely more on their own resources. It is thus important to gauge the extent and nature of such **under-preparedness** in order to be in a better position to alleviate it.

#### 1.2.3.2 *Student learning needs*

The nature of higher education is changing from traditional face-to-face instruction to **multiple modes of delivery** which are increasingly being mediated by technology. Taken-for-granted notions of preparedness for higher education and the way students develop to become academically literate may be far removed from the reality facing many distance learners. Therefore it is important to gain knowledge of actual student experiences in order to have a realistic view of students' needs in relation to developing academic literacy.

### *1.2.3.3 Accountability and sustainability*

The **quality assurance** movement, coupled with political developments, has highlighted the need for accountability in all spheres of higher education. A lack of a clear understanding of student experience in developing academic literacy will lead to a lack of accountability among professionals and institutions. This has a bearing on evaluation and assessment practices.

In addition, the drive for **financial sustainability** of institutions is strong due to the increasing scarcity of resources for Higher education. Are alternative modes of delivery suitable, specifically in relation to the development of academic literacy, for the majority of South African students or is the introduction of new modes of delivery driven primarily by financial considerations?

### *1.2.3.4 Social and economic development*

**National social and economic development** depends on significant numbers of well-educated citizens graduating from higher education. As modes of educational delivery change, it cannot be taken for granted that students have the required skills to function productively in new learning environments. Retention and graduation rates need to be optimised if higher education is to achieve its goals. Knowledge of processes of academic literacy development is important in understanding how to optimise these rates so as to contribute to social and economic development.

### *1.2.3.5 Improving practice in distance education*

Every field of endeavour has a body of practice, usually backed up by theory, which should be challenged and improved by research. Existing practice in distance education in South Africa should benefit from the insights into academic literacy development which are derived from this study.

## 1.3 THE RESEARCH PROBLEM

As an introduction to the research problems this section provides a summary of the research question, the unit of analysis, and the primary and secondary research goals. A more detailed commentary on how the questions and goals have been pursued is provided in chapter 4 (section 4.6).

### 1.3.1 The research question

The fundamental research question addressed by the study is the following:

**To what extent do undergraduate students studying in a distance education mode perceive their academic literacy to be at a level which enables them to cope adequately with the demands of distance learning?**

### 1.3.2 Research objectives

The specific research objectives of this study are as follows:

- Investigate and describe students' perceptions of the nature, extent of the **orientation** received before and during registration with respect to its effectiveness in raising awareness of the academic literacy challenges of distance learning.
- Describe student perceptions of the **learning approaches** they apply to their studies.
- Describe student perceptions of the **course materials** they are exposed to in relation to the development of academic literacy.
- Describe student perceptions of the effectiveness of the **learning support** received from their institution and its staff in developing academic literacy.

- Describe student perceptions of the extent to which **assessment** tasks and the feedback received on assessment assist the student in developing academic literacy.
- Contrast, where possible, student perceptions in the above areas with stated objectives, methods and materials of the courses in question.

For full cross-referencing of where the study has met these objectives, see section 4.6.2.

### 1.3.3 General aims of study

The achievement of the objectives stated above contribute to the general aims of the study which include the following:

- Illuminate the processes of academic literacy development in distance education;
- Describe effective practice in developing academic literacy in distance education;
- Identify problem areas in student learning in distance education;
- Make recommendations for improvements in practice, particularly in supporting student learning effectively so as to facilitate the development of academic literacy;
- Identify areas for further research in this area.

For full cross-referencing of where the study has met these objectives, see section 4.6.3.

### 1.3.4 The object and demarcation of the study

The object of the study (or unit of analysis) is the **undergraduate student studying at a South African higher education institution in a distance education mode**. In particular the study is concerned with the **perceptions and attitudes** which such students have of their level of academic literacy in relation to the challenges that they face in their studies.

## **1.4 THE RESEARCH DESIGN**

The study is predominantly **qualitative** and is **supplemented by quantitative methods** only in respect of the use of descriptive statistics. The goal of the chosen research methods is illuminative. Because of the complexity of the variables involved and the fact that constructs such as academic literacy have not been well defined in the literature, a more rigorous quantitative experimental design could not be contemplated and an investigation of causative factors was out of the question.

### **1.4.1 Literature study on teaching and learning in South African distance education**

A study of literature on teaching and learning in South African Distance education is included in order to describe the broad context of the research and to define terms and concepts which are pertinent to the research aims and objectives.

### **1.4.2 Literature study on academic literacy**

A study of literature on academic literacy was conducted in order to gain an understanding of the dynamics of how academic literacy is 'acquired'. Again this survey was done with a view to understanding the nature of the learning experience for students studying at a distance.

### **1.4.3 Attitude survey**

The main empirical component of the study consisted of a questionnaire designed to gauge student perceptions of the development of their academic literacy in distance education courses. This questionnaire was piloted with students who had previously studied through distance education and was refined as a result of their comments. The

questionnaire was then administered to groups of students studying through the University of South Africa and Vista University.

The questionnaire results were collated and analysed using descriptive statistics. Correlation between identified variables was attempted but due to the need for extreme caution in interpretation, correlation results have not been used. Since the variables in question would be quantitative abstractions of student perceptions, the reliability of constructs would be in question.

#### **1.4.4 Interviews**

The questionnaires were followed up by in-depth interviews which probed intentions, feelings and motives of selected students. An interview schedule was used which included questions designed to focus on the development of academic literacy. Interviews were transcribed and their content was analysed in terms of facets of the researcher's concept of academic literacy and the extent of the student's engagement with these.

#### **1.4.5 Content analysis of selected learning materials**

The researcher studied a selection of learning materials from the courses taken by the subjects. The content and methods in these materials was analysed and discussed also in terms of the same facets of the researcher's concept of academic literacy which were applied in the analysis of interview data. In some cases it was possible to interview the tutors of students and assess their perceptions of the engagement of the student in developing academic literacy.

## 1.4.6 Triangulation

The gathering of data from the different sources described above made **triangulation** (Cohen *et al.*, 2000:288) possible. The analysis of student perceptions was thus informed also by an analysis of evidence from materials and from tutors.

## 1.5 CONCEPT CLARIFICATION

Chapters 2 and 3 are devoted to in-depth literature studies in the areas of distance education and academic literacy. At this stage it will suffice to clarify briefly what is meant by these, and related concepts, which are at the heart of this study. A brief discussion of terminology is also included here.

### 1.5.1 Distance education

Distance education has been defined variously by different authors. Eastmond (in Willis, 1994:88) gives a concise definition of distance education as 'the organisational framework and process of providing instruction at a distance'. In Keegan's definition (Keegan, 1990:44), distance education has the following characteristics:

- The 'quasi-separation' of the teacher and the learner for the greater part of the learning process;
- The influence of an educational organisation, in determining the curriculum, producing learning resources and providing learning and administrative support for the student;
- The use of technical media for communication of content and interaction between the teacher and learner;
- The "quasi-permanence of a learning group".

Important contributions to the definition and demarcation of distance education as a practice and a discipline have also been made by a number of prominent scholars in the field. For example, Holmberg describes distance education as a 'guided didactic



conversation' (Holmberg, 1986:9) and stresses the importance of a personal approach to communication in distance education. Moore's theory of transactional distance has also been influential and is discussed in more depth later in this chapter (see page48).

In the literature, distance education is most often contrasted with **traditional** or **contact** education in which the greater part of the learning takes place between the teacher and learner with both being present. Oral transactions in a group setting form the substance of the learning process, unlike in distance education where the teacher and learners are separated in time and space.

While distance education has been implemented in different ways in different institutions at different times, there are certain key dimensions which emerge as essential to the successful practice of distance education. These are openness, flexibility, contact, student centredness; and accessibility. A detailed discussion of these dimensions is presented in chapter 2.

### 1.5.2 Open learning

The term open learning is commonly used to describe a mode of education which places a high value on flexibility in a range of areas: the recognition of prior learning (Portier & Wagemans, 1995:65); the mode and pace of learning; and forms and timing of assessment (Government of National Unity, 1995:28). Open education is concerned primarily with facilitating students' achievement of exit standards by removing obstacles to this achievement. Evans (1994:19) argues for the use of the term 'open education' as it is used above rather than the more popular term 'open learning'. The terms open and distance are often used together to designate a class of non-traditional learning methods usually characterised by being managed by the learner rather than by the teacher. For example, Tait (in Tait & Mills, 1999:141) used the acronym ODL (open and distance learning) as a generic term in this sense. Although the terms 'open' and 'distance' are commonly juxtaposed in this way the terms are not synonymous. Distance learning in a particular context may or may not support open learning.

### 1.5.3 Academic literacy

Academic literacy is a term which is widely used by academics to describe the complex mix of knowledge, skills and values which is acquired by a student in the process of academic study. The term usually carries with it a normative understanding that to become academically literate, the student needs to develop that mix of knowledge, skills and values to the point of being able to function effectively as a student in satisfying the academic expectations of the institution and the lecturers in particular disciplines.

“Becoming literate in the university involves learning to ‘read’ the culture, learning to come to terms with its distinctive rituals, values, styles of language and behaviour...” (Ballard & Clanchy in Taylor, Ballard, Beasley, Bock, Clanchy & Nightingale, 1988:8).

Students have to engage with and learn multiple academic discourses (Dison & Rule in Angéilil-Carter, 1998). This involves coming to grips with various aspects of these disciplines such as the codes, conventions, concepts, values, canons and skills which apply in a particular discipline.

### 1.5.4 Terminology

The terms ‘learner’ and ‘student’ are used somewhat interchangeably. Where discussion deals with principles and characteristics of learning the term ‘learner’ is preferred but the term ‘student’ is often used in more practical descriptions of actual students. The term ‘distance learner’ is preferred to the more clumsy ‘distance education student’. The consistent replacement of the term ‘student’ with ‘learner’ was not considered desirable as it can lead to an awkwardness in phrasing and an overuse of the word ‘learner’.

## 1.6 LAYOUT OF CHAPTERS

This chapter has introduced the study and provided the rationale for carrying it out. The object of the research, the research problem and the research design have been described in broad terms and the major concepts to be dealt with in the study, i.e. distance education and academic literacy, have been introduced.

Chapters 2 and 3 are devoted to detailed studies of the literature on distance education and academic literacy. In both areas an attempt is made to present major international trends and also to illustrate developments and problems which are particular to South Africa.

Chapter 4 describes the mix of research methods used in this study. The methodology is eclectic, including both quantitative and qualitative methods. This chapter also discusses the methodology from a critical, theoretical perspective.

In chapter 5 the research findings are presented. These findings include descriptive and normative statistics derived from the data collected by the questionnaire. The content of student interviews is analysed and thematic trends identified.

The largely descriptive focus of this chapter is followed by a critical discussion of the research findings in chapter 6 which leads on to recommendations for the improvement of practice in distance education with regard to developing academic literacy.

The final chapter reviews the research study; its key findings, its strengths, weaknesses and limitations. In the light of key findings questions for further research in the area of academic literacy in distance education are formulated and further research is encouraged.

## CHAPTER 2

# AN OVERVIEW OF DISTANCE EDUCATION CONCEPTS, POLICIES AND PRACTICES

### 2.1 INTRODUCTION

Since the object of this study is the distance learner in South Africa, an understanding of the context in which distance learning takes place is necessary. This chapter describes that context, both broadly, in terms of the essential nature of distance education, and then more narrowly in terms of the specific characteristics of South African distance education, the institutions involved and the programmes and facilities offered by these institutions.

The focus of discussion in this chapter is progressively narrowed to a view of the student in the distance education process, the characteristics of South African distance learners and their needs, how they interact with the system and what support structures and procedures are provided to support their learning, and their acquisition or development of academic literacy.

### 2.2 KEY TERMS AND CONCEPTS IN DISTANCE EDUCATION

In chapter 1 the terms distance education and open learning were defined and explained (see Sections 1.5.1 and 1.5.2). Keegan's authoritative definition of distance education was used to highlight three major dimensions of distance education, namely: distance (as separation of teacher and learner), educational organisation, and the use of technical media in communication. Open learning was described as a style of education which is concerned primarily with removing systemic obstacles to learning.

In addition to these two main terms, a number of other related terms are used in the literature on distance education: correspondence education, distance learning, distance teaching, open education, flexible learning and flexible delivery. There are clearly overlaps in the usage of these terms and their meanings also vary according to context and with time. In delineating the broad field of distance education, authors often describe chronological shifts in terms of usage, attempting both to define accurately the meaning of terms and to trace how terms have changed or become superseded as new methods have been introduced in the field.

However, this combination of historical and terminological approaches tends to yield a list of definitions which, although they help to delineate the field and the discourse of the field, are somewhat unsatisfying as an aid to understanding those concepts and issues which are essential to the nature of distance education.

It is apparent that there are common core elements in most definitions and that differences arise in at least three respects: the learning environment; the pedagogy; and the level of technology used (Belanger & Jordan, 2000:8). Another useful way to interpret differences in definitions in the field of distance education is to locate the type of activity in question on a plane defined by the axes of time and place as shown in Table 2.1, which has been adapted from Belanger and Jordan (2000:10).

	<u>Synchronous</u> (co-ordinated at same time)	<u>Asynchronous</u> (uncoordinated)
<u>Same place</u>	<p><b>Traditional learning</b> Face-to-face teaching and learning</p> <p><i>Other terms:</i> <i>Campus-based, Contact</i></p>	<p><b>Resource-based learning</b> (within an institution or organisation)</p> <p><i>Other terms: Computer-based training (CBT)</i></p>
<u>Different place</u>	<p><b>Real-time distance learning:</b> Live courses delivered at a distance by technology</p> <p><i>Other terms: Telematic teaching, tele-learning</i></p>	<p><b>Distributed learning:</b> Learning at own pace and own time</p> <p><i>Other terms: Asynchronous learning networks</i></p>

**Table 2.1:** Conceptualising distance education by time and place

In addition to conceptualising major 'types' of distance education it is useful to locate this study in the developing discipline of distance education. Holmberg (1986) argued that distance education could be considered as a discipline in its own right on the grounds of there being a distinctive set of research issues and a distinctive set of practices which are associated with it. In delineating the emerging discipline of distance education Holmberg (1986) identified nine constituent areas ranging from philosophy to administration. In terms of Holmberg's discipline structure, this study is relevant to the following areas:

- Distance learners, their milieu, conditions and study motivation;
- Subject matter presentation;

- Communication and interaction between students and their supporting organisation.

For a fuller understanding of distance education it is also necessary to identify and investigate key variables of distance education. From the literature the following have been chosen for discussion:

- **Distance** (Evans, 1994; Garrison, 1999);
- **Openness** (Rowntree, 1992; Jakupec & Nicoll, 1994);
- **Flexibility** (Taylor & Carter, 1995; Collis & Moonen, 2001);
- **Contact** (Moore in Harry *et al.*, 1993; Cross & Steadman, 1996) ;
- **Learner-centredness** (Cross & Steadman, 1996; Richardson, 2000; Burge, 1998 & 1999, Lucas in Rust & Gibbs, 1997); and
- **Accessibility** (Swift, 1993; Taylor, 1993; Daniel, 1996).

Most of these dimensions can be applied to the full range of activities in distance education (teaching, learning, mentoring, communicating, authoring, managing), and also to the range of systemic functions which are normally mirrored in the structure of distance education institutions: course design and production; learner support; and assessment and evaluation.

Before embarking on a detailed discussion of these dimensions a brief digression is necessary. It must be recognised from the outset that no neat distinction between distance education and conventional 'contact' education can be made. As it has been predicted for some time (e.g. Mugridge, 1992:152), there is a progressive convergence between the two (Tait & Mills, 1999:1) which is being hastened by increasing needs for flexibility in the delivery of courses and by developments in information and communications technology (Kirby, 1993; Carmichael, 1995:20).

So, for example, distance education, as it is implemented in many institutions, now typically includes learning activities which are usually associated with traditional 'contact' education - lectures, tutorials, practicals and cooperative learning

opportunities. Conversely, contact institutions are becoming progressively more flexible in their delivery of instruction, using more resource-based learning, often web-based (Daugherty & Funke, 1998) which is not wholly dependent on contact sessions between lecturer and students. Garrison (1998) argues that although many university administrators do not see the advantage of introducing flexibility through information and communication technologies, there are in fact major advantages to doing so, including an opportunity to re-think teaching and learning assumptions.

The distinction can nevertheless still be made at the institutional level between those institutions which organise their academic programme primarily by means of a schedule of contact sessions (lectures, tutorials, practicals) which the student is obliged to attend, and those institutions whose academic programme is primarily organised around the production, dissemination and management of learning materials and assessment instruments with which students engage independently by utilising whatever mix of resources and schedules suits their situation and purposes best.

The phenomenon of dual or mixed mode institutions like the University of Southern Queensland and RAU (Greyling, 1996:107), complicates the matter further. These institutions run parallel programmes in contact and distance modes. Truly flexible delivery may mean that a particular student could be in attendance for one course and not for another, or even in attendance for some aspects of a single course and not for others. One may rightfully ask then whether the distinction between distance education and contact institutions can still sensibly be made.

The answer is surely that at this stage there is still such a marked difference between the two modes (notwithstanding their possible co-existence in a single institution) and between the experience of students registered in these modes, that the distinction must still be made. Not to recognise this difference would be to gloss over the very considerable challenges and difficulties facing students and institutions in the field of distance education. Therefore an understand is required of the characteristics of distance education which were introduced earlier - **distance, openness, flexibility,**



contact, learner-centredness and accessibility - as they apply to the learner studying in the distance mode.

### 2.2.1 Distance

Distance, in distance education, has traditionally been thought of as geographical distance. The student is physically removed from the lecturer and the institution, and is forced to use technology in order to interact with the lecturer or institution. The earliest forms of distance education were correspondence courses which relied on the postal system for the dissemination of learning material and the collection of student assignments (Greyling, 1993:161-2). Some authors contend that, in spite of technological changes, there has not been a significant change in the way distance education is conceptualised and practiced (Garrison, 1993:194; Renwick Commission in Pityana, 2002:4).

In more modern forms of distance education, **distance** is seen to have more dimensions and may be bridged or mediated in a variety of ways. In Evans' (1994:18) words

“ (distances)... are complex and fluid 'distances' in the teacher-learner relationship. These are not just matters of geography or even time; the social economic, spiritual, political, experiential and personal dimensions add many layers to the 'distancing' of the teacher from the student.”

Keegan's first characteristic of distance education - “the 'quasi-separation' of the teacher and the learner for the greater part of the learning process” - still holds good in a time of convergence of distance and conventional modes, since, in both modes, the student experiences a complex mix of 'distancing' in the sense of Evans' conception above.

Notwithstanding arguments that distance is disappearing in distance education (Garrison, 1999:1) and judging by total number of distance education enrolments and the relatively small proportion of those students who are actively involved with learning centres, distance, for the majority of distance learners, is still experienced as

geographical distance, remoteness from resources and even as isolation. Examples of such experience are documented in chapter 5.

### 2.2.2 Open learning

The term **open learning** is used to describe a mode of education, or rather a broad educational philosophy as illustrated by the following explanation of the term:

“Open learning is an approach which combines the principles of learner centredness, lifelong learning, flexibility of learning provision, the removal of barriers to access learning, the recognition for credit of prior learning experience, the provision of learner support...” (GNU, 1995:28).

In essence, an open learning approach seeks to open up or improve access to learning by removing artificial obstacles to participation in the learning process. These obstacles typically have more to do with the convenience or objectives of systems or institutions than being essential pre-requisites for learning. One such example is the admission requirements of many face-to-face institutions. The practice of excluding students who have university exemption and qualify to study a particular course in other ways, is motivated more by the capacity of the institution to accommodate students in lecture halls and residences than by a consideration of whether the student is capable of success in the course. These types of institutions are limited by organisational constraints which tend to militate against the adoption of an open learning philosophy. By contrast, distance education institutions have fewer constraints and thus more flexibility in adopting such a philosophy.

Open education also involves the recognition of prior learning (Rowntree, 1992:39), flexibility in the mode and pace of learning and in forms and timing of assessment. Although the introduction of more flexibility in the management of the learning process leads to a more open educational institution, these are nevertheless still ‘system’ concerns, in Habermas’ (1987) terms, rather than normative or ‘lifeworld’ concerns.

Openness in an educational institution or system is more importantly about the quality of communicative action within it and the normative values which inform this action.

The values which are associated with openness are those which prize collaboration and negotiation between lecturers and students in making decisions about curricula and methods of learning, the acceptance and valuing of diversity in student experience, the rejection of force or coercion in the learning process and, in general, the valuing of genuine, democratic and ethical discourse between participants in an educational situation. Herman and Mandel (in Tait & Mills, 1999:36) argue for the reform of educational policies, structures and processes 'so as to increase the hospitality of the university to lifeworlds of collaborative enquiry'.

In an important critique of the discourse on open learning, Jakupec and Nicoll (1994) caution against an uncritical adoption of open learning as a generally beneficial orientation, arguing that the discourse on open learning often fails to discuss the relation of open learning to teaching and learning methodologies and gives the impression of transcending pedagogical concerns. In particular they take issue with more extreme forms of open learning which would support a high degree of learner autonomy in choice of learning content (compare values advocated by Herman and Mandel above). Jakupec and Nicoll (1994) also caution that the concept of open learning is politically popular because of its perceived benefits in cost-effectiveness, and flexibility and modularisation in courses and programmes, ostensibly contributing to a more democratic ethos in education by counteracting inequality and disadvantage. Jakupec and Nicoll (1994) argue that, on the contrary, open learning rhetoric may be used to justify the commodification of knowledge for profit in a free market society, with little regard for traditional patterns of knowledge production and sound pedagogical principles.

In summary then, openness has been interpreted in a variety of ways, from the functionalist perspective of opening up access to a critical perspective which stresses openness as a normative value in redressing inequalities in higher education.

Distance education institutions like The Open University of the United Kingdom have aspired to greater openness in the distance education process and have made significant contributions in higher education by the practical implementation of the principles of openness in admissions policies, course design and learner support. Undoubtedly many distance education practitioners like Evans (1994) have also contributed to empowering distance learners through their commitment to the value of openness in their interaction with distance learners.

### 2.2.3 Flexibility

Closely allied to openness is the characteristic of **flexibility**. The term is often used in the phrases **flexible delivery** and **flexible access**, commonly associated with dual mode institutions like the University of Southern Queensland (Taylor & Carter, 1995:5), which offer courses both in a distance and on-campus mode (Croft in Mugridge, 1992:55). In this context, flexible delivery means that the student may choose to access course material and learner support in the way s/he chooses (Johnston in Tait & Mills, 1999:46), either by attending face-to-face sessions such as lectures and tutorials or by self-study using prepared materials supplemented by assistance from lecturers or tutors, or by a combination of these methods. A high degree of flexibility illustrates the process of convergence of traditional and distance education (Tait & Mills, 1999:1) referred to earlier in this chapter.

Collis and Moonen (2001:10) provide a comprehensive analysis of the dimensions of learning flexibility. The table below is adapted from their analysis in order to give an overview of options for flexibility.

Dimension of learning flexibility	Examples
Time	<ul style="list-style-type: none"> <li>▪ Start and finish dates</li> <li>▪ Assignment submission dates</li> <li>▪ Tempo of studies</li> <li>▪ Assessment times and dates</li> </ul>
Content	<ul style="list-style-type: none"> <li>▪ Course topics</li> <li>▪ Course sequence</li> <li>▪ Practical vs theoretical orientation</li> <li>▪ Learning materials</li> <li>▪ Outcomes and assessment standards</li> </ul>
Entry requirements	<ul style="list-style-type: none"> <li>▪ Conditions for participation</li> <li>▪ Entry qualifications</li> </ul>
Instructional approach and resources	<ul style="list-style-type: none"> <li>▪ Social organisation of learning (individual and/or group)</li> <li>▪ Language of instruction</li> <li>▪ Resources: teachers, peers, library, WWW</li> <li>▪ Type of assignments and assessments</li> </ul>
Delivery and logistics	<ul style="list-style-type: none"> <li>▪ Time and place of contact opportunities</li> <li>▪ Support methods and technology</li> <li>▪ Type of support and communication</li> <li>▪ Location and technology for participation</li> <li>▪ Delivery channels</li> </ul>

**Table 2.2:** Dimensions of flexible learning - adapted from Collis and Moonen (2001:10)

#### 2.2.4 Contact and interaction

Cross and Steadman (1996:20) include quality **contact** between learner and teacher as one of the basic principles of good educational practice. According to Laurillard (in

Daniel, 1996:105) the ideal teaching and learning process is a one-to-one discussion between teacher and learner. In spite of the 'quasi-separation' of the student and the teacher (and the institution) which characterises distance education there is clearly a need for contact. It is only the very mature student with a high degree of academic literacy who is able to study effectively in complete independence. Even then, it would be argued by social constructivist theorists (e.g. Schwandt, 1998:240) that learning is a socially mediated process. Isolated, independent learning, when seen from this perspective, could be considered incomplete or alienating, as learning is dependent on the interchange between people.

There is a range of different types of **contact** which exists between the distance learner and the lecturer and between the distance learner and the institution. Distance education institutions have put increasing resources into enabling this contact so that the student in modern distance education is able to be in increasingly close contact with lecturers, the institution and fellow students, compared to the isolation which was the norm in earlier forms of distance education such as correspondence education.

Meaningful contact implies **interaction**. Moore (in Harry *et al.*, 1993:20-23) identifies three types of interaction: learner-content interaction; learner-instructor interaction; and learner-learner interaction. He argues that distance educators should do more to plan for all three kinds of interaction by using a mix of media and methods which is appropriate to learning tasks and the stage of development of the learner (*ibid*:23).

Methods of increasing opportunities for contact and interaction in distance education include the following:

- Learner support centres for managing student queries and requests;
- Residential schools;
- Learning centres;
- On-line systems for information and communication, including web sites, electronic mail, newsgroups, computer conferencing (Mason, 1994:57-59).

In spite of the greatly improved opportunities for contact in most institutions, it cannot be assumed that the experience of individual students is necessarily one of interaction which supports better learning. The findings of this study, presented in chapter 5, show that many students still study in isolation from their lecturers and peers. Some prefer it that way, while others suffer from feelings of isolation, lack of support and motivation. It is also clear that the ability to take up contact opportunities is inequitably distributed, being adversely affected by factors such as geographical remoteness, lack of financial resources and transport difficulties. In some courses, the requirements for contact have been decreased for what would seem to be reasons of convenience. For example in many UNISA courses, assignments, potentially an important point of contact between lecturer and student, are now optional (See chapter endnote 1).

### **2.2.5 Learner autonomy and learner-centredness**

**Learner autonomy** and control over learning is a key factor in successful distance learning, as it is in all types of education. There are a number of considerations in this area: autonomy and control, the degree of learner-centredness designed into courses and the extent to which student interaction is encouraged and facilitated.

Richardson (2000:9) traces back to Moore the development of the idea that learner autonomy can be seen as both a prerequisite for successful distance learning and a desirable consequence of distance learning. He points also to a substantial body of research indicating the importance of learner autonomy and control in all forms of education.

A related concept is that of **learner-centredness** which involves taking into account learner characteristics and learning styles (Cross & Steadman, 1996:25). Much of the educational reform in higher education in the later part of the twentieth century has been designed to improve student learning by increasing learner-centredness. Gibbs, for example, has done extensive work in disseminating practical ideas for engaging the learner in lectures and tutorials and by way of including interactive devices in the

design of courses (Lucas *et al.* in Rust & Gibbs, 1997; Rowntree, 1992). Awareness of the need for learner-centredness in distance education comes in part from the prominence of concepts of andragogy and adult learning which stress the need for learning to be problem centred and applied - an understanding of the adult learner as being self-responsible and having an extensive repertoire of prior learning (Cilliers *et al.*, 1997:117; Burge, 1998; Burge, 1999).

In addition to lecturers and institutions focusing increasingly on student characteristics and needs, and on giving students more control over their own learning, there has been a major shift towards facilitating student interaction and involvement using, among other methodologies, collaborative and cooperative learning (Martin, Arendale & Associates, 1993; Chomienne, 1997; Johnson, Johnson & Smith, 1991; Maxwell, 1997:78); reflective journals; computer mediated interaction to encourage language development; and Action Learning (Passfield, 1996). It can be argued further that these methods do not really challenge teacher controlled curricula and that students could be given more important roles in deciding on content, teaching methods and assessment.

The prior experience of many South African students entering higher distance education suggests that they have not benefited from a secondary education which gives them much autonomy or control and many would not have had much experience of learner-centred methods (Selikow, 1998:2). Whether this will change in time with the implementation of an outcomes based education (OBE) approach in new curricula, is yet to be seen (Jansen & Christie, 1999).

The growth of academic development programmes (access/foundation courses, tutorial support and, later, staff development) at contact universities are an acknowledgement of the depth of educational disadvantage experienced by many students as a result of inadequate secondary schooling (Moyo, Donne & Hounsell, 1997:3).

In the light of these difficulties and noting the extent of reform in higher education which has advocated increased learner-centredness, it is pertinent then to question the



effectiveness of distance education practice in SA in moving towards greater learner-centredness in methodologies and materials and in facilitating greater learner autonomy. This study attempts to do so by reflecting student perceptions of their experiences in this area. Detailed discussion of this question is included in chapter 5.

### 2.2.6 Access

Distance education has always played an important part in enabling greater access to higher education for a range of reasons (Swift, 1993:3). Distance education is available to those who live in isolated areas and it enables people who are in full-time employment to study, or who, for family or personal reasons, are unable to attend classes at an institution. Distance education is also generally more affordable (Taylor, 1993:1). A comparison of South African undergraduate fees shows that UNISA fees are generally slightly less than 50% of fees at residential universities like Rhodes and Stellenbosch Universities (UNISA, 2002; Rhodes University, 2002; Stellenbosch University, 2002). Vista University (Vista, 2002) fees are still lower than those of UNISA. Most distance education institutions have ascribed to open learning principles which means that students do not have to compete on merit for a limited number of places on a particular course. There is more flexibility in distance education to handle increasing student numbers because the institution is not bound by limiting factors such as lecture hall and residence capacities.

UNISA is a particularly good example of the ability of distance education to provide improved access to higher education for more students. It is included by Daniel (1996) in the category of the worlds' mega-universities. Pityana (2002:6) outlines the scale of achievement of UNISA in providing higher education over more than a century: over 130 000 registered students in 2001; the awarding of close to 200 000 degrees and diplomas over the past 35 years; and the large proportion of registered students who are black. Historically, also, UNISA has been the institution which has been open to students who, for political reasons, were barred from other institutions (Mandela, 1994:66).

This section has identified and discussed key characteristics of distance education: distance, openness, flexibility, contact, student centredness and accessibility. Not surprisingly, the discussion has shown a great deal of inter-relatedness between the characteristics. They are after all simply lenses for looking at the same thing. A useful way of describing the relationship between such characteristics was advanced by Moore (in Chen & Willits, 1998) as a theory of transactional distance. Chen and Willits (1998) concisely outline this theory as follows:

“Moore proposed the concept of transactional distance, a distance of understandings and perceptions that may lead to a communication gap or a psychological distance between participants in the teaching-learning situation. He believed that transactional distance must be overcome by teachers, learners, and educational organisations if effective learning is to occur .... Moore ... also argued that the degree of transactional distance between learners and teachers and among learners is a function of the extent of the dialogue or interaction that occurs, the rigidity of the course structure, and the extent of the learner’s autonomy.”

The challenges inherent in distance education would therefore seem to be to maintain a significant level of high quality interaction in learning and teaching and in the design of learning materials while optimising student choice and control. At the same time, institutions must strive for economies of scale and efficiencies which maintain and enhance their competitiveness in the higher education sector. It would seem that institutions which tackle these challenges successfully will have an increasingly important role in the provision of higher education.

## 2.3 GROWTH AND DEVELOPMENT OF DISTANCE EDUCATION

Where the previous section analysed and explored characteristics of distance education as a mode of education, this section traces the growth and development of distance education as a system, outlining its organisational transformations over time.

### 2.3.1 Growth of distance education

From its beginnings as correspondence education, distance education has not only grown but it has also gone through a number of transformations in methodology and status as a sector in higher education (Greyling, 1993:161). This section traces the growth which has taken place and discusses transformations which have changed distance education.

Internationally, the distance education sector has grown very rapidly. For example, post-secondary distance education enrolments at degree-granting institutions in the USA have more than doubled to approximately 1.6 million in the period from 1995 to 1997-8 (National Centre for Education Statistics (NCES), 2001). Mega-universities have emerged with enrolments of greater than 100 000 students (Daniel, 1996). There has also been a rapid increase in distance courses being offered by traditional universities and dual or mixed mode institutions are becoming more common. In South Africa the increase in student numbers registered for such courses has been a massive 492% from 1993 to 1999 (MOE, 2001:20). In the USA, 79% of public four-year higher education institutions offered distance education courses by 1997-8, up from 62% two years earlier (NCES, 2001). Internationally, a number of new on-line universities and consortia offering on-line opportunities for higher education have been established and although enrolment numbers in this area are still relatively small, this is likely to be a major growth area for distance education. Further discussion of virtual universities is included later in this section.

The growth of distance education has been attributed to a combination of factors acting on higher education:

- Increased demand for access to higher education;
- Rising costs of contact education;
- Growth and innovation in information technology;
- Commercialisation of the education market (Lee, 1999).

### 2.3.2 Transformations in distance education

Besides the rapid growth of distance education, the sector has also gone through transformations in at least three respects: **organisational**, **pedagogic** and **technological**.

From an **organisational** perspective, distance education institutions have over time tended to differentiate the functional units (such as administration, course design, media production, learner support and assessment) which are needed for efficient servicing of distance education on a large scale. There are different models for how institutions coordinate these functions and regulate the responsibilities, contributions and rewards of institutional units associated with the functions (Bothel, 2001). These models range from small support centres within a school or faculty, which develop, deliver, support and administer a limited range of courses in cooperation with faculty staff, to large academic centres with a full range of academic, administrative and support functions for running degree programmes at a distance.

**Pedagogically**, distance education has transformed from correspondence education, in which there was little engagement with the student, to a style of interaction which is more learner-centred, and encourages more contact and more meaningful contact between the institution and the student, the teacher and the student, the learning material and the student and between students themselves. This transformation is in line with the direction of general reform in higher education in the area of student learning and has been facilitated by the extraordinary development of information and

communications technology, which makes interaction more possible in the distance mode.

**Technologically**, distance education is being transformed by the use of the knowledge media (Eisenstadt & Vincent, 1998). Where previously print media were the exclusive means of dissemination of learning material and assignments and what interaction which did take place was by correspondence, the electronic media are now increasingly prominent in both dissemination and interaction. This has added more channels of communication, with the potential of greatly increasing flexibility and improving the efficiency of distance education processes.

“Learning can be independent of time and place, and available at all stages of a person’s life will be [is] technologically rich. Learners will have access not only to a wide range of media, but also to a wide range of sources of education” (Bates, 1995:229).

### 2.3.3 Distance education models

While the transformational trends discussed in the previous paragraphs are unmistakable and fundamental, it is clear that not all distance education systems and practices are in the same state of development or have gone through the same transformations. Taylor (1992) sees distance education as working according to one of three different models: the correspondence model, the multimedia model and the teleteaching model. All three models are still prevalent and the nature of the student experience in distance education is determined largely by the model used by an institution.

Briefly, the distinction between the models is as follows. The **correspondence model** relies almost exclusively on the dissemination of course material (most often in printed form) to be studied by the individual student for the purpose of summative assessment leading to certification. In this model there is little or no interaction or contact between the student and teacher or between the student and peers.

The **multimedia model** uses a combination of media to involve the student in an interactive learning experience. Learning material is carefully designed by course teams, ideally with expert academic and instructional design capabilities. Interaction between the student, the material, the tutor, and peers is desirable and encouraged by opportunities created by the institution, such as residential schools, tutorials, and use of computer based interactive technologies and systems.

The **telelearning model** uses television and telecommunications technology to replicate the classroom environment at a distance. This is a real-time, synchronous model which relies on the role of the teacher as instructor and utilises the technology to extend provision remotely. Lewis, Whitaker and Julian (1995:16) and Hardin (2001) note that the effectiveness of this model depends on the expertise of the lecturer.

The use of information and communications technology is not restricted to the telelearning model of distance education. This technology also enhances opportunities for asynchronous models of learning and communication and, as such, is also well suited to the multimedia model. In fact, the correspondence model could also be implemented using ICTs. The use of this technology is therefore potentially pervasive as the phenomenon of the virtual university shows.

#### **2.3.4 On-line learning**

Collis and Moonen (2001:34) claim that "The more-flexible, more-international, more-virtual university is a metaphor whose time has come." Their discussion of aspects of virtuality includes ideas of breaking the constraints of time and space in relation to access to learning materials and services as well as the actual technology involved, such as the world wide web. Collis and Moonen list the payoffs of successful embracing virtuality as being an increase in mobility and participation, improved opportunities for collaboration in scholarship and research, the opening of new markets, a potential

improvement in profitability, and finally the chance of increasing multiculturalism and internationalism.

The Virtual University Gazette (2002) lists organisations which are involved in on-line learning. These include undergraduate and graduate schools and colleges, and learning portals (Downes, 2000) and services. The organisations range from well known and established universities, both traditional and distance, like Washington State University and Athabasca University to little known new learning organisations.

Established distance education universities offer courses which are comparable with those at campus-based universities, following similar academic traditions and conventions. Newer learning organisations, often using on-line technologies, include consortia which cooperate to offer accreditation, such as Western Governors University.

An interesting development is that of learning portals, established by consortia of organisations in education and the information business. One such portal is [www.fathom.com](http://www.fathom.com), a powerful combination of prestigious universities, museums and publishers (London School of Economics, The British Museum and the Smithsonian Institute among others) which offers high quality on-line learning material, mediated by prominent international scholars. Other portals provide industry-based training (EntrePort, 2002; gForce Systems, 2002), interactive children's education (Babloo, 2002), and more recreationally oriented services like a global travellers' network (Global Travellers Network, 2002).

In addition to offering courses, E-learning institutions have begun to accredit prior learning:

"Virtual universities, such as WGU [Western Governors' University], leverage the power and resources of the internet to make higher education a virtual reality to anyone, anywhere, anytime on any device. In addition, WGU's competency-based training enables students to get credit for existing knowledge and skills -- accelerating the time it would normally take to earn a degree or certificate" Kim

Jones - Vice President, Global Education and Research, Sun Microsystems Inc.  
(Western Governors' University, 2002).

In an effort to promote economic and social development, the African Virtual University (World Bank, 2002b) seeks to bridge the knowledge and digital divide, which separates African societies from those in the first world, by training African professionals, particularly in science, technology and business through access to lecturers and learning resources throughout the world. AVU uses satellite and internet technology in learning centres to deliver lessons and to facilitate interaction with lecturers and tutors.

On-line learning is an area in which established institutions are having to compete with new organisations, often in the form of powerful consortia, for their share of students in a rapidly globalising market. Although not all these ventures (including WGU) are successful or profitable, the trend is unmistakable and the technologies are increasingly reliable and capable of enabling learning at a distance.

Critical questions should be asked about the quality of student experience in this new mode of education. Does electronically mediated education allow for the necessary quality of interaction between student and tutor and between students in order to develop the skills which are thought to be a desirable outcome of higher education? Is an acceptable quality maintained in on-line courses? Do most students have the resources to participate successfully in on-line higher education? In particular, it is probable that undergraduate students, who have not yet developed their academic literacy to the point where they are relatively independent in their academic thinking and practice, will be unlikely to benefit as much from on-line distance learning as postgraduate students will. Do these questions matter, given the inexorable advance of the digital medium in the fields of education and communication?

There is a large body of research which addresses questions of quality and effectiveness in the design and implementation of on-line learning and while it is beyond the scope of this study to discuss this research in detail, some common themes can be reported:



- Electronic mail is a reliable means of asynchronous communication which speeds up response times in distributed learning;
- Cooperative learning can be enhanced by on-line learning because of the ease of sharing project work (Cronje, 1997:154);
- Computer conferencing may provide an effective means for cooperative knowledge construction but more research is required to understand the processes by which this happens (Kanuka & Anderson, 1998);
- Access to large databases of knowledge world wide is possible and represents a huge resource in education;
- Technical reliability and access to resources are important pre-requisites for successful on-line learning.

The transformation in distance education discussed in this section is clearly not evident to the same extent in all institutions. However, an ideal of a new type of institution is emerging along the lines predicted by Bates (1995:239). These institutions would have the following characteristics:

- Flexible access to a wide range of information resources;
- Coherent curricula;
- Emphasis on quality control and accreditation;
- Networking of learners and instructors with gateways to other learning networks;
- Application of new technologies;
- Conduct research on teaching and learning needs (Bates, 1995: 239).

This section has shown that distance education has grown and developed to the point that it is a vital component of higher education provision, being capable of implementing new pedagogical and technological models and having the flexibility to respond to growth needs in higher education.

Of course this general discussion on the potential of distance education begs the question of quality. This study seeks to illuminate the quality of student experience in

South African distance education in relation to their development of academic literacy. The characteristics and dimensions of distance education discussed in this section inform discussion of specific developments in South African distance education.

## **2.4 DISTANCE EDUCATION IN SOUTH AFRICA**

In order to understand the context of this study it is important to describe South African distance education, the institutions involved, the challenges facing the sector, the public policy environment and views on the quality of practice in the sector.

### **2.4.1 Institutional overviews**

Although it has been proposed that UNISA, TSA and VUDEC should merge (see section 2.6), these institutions remain autonomous and continue to function independently. An overview of their salient characteristics follows.

Pityana (2002:5) lists the following important characteristics of UNISA. It is the largest and oldest (125 years) university in South Africa. It awards more degrees and certificates to black students than any other university. UNISA is rated third in South Africa among universities with regard to standards of excellence in teaching and research. It also compares well in respect of research output and publications. UNISA was also "recently awarded accreditation by the Accreditation Commission of the Distance Education Council in the United States" (Pityana, 2002:6).

UNISA has six faculties, the largest being Arts (of which Social Science is a major part) followed by Economic and Management Sciences. Teaching is conducted primarily by means of study guides (wrap around with textbooks or stand-alone), tutorial letters and assignments. Media employed is dominated by print and supplemented by audio (Department of Education, 1996b:95) and the gradual introduction of internet-based channels.

Graduation rates at UNISA over a period of six years to 1992 show low completion rates in the region of 10% for Commerce and 5% for Science, although rates for Education are much higher at about 36% (Department of Education, 1996b:96). In an effort to improve retention and graduation rates, UNISA has over the past five years introduced a range of learner support features which are discussed in more detail in section 2.8.2.

Low completion rates are due to a combination of many factors, including a lack of engagement with the learning process, insufficient time spent studying because of work and family commitments, and inadequate interaction between students and staff. It should also be borne in mind that the quality of the student intake to distance education as measured by the matriculation results of entering students does not compare favourably with the intake at many campus-based institutions.

Technikon SA (TSA) has over 70000 students registered in career-specific courses in 2002, having grown substantially over the past decade (Department of Education, 1996b:98). In keeping with recent trends, TSA provides flexibility in the mode of learning, combining traditional correspondence type education with a "choice of learning strategies", including lectures, tutorials, practicals and experiential learning opportunities. TSA offers administrative interaction and some course materials on the web. TSA's Integrated Learner-Centred Distance Education model involves the provision of learner support services through 21 regional offices spread across the country (TSA, 2002). The Faculties of Law and Business accounted for the great majority of enrolments by 1996. Completion rates at TSA over 6 year periods are also relatively low at less than 20% for large programmes such as Public Administration and Police Administration (Department of Education, 1996b:99).

Vista is a mixed-mode university with seven campuses in large black urban areas. It offers distance learning through VUDEC, its distance education campus. VUDEC enrolments were in the region of 12000 in 1996. It has concentrated on upgrading

underqualified teachers mainly through correspondence with little use of campus facilities for distance learners (Department of Education, 1996b:102).

Building on their experience of guided self-study (Greyling, 1996:107), Rand Afrikaans University (RAU) has established a Centre For Distance Education and distance education courses have been introduced in seven faculties: Economic and Management Sciences, Education, Engineering, Arts, Law, Science and Nursing. RAU has a particularly wide range of offerings for advanced certificates in Education. Learner support is facilitated by six regional offices and smaller contact centres. The example of RAU is included here to show how a contact university has diversified and restructured over a relatively short period to become a dual mode institution. Table 2.5 shows the great strides which Pretoria University and the University of Port Elizabeth (UPE) have made in a similar direction.

South Africa has a sizeable private distance education sector comprising colleges such as Damelin, Intek, Lyceum, Rapid Results and Success (Andrew, 1995:13). These colleges have concentrated on secondary education, professional qualifications and vocational and self-development courses (Department of Education, 1996b:104-105).

These colleges typically work in partnership with other learning and training organisations. Damelin, for example, has links with a number of universities, both national and international, including Oxford Brookes University, UNISA, the University of Pretoria, RAU and Free State University (Damelin, 2002). Lyceum College has a strong link with Educor, a private provider of education and training which in turn services other colleges and institutions such as Damelin, Midrand Campus, and Success College (Lyceum, 2002). The size of the private distance education sector is difficult to ascertain but it is clearly substantial.

By its nature distance education crosses international boundaries. Students are free to enroll at institutions across the world. A number of international universities have

specifically targeted the South African market. These include Australian universities, University of Southern Queensland (2002) and Bond University (2002).

In a free market, international universities are indeed competition for South African universities since overseas qualifications are sought after. However, high fees due to currency exchange rates afford a measure of protection for local institutions. In addition, the provision of learner support is more difficult for overseas universities. Nevertheless, due to advances in information and telecommunications technology, local institutions cannot be complacent and must be prepared to compete in a global market.

The following tables outline enrolment figures for South African higher education for the years 1998 to 2000, indicating absolute and percentage changes. Figures for contact and distance institutions are included to provide a comparative perspective. The reader is referred to the list of acronyms on page xvii.

Institutions	1998	1999	2000	Enrolment changes		% change: 2000	
				comparing:		To 1998	To 1999
				2000 to 1998	2000 to 1999		
HWU's	183.6	192.3	194.7	11.1	2.4	6%	1%
HBU's	91.1	79.9	71.5	-19.6	-8.4	-22%	-11%
HWT's	85.5	92.3	94.4	3.9	-2.9	5%	-3%
HBT's	45.3	44.2	45.5	0.2	1.3	0%	3%
Distance Institutions	197.9	173.2	171.9	-26.0	-1.3	-13%	-1%
<b>Overall Total</b>	<b>603.4</b>	<b>581.9</b>	<b>578</b>	<b>-25.4</b>	<b>-3.9</b>	<b>-4%</b>	<b>-1%</b>

**Table 2.3:** Head count enrolment totals: summary for the SA higher education system (CHE, 2001)

	1998	1999	2000	Enrolment changes		% change: 2000	
				comparing:			
Unisa	120.8	107.8	111.6	-9.2	3.8	-8%	4%
TSA	77.1	65.4	60.3	-16.8	-7.0	-22%	-11%
<b>Overall</b>	<b>197.9</b>	<b>173.2</b>	<b>171.9</b>	<b>-26.0</b>	<b>-1.3</b>	<b>-13%</b>	<b>-1%</b>
<b>Total</b>							

Table 2.4: Head count enrolments in SA distance institutions (CHE, 2001)

	1998	1999	2000	Enrolment changes		% change:	
				comparing:		2000	
				2000 to	2000 to	To 1998	To
				1998	1999		1999
UCT	15.9	16.3	17.1	1.2	0.8	8%	5%
Stellenbosch	16.8	18.6	21.3	4.5	2.7	27%	15%
Natal University	19.1	21.7	21.5	2.4	-0.2	13%	-1%
Rhodes	5.4	6.2	6.3	0.9	0.1	17%	2%
*OFS	10.4	10.4	10.4	0.0	0.0	0%	0%
Potchefstroom	13.4	14.4	14.4	1.0	0.0	7%	0%
Wits	17.6	17.2	17	-0.6	-0.2	-3%	-1%
Pretoria: contact	26.7	??26.5	??26.1	-0.6	??-0.4	??-2%	??-2%
Pretoria (DE):	26.4	??28.6	??27.2	0.8	-1.4	3%	-5%
RAU	20.7	19	19.5	-1.2	0.5	-6%	3%
UPE: contact	6	6.4	6.9	0.9	0.5	15%	8%
*UPE: distance	5.2	7	7	1.8	0.0	35%	0%
<b>Total: HWU's</b>	<b>183.6</b>	<b>192.3</b>	<b>194.7</b>	<b>11.1</b>	<b>2.4</b>	<b>6%</b>	<b>1%</b>

Table 2.5: Overall head count enrolment totals at historically white universities (HWU) (CHE, 2001)

In terms of total enrolment in higher education, distance education accounts for a large percentage. The most reliable figures seem to be those reported by the Council for Higher Education (CHE, 2001). Based on these figures, distance learners accounted for almost 30% of higher education enrolments in 2000. It is worth noting the decline in numbers at the established distance education institutions during the period 1998-2000. However, the trend would seem to have been reversed since then as figures reported by both UNISA and TSA for 2001 and 2002 respectively, show substantial increases on the CHE figures. At the same time the substantial increase in distance education enrolments at contact institutions is evident. Detailed enrolment figures for HWUs are presented above simply to illustrate this point whereas equivalent figures for contact historically black universities (HBUs) are not given since they have not enrolled substantial numbers of distance learners. In terms of enrolments distance education is, and seems likely to continue to be, a major factor in the provision of higher education in South Africa.

#### **2.4.2 Challenges to existing distance education providers**

Through the 1990s, distance education was paid increasing attention by national education planners who recognised its potential for expanding higher education provision while also being aware of problems in the sector.

The NCHE (1996) envisaged an enhanced role for distance education, better cost-effectiveness, the key role of good course materials, and the need for improved learner support through collaborative consortia in providing appropriate tutoring. To these challenges Naidoo (1996:137) adds the need to integrate new technologies into distance learning, a stronger emphasis on quality assurance and the need to extend distance education provision to sectors other than higher education in a bid to address broader needs in education and training.

The National Plan for Higher Education (Ministry of Education, 2001:4.4) argues that expansion of distance education programmes is influenced by changes in information technology, the need for greater cost-efficiency, increased competition from private

providers, and the fact that the White Paper (GNU, 1995) indicated that distance education would have an important role in expanding access, diversifying the learner body and enhancing the quality of learning.

Traditional providers of distance education face competition in a number of forms:

“..the rapid development of distance education programmes by traditionally contact institutions; second, the establishment of satellite campuses by contact institutions to facilitate the delivery of their distance education programmes and, in some cases, to offer traditional face-to-face programmes; third, the rapid growth of the private higher education sector with its limited focus on the delivery of low-cost, high demand programmes which are financially lucrative, such as those in business, commerce and management” (Ministry of Education, 2001:1.3).

Having described the distance education sector in South Africa and discussed challenges facing the sector it is necessary to consider views on the quality of distance education provision. The following section does this by discussing methods of evaluating distance education and reviewing evaluative judgements which have been made of distance education in South Africa.

## 2.5 EVALUATING DISTANCE EDUCATION

The discussion so far has described the essential features of distance education and highlighted advantages and disadvantages of this mode of educational provision. There is clearly a lot at stake in this sector. The political pressure brought to bear by the Minister of Education on the South African distance education institutions for amalgamation arguably stems from a conviction of the critical role of distance education in higher education provision. In a sense, because of the fundamental changes in educational practice and technology, distance education, in all its forms, is the future of education. This places it high on the social and political agenda of a society. The evaluation of distance education, therefore, is crucial in the monitoring of the



effectiveness and future direction of a society's educational provision (Thorpe, 1988:191; Belanger & Jordan, 2000:11). Distance education has also been seen in the past as a second-class education for the most disadvantaged (Perraton in Murray-Harvey & Silins, 1997:171). Evaluation is therefore necessary in ridding distance education of that stigma and as a safeguard against it perpetuating inequalities in higher education.

Evaluation of distance education may involve looking critically at personnel, programmes, projects and products (Eastmond in Willis, 1994:99). At a more detailed level the evaluation of distance education courses is important to gauge student satisfaction, appropriateness of course content and effectiveness of teaching so that improvements in practice can be made (University of Idaho, 2001. Also see Strydom, 1997a; Greyling, 1993 ; SAIDE, 1994 for distance education evaluation criteria).

Pond (2002) argues that a fundamental shift is taking place in models of accreditation and quality assurance in distributed learning away from a focus on the process or medium of education and towards an outcomes or product based model. Pond sees previous methods as teacher and institution centred, prescriptive and hegemonic in that accreditation and quality assurance standards are controlled by the credentials of the institution. He argues that newer forms will be tailored to the needs of the learner in accrediting learning outcomes and competencies by multiple agencies. In this view, quality assurance is tied closely to accreditation and accreditation is no longer the preserve of academia. What counts as value is no longer the traditional credentials of institutions and lecturers but, the perceived relevance and value in the marketplace.

This view must be tempered by recognising its bias towards market forces and noting the importance of qualification frameworks such as the National Qualification Framework (1996) for regulating and accrediting learning and providing criteria for quality assurance.

Notwithstanding the undoubted achievements of institutions like UNISA and Technikon SA in extending higher education provision, for the past decade at least there

have been voices which have been critical of practice in South African distance education. Ridge and Waghid (2000:80) make the claim that 'throughout the region, efficacy, relevance and cost effectiveness leave much to be desired' and recount the NCHE's criticisms as:

- Low throughput and completion rates in science and technology;
- Ineffective single mode correspondence type distance education;
- Inadequate tutorial and learner support structures at regional and national centres; and
- Subsidy which does not encourage learner-centred education.

Dodds *et al.* (in Harry, 1999:103), also draw on NCHE opinions in urging transformation in the areas of learning materials, learner support systems, governance structures, and the establishment of partnerships between institutions to avoid duplication and improve cost-effectiveness.

The Renwick Commission (in Pityana, 2002:4) was particularly severe in its judgement that what has been offered in the sector is generally deficient, outmoded and even dysfunctional on the grounds that it has been based on "an outmoded and limited conception of ...distance education" (Pityana, 2002:4).

Since its launch in 1992 SAIDE has advocated good practice in distance education through its involvement in a range of evaluations, developmental workshops and policy forums. SAIDE has consistently critiqued South African distance education on two counts - the poor quality of learning materials and the relative lack of learner support offered by institutions. SAIDE has worked extensively with both UNISA and TSA on development and evaluation projects, as well as with traditionally contact universities wishing to offer course in dual mode (Glennie & Gultig, 2002:8).

The Ministry of Education is ambivalent in its attitude to the growth of distance programmes at contact institutions (Ministry of Education, 2001:section 4.4). On the one hand, it welcomes the development as indicative of the capacity of institutions to adapt to new methods and to grasp new opportunities. On the other hand, it has strong

reservations about the growth of programmes which seem to be designed primarily for the institution's financial gain and do not fit into a broader plan for the role which the institution is supposed to be playing in expanding educational opportunity as part of an agreed national strategy. There are concerns about the quality and relevance of distance programmes provided by contact institutions in the following respects:

- Quality of materials design and lack of diversity of medium of presentation;
- Lack of full use of interactive possibilities of on-line course offerings;
- Little evidence of research-based approaches to design, development and delivery;
- Lack of research into student needs and the context of their learning; and
- Questionable relevance of programmes (MOE, 2001:4.4).

It can be argued that established distance education providers should be subject to the same scrutiny in terms of quality and relevance.

There is concern expressed in the National Plan about the phenomenon of the virtual university. It is argued that the kind of experience students would encounter by doing on-line courses through global providers would fall short of the sort of experience needed to develop future intellectuals and leaders, the sort of experience in which scholarship, research, teaching and service are equally valued (Ministry of Education, 2001:section 4.4). Similarly, Rumble (2000:2) notes the concern that the globalisation of context can lead to a loss of cultural diversity and richness.

In summary, it is clear that the on-going evaluation of distance education in South Africa is crucial to the healthy development of the sector. There are powerful factors which dictate this - the scale of operations, the legacy of poor materials and lack of user support, the lure of easy financial gain through rapid enrolment increases, and the complexity of teaching and learning at a distance in a constantly changing technological landscape.

“The struggle remains one of supporting pockets of high quality educational innovation, while developing ways of curtailing the expansion of poor quality

provision driven largely by the promise of good financial returns" (Glennie & Gultig, 2002:13).

This study aims to contribute to the evaluation of current practice in South African distance education through critical discussion of learner support as one of the core processes in distance education and an analysis of what is currently being done in South African distance education to support learners and develop their academic literacy.

The evaluation of distance education, while concerned with the details of current practice in the field, must also be informed by the policy context in which it takes place. The following section presents an overview of policy directions in the field of distance education in South Africa.

## **2.6 POLICY DIRECTIONS**

In response to perceived difficulties in the way distance education is developing in higher education the Ministry of Education has signaled its intention to regulate distance education by means which are discussed below.

Although it agrees to lift the moratorium on the introduction of new distance education programmes in contact institutions, it is recommending the development of a clear policy for these programmes which stipulates conditions and criteria which would have to be met. It sees the Higher Education Quality Council (HEQC) being involved in quality assurance for such programmes.

Furthermore, the Ministry stipulates that all new programmes and student places on programmes would need to be approved as part of the three-year rolling plans of institutions. In this way the Ministry intends to regulate distance programmes in contact institutions so that they are in line with regional and national higher education priorities and so that they are subject to the quality assurance criteria of the HEQC (Ministry of Education, 2001:section 4.4.1).

It is worth noting that the extent to which contact institutions should be involved in distance education has been debated quite actively for at least a decade. Greyling (1993) conducted an exhaustive analysis of suitable criteria for distance programmes at residential universities, concluding that a mix of modes, combining the best characteristics of contact and distance programmes, provides a cost effective and workable solution to the challenges of meeting higher education needs for the future. In 1994, SAIDE facilitated a wide-ranging seminar on the subject with participation from most Universities and many Technikons.

The second major policy direction expressed in the National Plan for Higher Education (section 4.5) is the intention of the Ministry to establish a "single dedicated distance education institution through merging UNISA and Technikon South Africa and incorporating the distance education centre of Vista University into the merged institution."

It is argued that this national consolidation of distance education would have the following advantages for the higher education system:

- Focusing the *contribution of distance education to national and regional goals*;
- The *development of quality courses* by a national network of centres of innovation;
- The coordination and facilitation of learner support systems through *the development of a national network of learning centres*;
- The *enhancement of human resource development* for the SADC region and the entire continent;
- The *improvement of economies of scale and scope*, particularly with respect to innovation by means of new information and communications technologies.

Initially, the determination of the Ministry of Education in pursuing this policy direction was contested by the institutions concerned. Students, staff and councils have been critical of the Ministry's modus operandi and the time scale which has been applied to the merger. In recent developments UNISA has withdrawn its legal challenge to the

merger and the Minister of Education and the UNISA Council have met to discuss issues and procedures relating to the timing of the merger and also the name of the merged institution (DOE, 2002).

Discussion of the details of the proposed merger is beyond the scope of this chapter but the question of the desirability of rationalisation of distance education is discussed in the final chapter.

This discussion of policy directions for distance education has been included here to provide a framework for discussing the relevance of the findings of the study and their possible application. The recommendations of this study on what can be done to develop academic literacy skills in distance learners can be useful both in the quality assurance procedures discussed above and in the work of learning centres (in supporting students) and centres of innovation (in the development of materials and courses), all of which have received attention in policy debates of distance education.

## **2.7 DISTANCE EDUCATION PROCESSES AND INFRASTRUCTURE**

The remarkable growth and development of distance education as outlined in the previous section of this chapter has been possible only because of the adoption of industrialised processes and the division of labour along functional lines in servicing a distance education operation at an institutional level.

Modern distance education depends on economies of scale. Once enough students are enrolled at a particular institution, it can justify financially the establishment of specialised organisational units which service increasingly narrow functional needs. So for example, there can be specialist course production teams who may not teach; specialist media sections which transform course ideas into media packages; printing production units which specialise in producing texts, study guides and tutorial letters; a mail unit which services dissemination and collection of materials between the institution and the student; a learner support centre which tracks all student requests

and may coordinate learning support functions such as teleconferences and residential schools; and teams of lecturers who interact with the students at an academic level and are responsible for assessment.

Ridge and Waghid (2000:80-84) provide a good example of differentiation and specialisation of functions and roles in the instructional design process, tracing its evolution through to fourth generation instructional systems design which they claim yields courses which are responsive to learner needs and to changing conditions because it is a dynamic process which includes feedback through evaluation.

While it could be argued that all functional units in a distance education operation are concerned with student learning, from an organisational point of view, there are some functional units and staff roles which are more intimately involved with learner support. Most directly, these include learner support centres and the role which lecturers play in direct communication with students in supporting their learning. Learner support centres, whether centrally or regionally situated, provide the most explicit support to learners in the form of responding to queries, putting students in touch with lecturers who can engage with the learner, and organising tutorial and learning skills sessions to assist in the learning process.

Curriculum development and course design functions have an equally important role in supporting student learning but in a less direct way through learning materials.

## **2.8 DEVELOPING ACADEMIC LITERACY IN DISTANCE EDUCATION**

The previous section analysed the infrastructural and organisational units which are necessary to conduct the business of distance education. Since this study is about the development of academic literacy it is necessary to discuss in more detail those which contribute directly to the development of academic literacy in the student or have an impact on it in some way. Two functions are key in this regard: Firstly, curriculum development and course design are vitally important in the development of academic

literacy because these processes define the type of learning in which the student will be engaged. Secondly, learner support functions have an important role in developing academic literacy by creating the sorts of opportunities for interaction which were discussed in section 2.2.4.

### **2.8.1 Curriculum development and course design**

These functions of curriculum development and course design include identifying outcomes, selecting content, posing questions, framing activities and designing assessment. These processes are particularly important in distance education where learning from materials has such a central place.

Rowntree (1994:10) includes the following as types of learning materials commonly used in distance education: text books, wrap-around study guides, self-teaching texts/ action guides, worksheets, case studies, tutorial letters and assignments. To this list one should add audio-visual and computer-based material.

Examination of materials may be guided by an awareness of some of the issues and learning variables such as interactivity, challenge, learner-centredness, and accessibility. With these macro-issues in mind, materials should include the following desirable features:

- Content quality and accuracy;
- The effective use of outcomes and objectives;
- Structure and content mapping and alternative learning pathways;
- Range of learning modalities used through a mix of media;
- Examples and applications;
- Self-assessment activities and questions.

This list of features was compiled from suggestions for effective learning material design in Rowntree (1994).



## 2.8.2 Learner support

Learner support may be defined as the collection of resources and procedures which enhance the learning environment of the distance learner. These resources and procedures may be designed and provided by the institution with which the student is registered or they may exist independently of that institution.

Wade (in Wade, Hodgkinson, Smith & Arfield, 1994:13) argues that an institutional framework for learner support and guidance is essential for flexible learning. Bothel (2001:1) argues that in order to respond to the many strong forces acting on education, universities must accelerate change in functions such as admissions, registration, advising, technology support and other student services. This section considers the need for learner support, who typically provides such support, and institutional models for providing support.

Learner support includes all activities which assist the learner to succeed academically. It includes assistance in assimilating, understanding, applying and evaluating academic content but would also include assistance in dealing with administrative and financial matters, with learning skills development and with developing organisational skills.

Rowntree (1994:74) includes the following in the list of people who may be supporters of learners in distance education: advisors or counselors; tutors; mentors; line managers (in a work situation); technicians or demonstrators; librarians; learning centre receptionists; other learners; friends, family and colleagues. Rowntree (1994:73) and Greyling (1993:40) list categories of help which learners may need in order to succeed.

The following list is adapted from these sources:

- Entry and exit level counseling;
- Helping learners select and adapt learning materials;
- Agreeing on a plan of support with the learner;
- Assessment of progress and providing feedback;
- Guidance on approaches to learning;

- Helping to establish and sustain peer learning support groups;
- Helping learners to apply their knowledge in real life situations (e.g. work).

The categories of support listed above can be seen as adding value to the student's learning and are the kinds of support which are typically provided by learning centres.

Rowntree also includes administration of students' records, formal assessment, managing learning materials and being involved in the evaluation of materials, courses and systems. These can be seen as the core functions in supporting learning and are normally provided by administrators and academic staff of the institution with which the student is registered, often remote from the student.

Smith and Wade (in Wade *et al.*, 1994:51-52) stress the importance of lecturing, tutoring and mentoring staff in providing support for flexible learning in the following ways:

- providing support for the learning process;
- giving feedback;
- preventing the learner feeling isolated;
- being positive and encouraging;
- helping maintain motivation;
- assisting in the planning of work;
- facilitating peer support.

Van Dyke (1995:62), based on a large student survey in an Australian environment, reports a range of student suggestions for improving learner support:

- Improving accessibility and interaction between students, faculty and support staff;
- Greater use of electronic media;
- Improved telephone access;
- More understanding and respect from staff;
- Enhanced access to resources, particular libraries;

### 2.8.2.1 *Institutional models of learner support*

The previous section has shown that learner support embraces a wide range of helping and facilitating roles. Distance education institutions provide this support through various mechanisms such as permanent support units situated on the main campus; support centres situated remotely in locations with the greatest concentrations of enrolled students, often called regional learning centres; residential schools conducted at the central campus or remotely for groups of students.

Media used to maintain contact with students and to engage with them when they request support include both synchronous and asynchronous telecommunications methods, e.g. phone, fax, teleconference, video conference, voice-mail (Carmichael, 1995) e-mail, computer conferencing (Bullen, 1998) and on-line web-based communication (Daugherty & Funke, 1998).

### 2.8.2.2 *On-line learner support*

On-line support for student learning is becoming increasingly important as access to computer networks becomes more widespread. On-line support is typically provided by means of computer mediated communication facilities such as e-mail, list serves, computer conferencing (see Scott & Phillips in Eisenstadt & Vincent for desirable features), through web-based instructional material provided as part of a course (Daugherty & Funke, 1998), or through learning resource material and bibliographic information (journals, books, multimedia) provided by libraries. Beagle (1998) comments that the library is the 'socially designated keeper of knowledge media' and that its orientation has always been student- rather than teacher-centred. As such, libraries are centrally placed to provide on-line learning support in distance education and need to plan strategically to develop their capability and capacity in this regard (Lee, 1999).

There is evidence in the literature that students value on-line learning and support and that for on-line learning and support to be effective it is important that infra-structural, access and efficiency problems in the delivery of material and support in this form must be minimised (Shaw & Pieter, 2000). If this can be done then creating an on-line academic community on the web for the distance learner to interact with can be an important source of support (McLellan in Khan, 1997:185).

## 2.9 SOUTH AFRICAN DISTANCE LEARNERS

Greyling (1993 :41) lists the following characteristics of distance education learners:

- Involved with and driving the learning process;
- Developing their own potential;
- Developing a range of study skills;
- Mastering learning goals independently; and
- Evaluating themselves.

However, this list represents something of an ideal type. Greyling also argues that learners should be seen in terms of differences, cultural, experiential, in intellectual capacity, academic progress, motivation and life circumstances.

Evans' (1994) case studies emphasise the uniqueness of distance learners. As he puts it "Adult students en masse are as dynamic and chaotic as the global weather system" (Evans, 1994:128). However, through experience and reflection the distance educator is able to discern more general patterns and factors which bear on the experience of individual students. Evans uses case studies to identify and illustrate the following: social and educational background; money; gender and power relations; work; recreation; and age.

The present study confirms the diversity of learner characteristics in the sample studied and illuminates some of the general patterns which emerge in relation to South African distance learners and the teaching and learning context which they experience. The study goes further in probing some of the cognitive processes which students experience

as significant in their developing academic literacy and an attempt is made to develop an understanding of students which integrates student perceptions of the external conditions of their lives and internal cognitive and affective development processes which facilitate or hinder students' acculturation into the academic milieu.

## 2.10 LEARNING SUPPORT INITIATIVES IN SOUTH AFRICAN DISTANCE EDUCATION

In response to perceived needs and the criticisms which have been documented in this chapter, UNISA and other institutions have taken steps to improve the quality of their practice in recognising and catering for the diversity of student characteristics.

Daniel (1996:183) notes UNISA's efforts to strengthen learner support through regional administrative centres and libraries, the establishment of learning centres and by expanding tutorial provision. UNISA (1996) published a manual providing guidelines for the implementation of support services at UNISA Learning Centres.

UNISA's Learning Centres currently "aim to assist UNISA learners to develop into motivated and independent learners through:

- Weekly face-to-face tutorials led by expert local tutors;
- Study skills and student development workshops;
- General academic support;
- The chance to meet fellow students who have similar academic hurdles to overcome;
- Examination preparation" (UNISA Website, 2002).

Randell (1998:13) confirms the importance of contact sessions in encouraging independent study.

In the electronic medium UNISA has established the Students On-line (SOL) system which offers administrative and academic services, including study information and discussion forums.

## 2.11 CONCLUSION

This chapter has discussed fundamental characteristics of distance education, considered the development of the sector both internationally and in South Africa and then focussed more narrowly on learner support as the function which is most directly involved in the development of academic literacy. The discussion in this chapter has been included to gain an understanding of the context in which South African distance learners learn as this is important in examining in more detail how academic literacy is developed. Chapter 3 is devoted to a survey of the literature on academic literacy, both as a concept and as the lived experience of distance learners in South Africa.

### Chapter notes:

1. Comparative first year BA fees for 2002: Rhodes University: R12480; Stellenbosch University: R 10500; UNISA: R4920 (Source: Rhodes University, Stellenbosch University and UNISA websites, 2002).
2. Question marks in this table indicate uncertainty about the accuracy of data received from institutions.

## CHAPTER 3

### THEORETICAL PERSPECTIVES ON ACADEMIC LITERACY

#### 3.1 INTRODUCTION

In chapter 2 the focus was on understanding distance education as a system and the characteristics and challenges of distance education in South Africa. Particular attention was paid to the question of supporting learners in distance education. Before presenting empirical information and an interpretation of how students in this study become 'academically literate' (or fail to do so) and their attitudes to this process, it is necessary to take a step back from the immediate situation and attempt to answer by means of a review of available literature, a range of broad questions:

- What is commonly perceived to be the purpose and value of higher education in relation to the knowledge, skills and attitudes of graduates?
- What philosophical positions are adopted in education to justify particular orientations to teaching and learning?
- How are these philosophical orientations translated into practice in relation to the development of academic literacy?
- What theories and models have been advanced about the processes by which academic literacy is developed?
- How adequate are these models as frameworks for understanding the experience of South African distance learners?

These questions are posed here as organisers for the discussion of academic literacy in this chapter and not as research questions. The sections on the aims of higher education, philosophical orientations and good practice are intended to frame the main focus of the chapter, that of 'academic literacy'. As such those sections are not intended to be comprehensive treatments of the questions raised but they are important in locating discussion on academic literacy in a broader context of questions about the nature and purpose of higher education and how students make their way through it.

A persistent thread in discourses about academic literacy in the literature is that there are in fact many literacies. (Taylor in Taylor *et al.*, 1988:2; Nightingale in Taylor *et al.*, 1988:66) What it means to be or to become academically literate is context dependent and academic contexts and cultures vary a great deal. Learning and teaching cultures which exist in South African distance education therefore examined and it is argued that an expanded concept of academic literacy is needed to explain the complex of skills and attitudes which are likely to make distance learners successful in the South African context.

### 3.2 AIMS OF HIGHER EDUCATION

Higher education is a complex global system with many variations in national and local implementation. Its specific aims and purposes are therefore varied and are generally expressed in terms of attributes of graduates who have acquired knowledge and developed understanding at a high level which enables them to be productive, creative, critical citizens with a sound ethical approach to life. For example, Taylor (in Nightingale & O'Neil, 1994:53) includes the following desirable attributes: problem-solving, critical and strategic thinking skills, and interpersonal and communication skills. Bates (1995:232) adds independent learning, adaptability and teamwork (see also Fallows & Steven, 2000:8-9).

Which ever way the desirable outcomes of higher education are conceived (e.g. Melton, 1997:32-35), the fundamental purpose of higher education must be to educate citizens who are able to sustain and enhance the economic, intellectual, moral and spiritual fabric of societies and cultures, however broadly or diversely these may be conceived.

One may ask what attributes enable educated people to lead societies effectively. In a liberal tradition, knowledge, professionalism, good judgement and a well developed ethical and moral sense would be prized. More pragmatically one may think in terms of competencies as Rowntree (1994:59) does in claiming that generic competencies



distinguish superior from average performers in organisations. He lists the following examples of such competencies:

- discerning themes and patterns in large amounts of disparate information;
- ability to explain the different sides of a controversial issue;
- ability to learn from experience;
- ability to see beneath the surface features of someone else's behaviour and diagnose the concerns that drive it;
- ability to promote feelings of efficacy in other people; and
- proactive ability to influence and make an impact on other people.

This set of competencies closely resembles the critical cross-field outcomes for higher education in South Africa as conceptualised in the National Qualifications Framework (in DOE, 2002). These outcomes include both critical/reflexive and productive/utilitarian aspects (Muller in Kraak, 2000b: 83-87):

- Identifying and solving problems by critical and creative thinking;
- Working effectively as a team member;
- Collecting, using and evaluating information;
- Effective communication using a range of skills;
- Using science and technology effectively and critically; and
- Demonstrating and understanding of the world as a 'set of related systems'.

A set of generic competencies such as these can be thought of as meta-skills which contribute to success in an organisation, or in life more generally. They are of interest to this study in that higher education ultimately should be designed to facilitate the development of such skills. Therefore at least some of these skills should be developed by the academic experience of students in higher education. In this sense the development of academic literacy should contribute to general professional and life-skills.

Building on this understanding of desirable outcomes in higher education, the following sections consider theoretical orientations to teaching and learning and the practical implications of these orientations.

### 3.3 PHILOSOPHICAL ORIENTATIONS TO TEACHING AND LEARNING

While social and economic needs and goals guide the overall purpose of higher education, the way that it is implemented depends on many factors, including policy, resources, academic traditions and the actions and motivations of participants in a given institutional setting. These factors in turn are 'driven' by a combination of philosophical and pragmatic considerations.

Pragmatic considerations in higher education have been discussed in chapter 1 (sections 1.2.1 & 1.2.2) where various trends were discussed. The discussion on distance education in chapter 2 also dealt with pragmatic issues and touched on philosophical thinking about the nature and practice of distance education as a system or mode of education (sections 2.3 & 2.7). It is important now to look at underlying philosophical orientations which influence the way in which teaching and learning is understood and practiced.

The shift in 'zeitgeist' at a philosophical and epistemological level from modernist to postmodernist positions is widely documented in the literature (Cross & Steadman, 1996:12; Kinchloe & McLaren in Denzin & Lincoln, 1998:268-271). The implications of this shift for the process of enquiry and research are explored in more depth in chapter 4. In a nutshell '[the] contemporary era [is] marked by the delegitimation of the grand narratives of western civilisations' (Kinchloe & McLaren in Denzin & Lincoln, 1998:268) - a break of faith in the power of traditional reason and scientific method, and in the usefulness of social, political and religious orthodoxy.

The radical change in information technology is related to this shift in world-view in complex ways (Bates, 1995:230). Clearly society is moving and transforming from an

industrial age into an information age (See Table 3.1). This involves a radical restructuring of most manufacturing and organisational processes as well as the acquisition of new skills by people in areas like information literacy and cooperative behaviour.

<b>Industrial Age</b>	<b>Information Age</b>
Teaching franchise	Learning franchise
Provider-driven, set time for learning	Individualised learning
Information infrastructure as support tool	Information infrastructure as the fundamental instrument of transformation
Individual technologies	Technology synergies
Time out for education	Just-in-time learning
Continuing education	Perpetual learning
Separate learning systems	Fused learning systems
Traditional courses, degrees and academic calendars	Unbundled learning experiences based on learner needs
Teaching and certification of mastery are combined	Learning and certification of mastery are related, yet separable issues
Front-end, lump-sum payment based on length of academic process	Point-of-access payment for exchange of intellectual property based on value added
Collections of fragmented, narrow and proprietary systems	Seamless, integrated, comprehensive and open systems
Bureaucratic systems	Self-informing, self-correcting systems
Rigid, pre-designed processes	Families of transactions customizable to the needs of learners, faculty and staff
Technology push	Learning vision pull

**Table 3.1:** Transformations from the industrial to the information age (Dolence & Norris, 1995:4)

At a technical and organisational level our world is becoming customizable. This has profound consequences for teaching and learning. The essential transformations

emerging from the characteristics listed above involve a shift in emphasis from rigidity to flexibility and customisation, from the power of the organisation to that of the individual or the client, from formal, compartmentalised learning planned in advance to perpetual, applied, just-in-time learning. It could be argued that these transformations are driven by the increasing volume of information available and the growing complexity of social organisation.

### 3.3.1 Models of teaching and learning

The information age has brought with it new models of education. Industrialised styles of teaching and learning are being replaced with models which are thought to be better suited to the information age. The comparisons presented in Table 3.2 show divergent conceptions of teaching and learning. The transmission model is located in the modernist paradigm. The model shows faith in a planned approach to teaching and learning in which knowledge is transmitted from teacher to learner and accumulated by the learner through practice and reinforcement. By contrast, constructivist models, rooted in a postmodernist paradigm, reveal a more active, intentional role by the learner in selecting and interpreting knowledge and then constructing a unique personal understanding.

	<i>Transmission Model</i>	<i>Constructivist Model</i>
<i>Learning</i>	<ul style="list-style-type: none"> <li>▪ correct performance on a task</li> <li>▪ cumulative</li> <li>▪ receptive</li> <li>▪ from outside in</li> <li>▪ practising and performing</li> </ul>	<ul style="list-style-type: none"> <li>▪ personal understanding</li> <li>▪ interpretive and selective</li> <li>▪ active</li> <li>▪ constructive</li> <li>▪ reviewing and integrating</li> </ul>
<i>Teaching</i>	<ul style="list-style-type: none"> <li>▪ giving accurate information</li> <li>▪ sequential</li> <li>▪ direct</li> <li>▪ structuring the environment</li> </ul>	<ul style="list-style-type: none"> <li>▪ setting challenging tasks</li> <li>▪ observing and interviewing</li> <li>▪ supporting the learner's activity</li> </ul>

	<ul style="list-style-type: none"> <li>▪ rewarding performance</li> </ul>	<ul style="list-style-type: none"> <li>▪ creating dissonance</li> <li>▪ helping learners to reconsider</li> </ul>
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**Table 3.2:** Comparison of transmission and constructivist models of learning and teaching (adapted from Young & Marks-Maran in Tait & Mills, 1999:176-182)

It is widely accepted that the transmission model of teaching and learning, while efficient for the transfer of knowledge, is not effective in engaging the learner in the learning process because little opportunity exists for the learner to construct personal understandings. The following table compares two models of such constructivist learning.

	<i>Socio-Cultural Model</i>	<i>Metacognitive Model</i>
<i>Learning</i>	<ul style="list-style-type: none"> <li>▪ social</li> <li>▪ assisted performance</li> <li>▪ interactive and co-constructive</li> <li>▪ self-regulating among the group</li> <li>▪ evaluating shared values</li> </ul>	<ul style="list-style-type: none"> <li>▪ mindful engagement</li> <li>▪ strategic management of learning tasks</li> <li>▪ reflecting and self-monitoring</li> <li>▪ adapting, applying and transferring knowledge</li> <li>▪ self-evaluating</li> </ul>
<i>Teaching</i>	<ul style="list-style-type: none"> <li>▪ joint activity</li> <li>▪ guiding the conversation</li> <li>▪ helping joint constructions to form</li> <li>▪ enacting community values</li> </ul>	<ul style="list-style-type: none"> <li>▪ explicating expertise</li> <li>▪ supporting and assisting reflection</li> <li>▪ applications across concepts</li> <li>▪ providing criteria for evaluation</li> </ul>

**Table 3.3:** Constructivist models of learning and teaching: Comparison between socio-cultural and meta-cognitive models (adapted from Young & Marks-Maran in Tait & Mills, 1999:176-182)

Table 3.3 shows differences in emphases on the way learning and teaching occurs (or should occur). The socio-cultural model emphasises the social and cooperative aspects of learning whereas the meta-cognitive model stresses the more introspective, individual, mental aspects of constructing knowledge. These models are included here for their usefulness as frameworks for understanding academic literacy and no attempt is made at a more definitive taxonomy of the range of constructivist standpoints outlined by authors like Schwandt (1998:235-250).

The models discussed in this section are used in discussion of the concept of academic literacy as it appears in the literature and in argument for the reformulation of the concept as it applies specifically to distance learning in South Africa.

#### **3.4 'GOOD PRACTICE' IN TEACHING AND LEARNING**

A discussion of academic literacy needs to include a perspective on common principles of effective education. While theoretical perspectives provide frameworks for understanding the nature of teaching and learning, practical guides are more concerned with how to teach and learn effectively. These guides are pertinent to an understanding of academic literacy in that, if they are effective, they will be instrumental in facilitating the development of academic literacy. As well as guiding practice they can be used as benchmarks for the interpretation of student learning experience.

The Universities' and Colleges' Staff Development Agency (UCOSDA) Guide (in Thackwray, 1997:82-83) is a 'compendium of principles for developing and enhancing student learning.' It is well known and widely distributed in academic development circles in higher education, as is Chickering and Gamson's 'Seven principles of good practice in undergraduate education' (Cross & Steadman, 1996:19-26). The two guides are included in the Appendices E and F as illustrations of the degree of consensus which has been reached among practitioners about effective principles for facilitating undergraduate learning.

Practical principles emerging from these guides indicate the following facilitative factors:

- Student-teacher contact;
- Cooperation among students and teaching colleagues;
- Active learning;
- Prompt feedback on learning tasks;
- Time on task, practice;
- High but realistic expectations;
- Diversity in learning, teaching and assessment methods;
- Careful structuring of curriculum and course content and objectives or outcomes;
- Use of visual media;
- Challenge; and
- Enthusiasm and caring.

Reflecting on the models outlined in the previous section, it seems that the factors above are drawn from both sides of the transmission-construction divide, if such a divide in fact exists. There are many ways of interpreting this but it seems reasonable to argue that it is an indication that real lecturers and students do not live in theoretical worlds and will adopt practices which seem to work for them. The guides in question are not strongly based on particular theories but do take into account empirical evidence of effective student learning. Morphew (in Lau, 2000:6-9) lists the following 'constructivist' devices which can be used to encourage meaningful learning:

- Concept maps and semantic webs;
- Venn diagrams and other graphic organisers;
- Models;
- Analogies and metaphors;
- Hypothesis making and testing;
- Integrated themes;
- Journaling;
- Portfolios;

- Dialogues and cooperative learning; and
- Use of a learning cycle of exploration, explanation, expansion (application) and evaluation.

The philosophical mix of prescriptions for good practice also reveals the transition between 'transmission' and constructivist approaches. The transition or divide can also clearly be seen in the perceptions of students which are reported and interpreted in chapters 5 and 6.

### 3.5 MULTIPLE LITERACIES

The outcomes of effective teaching and learning in higher education should be those generic or cross-field outcomes which were discussed in section 3.2, namely knowledgeable, critical and ethical citizens who are able to solve problems and communicate effectively.

Higher education strives for these outcomes through the medium of academic study. The achievement of these goals signals that the learner is academically literate in a broad sense of the phrase. However, literacy is a complex concept and before examining academic literacy *per se*, it necessary to understand more about the term 'literacy' itself.

"When we think about literacy, we face a number of paradoxes. Presumably linked to an increase in mental abilities, communicative resources, and general social powers, literacy has for most of world history been the special property of small socio-political elites which have, when necessary, fiercely guarded that property" (Collins in Mitchell & Weiler 1991:230).

'Literacy' is a contested term. It is important to pursue this point since this chapter aims to understand academic literacy as a subset of 'literacy' or rather as a particular kind of literacy among many literacies. A singular use of the term assumes that it denotes a unitary concept. However, it is widely accepted that this is not the case, that multiple



forms of literacy exist and that the way they are valued is an important dynamic of power relations.

Collins (in Mitchell & Weiler, 1991:232-233) introduces the concept of 'schooled literacy' - a "universalistic literacy, context independent and functionally general, evaluated by tests under prior assumptions of differential achievement" and claims that this literacy has become the standard by which all literacies are judged. The affirmation of such a universalistic standard is seen by critical theorists such as Collins as a form of control or hegemony.

The term 'discourse' may be used as a count term (many discourses) rather than as a mass term (much discourse). The term literacy has become used in the same way. The thinking behind this choice of usage is that the use of a mass term implies the existence of a thing with unvarying characteristics even though its extent may change. The effect of using a mass term is to privilege the version of the underlying concept which the writer/speaker holds as the only true understanding of the concept. The use of a count term immediately allows the existence of multiple instances of a class of things. The importance, in critical terms, of using terms such as discourse, literacy and academic literacy as count terms is in allowing space for different voices in constructing meaning.

Langford (in Henri & Bonanno, 1999:48) traces the development of views of literacy from a basic functional literacy, consisting of reading and writing skills, to a view which included speaking, listening and critical thinking skills, and still further to a point where literacy became a count term to denote a range of literacies, including academic literacy and information literacy. Langford and others (Brindley, in Gamble & Easingwood, 2000) argue that these transformations in the understandings of the term are related to the developing information needs of the society.

"Literacy depends on information. Information is expanding at exponential rates. The mere ability to read and to write is being translated into the ability to read, write, and to develop the capabilities to understand, absorb, assimilate, and

digest the images being transmitted electronically with the added capacity to communicate these images ..." Langford (in Henri & Bonanno, 1999:49).

More detailed consideration is given to information literacy once the concept of academic literacy has been explored. The purpose of this section is to outline the nature of "literacy" as a concept and to indicate something of its structure as a "meta-term".

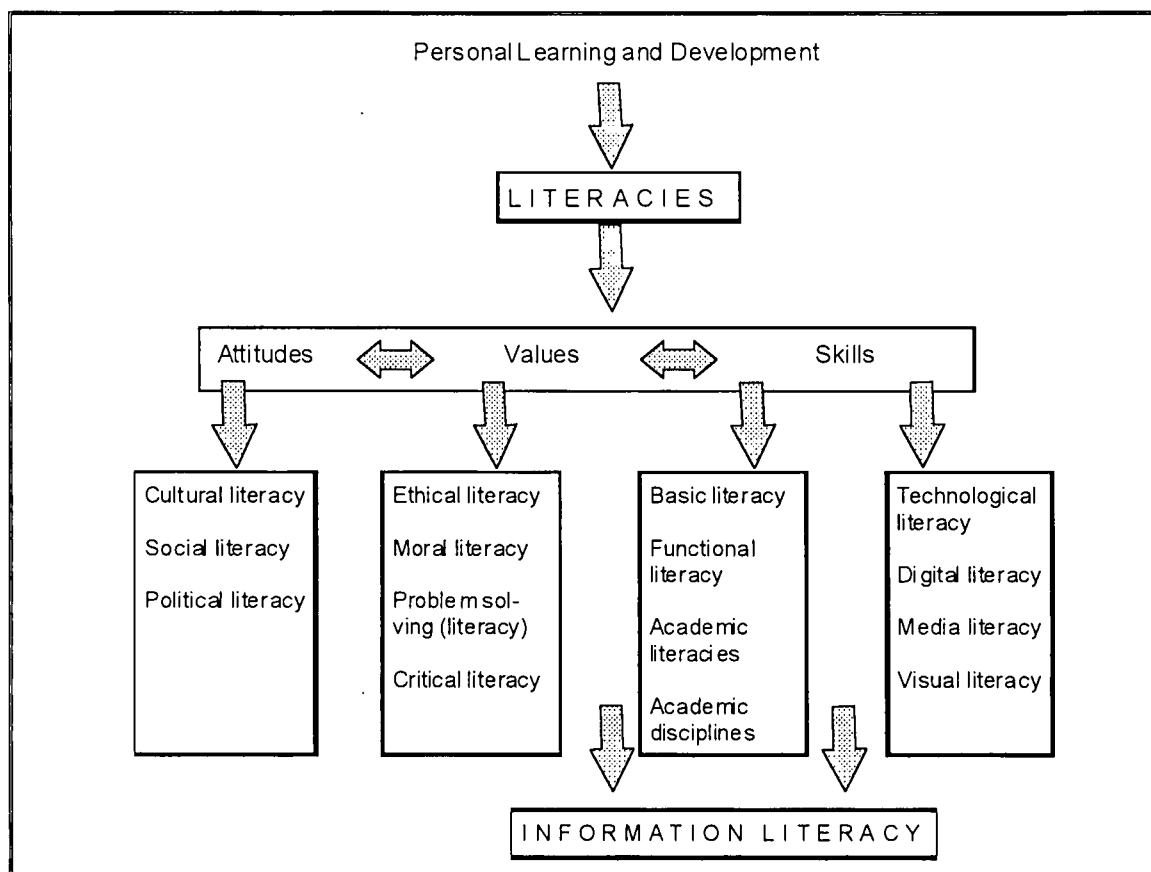


Figure 3.1: Multiple literacies

Figure 3.1 has been constructed as an extension and interpretation of Langford's taxonomy of literacies. In this representation a literacy is conceived of as a set of competencies, which are applicable in a particular area of experience, which may be influenced primarily by attitudes, values or skills. The distinction between different literacies in common usage seems to be made on the basis of content. For example,

academic literacy would, in these terms, be a set of competencies to enable effective participation in the culture of academia or a subculture thereof.

### 3.6 ACADEMIC LITERACY

Lea (1998:3) argues that the conceptualisation of academic learning in higher education research falls into three broad categories:

- Academic learning as acquisition of core study skills;
- Academic learning as 'academic socialisation, learning disciplinary genres and acquiring the discourse' (Lea, 1998:3); and
- Academic learning as an engagement with epistemological and identity issues in a contested field where the learner is challenged by and challenges different academic literacy practices.

Taylor *et al.* (1988:1-2) point out that literacy has traditionally been defined in a narrow, reductionist manner as the lack of surface level linguistic error in areas such as syntax, word structure, punctuation and spelling. They claim that this view ignores referential meaning, the student's understanding and intention, the context in which writing is produced and the intended audience. They claim that academic writing is not primarily about applying skills but is rather about "the creation of meaning and the expression of understanding".

In Ballard and Clanchy's (in Taylor *et al.*, 1988) analysis of the concept 'academic literacy', the idea of cultural understanding has a central place as illustrated in their schematic diagram, reproduced here in Figure 3.2. They and other authors who share a social constructivist approach (Nightingale in Taylor *et al.*, 1988:75-76) argue that cultural understanding has a number of layers. Most broadly, for Ballard and Clanchy, there exists a general academic culture which consists of understandings of the conventions of the broad academic community and of the generalised academic discourse which characterises the interactions within this community. They describe this culture as a culture of knowledge which is 'sustained by the university' and they

argue that it 'both elicits and shapes distinctive use of language' (Ballard & Clanchy in Taylor *et al.*, 1988:6).

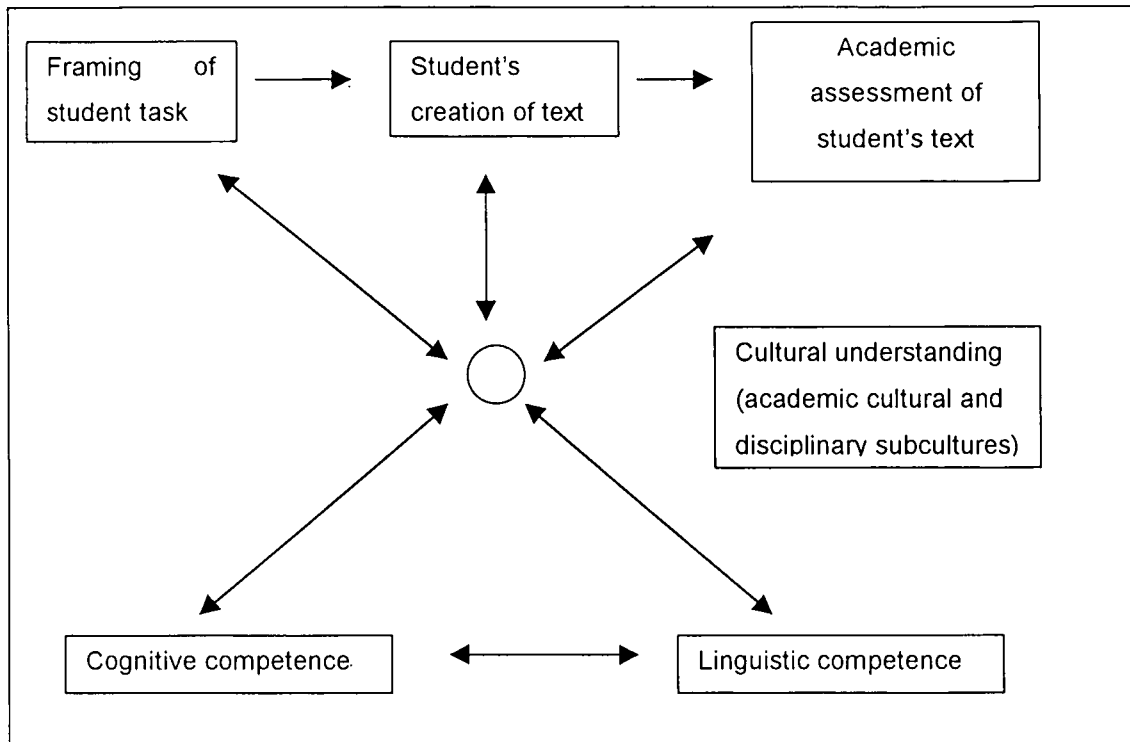
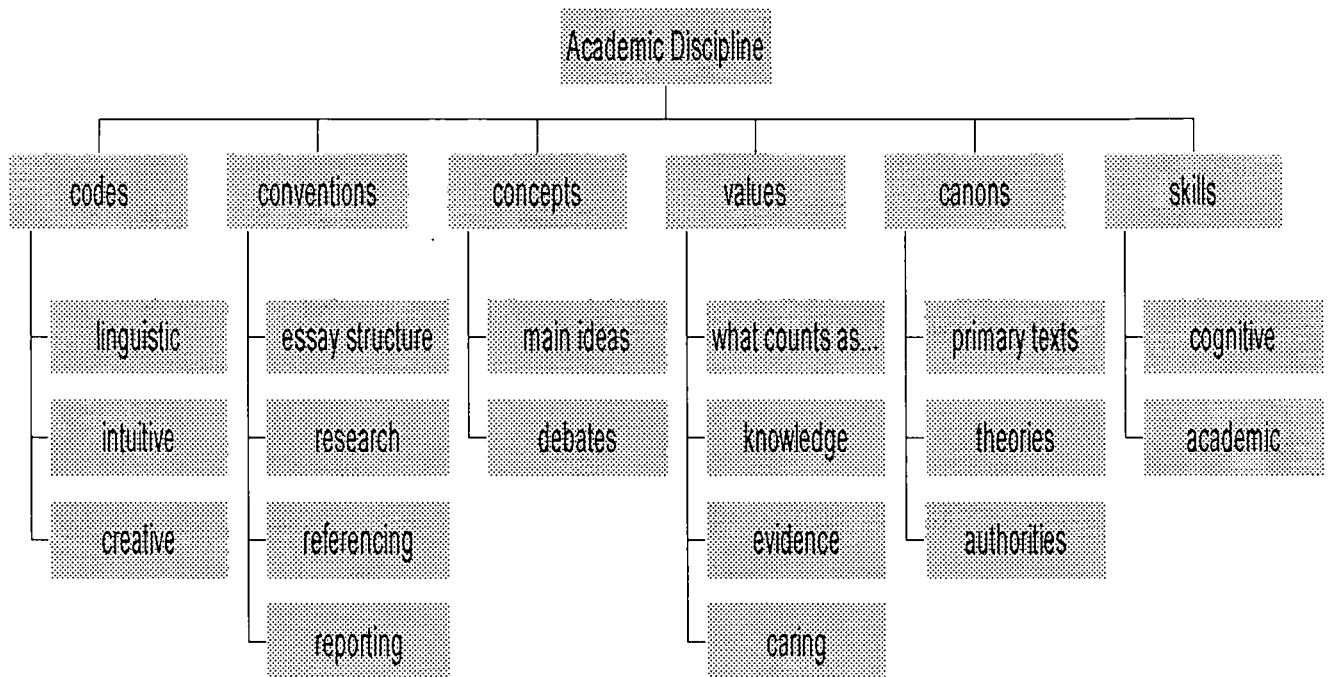


Figure 3.2: Academic Literacy (Ballard & Clanchy in Taylor *et al.*, 1988:9)

Figure 3.2 shows the inter-relationship of cognitive and linguistic competence and cultural understanding. These form the basis of the student's knowledge and competencies in dealing with the tasks faced in academic study. Tasks are framed and assessed by academics (those already initiated into the academic culture). The student's interaction with the academic culture is most often through the creation of texts in which the student attempts to give personal meaning to the experience of the academic culture.

## Structure of an Academic Discipline



**Figure 3.3 :** The structure of an academic discipline

However, the academic culture is by no means uniform. It consists of many academic disciplines, each of which is considered to have a distinctive subculture which, in turn, has its own discourse, language or dialect.

According to Dison and Rule (in Angéllil-Carter, 1998) a discourse is constructed around the structure and practices of an academic discipline. Students have to engage with and learn multiple academic discourses and even different genres within these discourses. The matter is further complicated if one considers the existence of different schools of thought or ideologies within a single academic discipline.

Figure 3.3 has been constructed from the ideas of Dison and Rule (in Angéllil-Carter, 1998) to illustrate the structure of an academic discipline. It highlights the complexity of

an academic discipline and the task facing novice students who set out to acquire the discourse of the discipline.

Students acquire knowledge of the central concepts of a discipline through the study of its canons (or main texts). This study involves an understanding of the conventions of the discipline, acquisition of the cognitive and academic skills which are required in the discipline, an understanding of the dominant codes employed in the discipline and lastly, an engagement with a set of values which are prevalent in the discipline, or are typically held by practitioners of the discipline.

In the general sense, a student who has acquired a sufficient degree of linguistic and cognitive competence within the academic culture may be judged to be academically literate. As Ballard and Clanchy (in Taylor *et al.*, 1988:8) put it:

“Becoming literate in the university involves learning to ‘read’ the culture, learning to come to terms with its distinctive rituals, styles of language and behaviour.”

More specifically,

“Literacy refers to a student’s capacity to use written language to perform those functions required by the culture in ways and at a level judged acceptable by the reader” (Ballard & Clanchy in Taylor *et al.*, 1988:8).

Samson and Radloff (1993:25) present an example of a generic academic writing programme and reflect on a range of factors which enhance such programmes, such as the opportunity for modeling of writing in genre, providing specific and constructive feedback, providing a supporting social context and dealing with metacognitive and affective issues related to the complex cognitive task of academic writing.

However, the structure of degree programmes is such that the individual student is often required to operate within a number of academic subcultures, as discussed above. As the examination of student writing by authors in this field (Ballard & Clanchy in

Taylor *et al.*, 1988; Bock in Taylor *et al.*, 1988) shows, competence in one academic field does not guarantee competence in another. As Taylor (in Taylor *et al.*, 1988:2) puts it: 'The point is that there are different literacies'. Nightingale (in Taylor *et al.*, 1988:66) notes that no one 'writing' teacher can address the specialist demands of different academic disciplines. Ballard and Clanchy (in Taylor *et al.*, 1988:12) expose further sources of confusion for the novice student. Firstly, they claim that "most forms of literate behaviour in fact fly in the face of the rules by which university culture is bound", citing political discourse and letter writing as examples. Secondly, they argue that academic value systems are shaped by culture (using the term 'culture' in its broadest sense), as demonstrated by the different judgement applied to 'plagiarism' in Western and Asian academic cultures. Dison's (1997) poignant case study clearly illustrates the complexity of literacy development in a multilingual and multicultural South African context.

The question of judgement is crucial and one which is revisited in later discussion of the requirements of distance courses and the expectations of acceptable student performance in that context (see section 5.4.2). For the immediate purpose of understanding the concept of academic literacy, it seems that literacy depends on the judgement of the reader or listener who has power to assess the student, usually the lecturer or the tutor. The reliability of a judgment of the extent of a student's academic literacy depends then on the extent to which expert (or 'initiated') members of a particular academic subculture are in agreement. The judgement of the extent of a student's academic literacy "depends on the set of cultural understandings with which academics would generally agree" (Ballard & Clanchy in Taylor *et al.*, 1988:8).

So far the discussion has focussed on judgements which are made about student competence or the extent of their academic literacy. This judgement is quantified in the grades which are given to student assignments and summative assessments. Judgements are also expressed in a more qualitative way in the form of feedback given to the student by tutors or lecturers. Typically this takes place in tutorials (mostly verbal) and when assignments are returned to students (mostly written).

Students often express confusion or a lack of understanding about grades which they have been assigned. This happens most frequently when the nature of the assessment is not simply content-based and requires the student to respond in the 'dialect' of the discipline. Students often feel that good grades are a matter of 'cracking the code'. There is an element of lottery about it, or at least of detective work. As students progress through a programme they become less confused about assessment and more confident about their performance. They either 'crack the code' or drop out.

The reasons for the confusion about performance in novice students are potential many but Ballard and Clanchy (in Taylor *et al.*, 1988:8) claim that "cultural understandings are seldom addressed directly in exchanges between academics and their students". This would seem to be a gross neglect of duty on the part of university lecturers. If cultural understandings are the stuff of academic discourse and a student's competence in participating in this discourse is what is being assessed, surely the teacher has a duty to make explicit those cultural understandings (Parry, 1989:148). This assertion is supported by the finding of Wegerif (1998) that success on an on-line course at the Open University was related to whether students were able to move from a feeling of being outsiders to a feeling of being insiders.

In one sense, the confusion of new students and the lack of explicitness on the part of lecturers has always been part of the academic culture. University lecturers are often reluctant to give anything to students on a plate because one of the deep values of the academic culture is that students must become independent thinkers, and that they must question and search for answers. Students are taken out of their 'comfort zone' or, in Vygotskian terms, zone of proximal development (Tudge in Moll, 1990:157) and figuratively thrown in at the deep end to 'sink or swim'.

To be fair to traditional academic teaching and assessment practice, one must recognise that the rules of the academic game are, in most cases, communicated to students. In the framing of student tasks and in the feedback provided on assignments lecturers try to



make known to students what is required. Ballard and Clanchy's earlier research identified that, in addition to basic accuracy of content, there were four criteria underlying most academic judgements:

- Relevance and adequacy to the topic;
- Evidence of wide and critical reading;
- Demonstration of reasoned argument;
- Competent presentation.

However, over the past two decades, there has been a significant shift in policy and practice of most universities, in the area of teaching and learning, towards becoming more learner-centred. In particular, outcomes based education (OBE) has been adopted by government as the guiding principle of South African education (Kraak, 2000a; Engelbrecht, du Preez, Rheeder & van Wyk, 2000). One of the major thrusts of OBE is the explicit stating of outcomes and the communication of these outcomes to the learner. The learner is brought into the confidence of the teacher about the nature of tasks and about how they will be assessed. The learner is apprenticed rather than being initiated. This aspect of OBE has much in common with the approach advocated earlier by academic literacy theorists:

"Becoming literate involves becoming acculturated: learning to read and write the culture. For academics wishing to hasten this process, the key to success lies in developing practical ways of making their own understanding of the university culture explicit and accessible to students" (Ballard & Clanchy in Taylor *et al.*, 1988:19).

Because of the intimate connection between language and culture (Ballard & Clanchy in Taylor *et al.*, 1988:6) and the role of language in developing skills of communication, critical reasoning and lifelong learning (Moore, Paxton, & Thesen in Angélil-Carter, 1998:10), language teachers have often been at the forefront of attempts to 'acculturate' or 'enliterate' students (Boughey, 1994:26), particularly non-traditional students who do not easily fit the mould of traditional institutions.

Beasley (in Taylor *et al.*, 1988:42-52) reports on experiences of a foundation course introduced at Flinders University in South Australia. He claims that these experiences showed that 'universities can take direct responsibility for the development of academic literacy'. Beasley (in Taylor *et al.*, 1988:51) argues that the experience of the Flinders foundation course counters widely held fears that foundation courses may have negative consequences such as the following:

- Such courses may admit students who are not capable of academic success; and
- Such courses would be 'dummied down' to maintain acceptable pass rates.

Beasley presents statistics and case study material to show that subsequent academic performance of students on the Flinders course compares very favourably with the results of other students.

More recently, Moore *et al.* (in Angéil-Carter, 1998) outline the range of courses and services in the area of academic literacy which have been introduced at UCT over a decade. These range from 'academic literacy' courses specifically designed to introduce students to the culture of the university, to mainstream language courses, to consultancy services for staff and students which aim to improve academic writing and to improve pedagogy so that it makes the deep rules of the academic cultures and subcultures more explicit and accessible to students.

Courses designed to develop the academic literacy of students vary in their design but there seems to be some common ground (Beasley in Taylor *et al.*, 1988; Quinn, 1999): students are introduced to restricted content areas of a discipline or disciplines often on the basis of a theme such as culture, gender or ethnicity. Through intensive work with lecturers, tutors and in peer groups, the students on such courses attempt to come to grips with the discourse or discourses of the selected areas. This work tends to be language intensive, often involving drafting and redrafting of academic essays with careful feedback from lecturers and tutors, which is designed to make a number of elements more explicit: the discourse (both broadly academic and more narrowly disciplinary) or genre; the skills being developed; and metacognitive factors such as the

student's knowledge or experience of their own cognition and control over their cognitive processes. Student journals are often used to combine language development with the development of metacognitive and affective strategies, through reflection on experience (Andrusyszyn & Davie, 1997).

Quinn (1999) discusses shortcomings of such courses as being the potential lack of transfer of learning between disciplinary contexts, and that such courses could promote a false idea that academic language does not vary across disciplines. In spite of these potential difficulties, Quinn cites authors who argue that general skills and attitudes can be transferred, listing the following categories of potentially transferable skills:

- Scepticism about information;
- The need for evidence in support of an argument;
- The need for linkages between elements of information;
- Clarity and logical progression in writing.

Courses such as those discussed above often form part of foundation or access courses which have been important components of educational support programmes in South African universities over the past decade. These courses have sought to redress some of the pressing needs of disadvantaged students which stem from a range of factors related to the systemic inequalities in higher education as identified by Agar *et al.* (1991:3). It is now widely recognised that such courses should ideally not be adjunct to the academic mainstream (see Boughey, 1994, for an early argument on this point) and that the teaching and learning agendas which they were designed to engage should be embedded in mainstream courses for the academic development of all students.

The approaches to understanding academic literacy which have been examined so far are derived mainly from a metacognitive model of teaching and learning (see Table 3.3). New perspectives on academic literacy, which have a stronger socio-cultural underpinning, have emerged. Lea and Street (1998:3) describe work done in this area as representing 'New Literacy Studies'. This approach considers academic literacy from a cultural and social perspective.

The preceding section has outlined the concept of academic literacy as it has come to be understood in language teaching and academic development communities. However, academic literacy as it has been conceptualised in the discourse of these communities would seem to be too narrow a concept to provide a full understanding of the skills and competencies, and even attitudes and values of students, which contribute to success or failure in higher education.

The classic understanding of academic literacy and the educational interventions which have flowed from this understanding are dominated by considerations of written discourses. The 'academic literacies' approach (Lea & Street, 1998:3) is also concerned with the making of meaning and identity through engagement with the written word. In particular, the academic essay has been the prime vehicle for academic literacy skills development and for assessment. This orientation reveals a bias towards arts and social science curricula which are more language intensive from the point of view of the tasks which are required of students. It can be argued that students of scientific and commercial disciplines, are expected to be literate and numerate in ways which do not depend so closely on the ability to write discursively or argumentatively. For these students there is likely to be a higher value placed on procedural writing, research, data processing and presentation skills, including oral presentation.

Secondly, it must be recognised that many curricula are still intensively content-based. Even though it might be argued that such curricula should change, the experience of students in such curricula must be taken into account in any comprehensive view of academic literacy. Data from the survey conducted as part of this study shows the extent to which students, particularly undergraduates, are concerned primarily with the ability to learn facts and procedures and to apply these. Their success is likely to be more dependent on traditional academic skills and cognitive learning strategies than on a highly developed understanding of the culture of the disciplines that they are studying, particularly in the early stages of a degree programme. The extent to which distance education courses may be more content-based than face-to-face courses is an

issue which arises from the results of this study and is discussed in more detail in chapters 5 and 6.

Thirdly, the orthodox understanding of the concept of academic literacy, as described in the literature study earlier in this section, seems to pay too little attention to the development of metacognitive strategies. Such strategies are important in the student's reflexive knowledge of self as a learner and in the ability to monitor and control cognition. A more detailed discussion of metacognition is included in the section 3.5.3.

Lastly, it would seem that the formation of attitudes and values are an important consideration in any model of academic literacy. For example it is likely that motivation plays an important role in a student's willingness to apply cognitive and metacognitive strategies. It is demonstrated in the analysis of the results of the student survey that the affective domain, feelings and attitudes are prominent factors in students' images of themselves as successful or unsuccessful distance learners.

The critique offered here of the original version of the concept of academic literacy is not intended to negate the concept but rather to illustrate that its emphases lie strongly in the area of schema development – the development of a sophisticated understanding by the student of the codes, conventions, concepts and canons of a discipline (Dison & Rule in Angélil-Carter, 1998, see Figure 3.3). For a study such as this which aims to illuminate the broad experience of being a distance learner in South Africa, this version of the concept of academic literacy is too narrow to be useful in explaining the breadth of that experience. Dison and Rule's concept of disciplinary competence is a useful starting point for exploring an expanded model of academic literacy: "The sense in which we use the term 'competence'... entails an integration of content and skills and is underpinned by affective factors" (Dison & Rule in Angélil-Carter, 1998: 86).

### 3.7 AN EXPANDED MODEL OF ACADEMIC LITERACY

What is proposed for the purposes of this study is a broader concept of academic literacy which includes schema development, academic skills, cognitive learning strategies, metacognitive strategies, values and attitudes. It is also important to consider the relationship between academic literacy, as outlined here, and two other factors in learning: motivation and learning style. A map of the components and the interrelationships between these factors is presented in Figure 3.4. This map should be understood as a conceptual guide rather than a tight schematic model of learning and academic literacy. While due care has been taken in constructing the map from the writings of various authors, principally Cross and Steadman (1996), the discrete placement of various concepts does not mean that there cannot be overlapping of meanings. The thoughts and feelings of an individual learner are likely to be more complex and organic and less categorical than the map suggests.

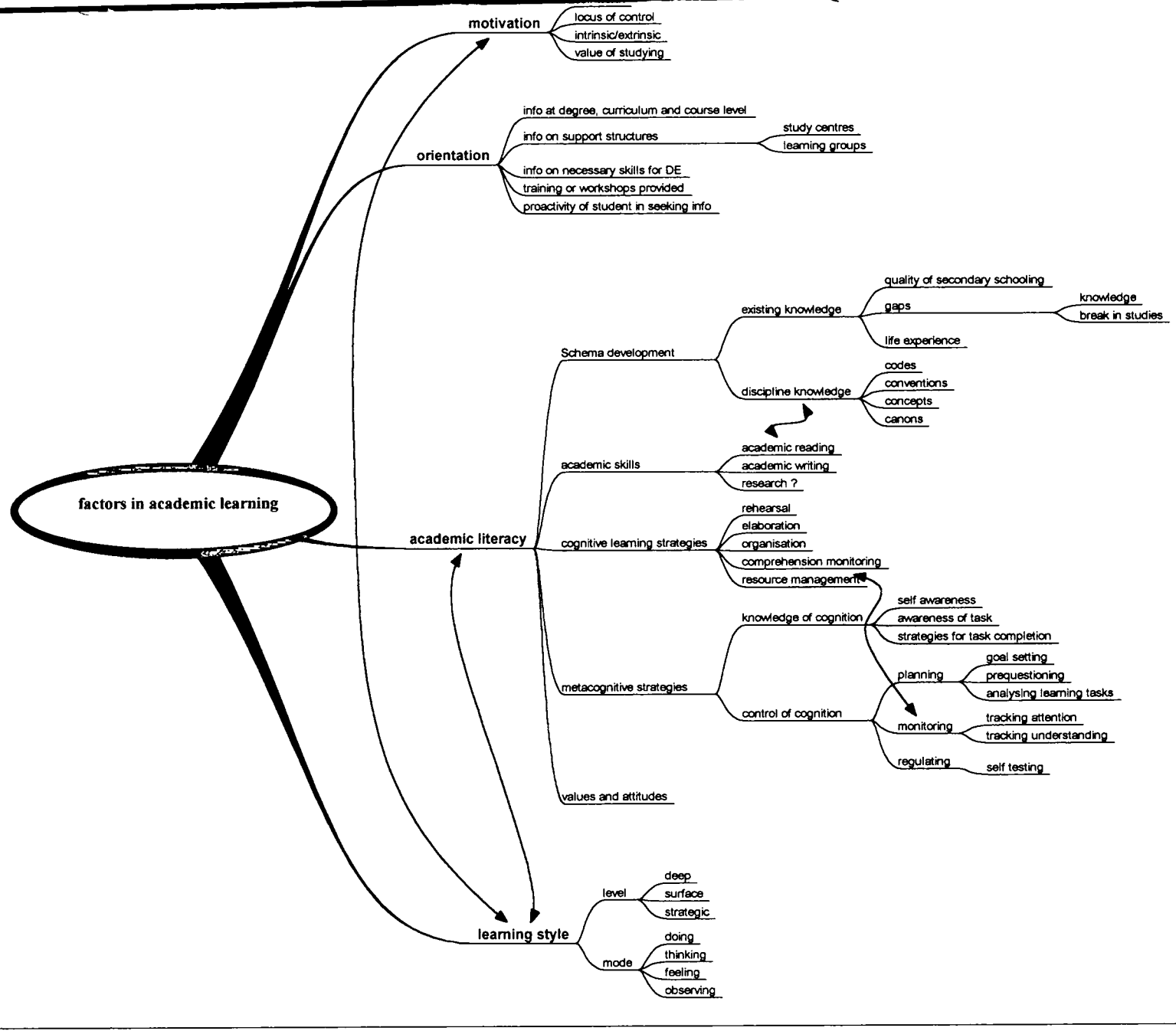


Figure 3.4: Map of academic literacy components

The map in Figure 3.4 illustrates the proposed inter-relationship between academic literacy, as a complex of knowledge, skills and values, and motivation and learning style, both of which are orientations which mediate academic literacy.

The concept of academic literacy itself, as illustrated in the map, is considerably broader than that which has been presented so far in this study. It includes schema development, academic skills, cognitive learning strategies, metacognition, and values and attitudes.

In the sections which follow the components of academic literacy and the factors which mediate it are discussed in details, with reference to the literature in the various areas. The map in Figure 3.4 can be used as a visual guide to the 'structure' of academic literacy in its broader form as it has been conceptualised for the purpose of this study.

### **3.7.1 Discipline knowledge and schema development**

Any discussion of academic literacy should take into account the development of discipline knowledge. Initially, students build up schemas for understanding disciplines from the academic work which they do at secondary school level and from any life experience which may be relevant to the disciplines which they are studying. The richness of these schemas will influence their ability to learn the academic culture of the disciplines which they study in higher education.

Returning to Dison and Rule's analysis of the elements of an academic discipline (see section 3.6), it is evident that the development of academic literacy takes place through a process of the student engaging with the codes, conventions, concepts and values of a discipline through a study of its canons and by acquiring the cognitive and academic skills required for this study.



### 3.7.2 Academic skills

Academic skills are traditionally thought of as skills in the areas of academic reading and writing as well as in research. The following sections explore these areas.

#### 3.7.2.1 *Language competence and academic literacy*

At a common sense level it seems obvious that competence in the language of instruction is likely to be a major determinant of academic success. The academic process is transacted through language and students with limited vocabulary and/or weaknesses in their ability to manipulate the structures of the language are unquestionably at a disadvantage. To put it another way: language is the most basic tool for building academic literacy. Taylor (in Taylor *et al.*, 1988:53-55) shows clearly how the application of formal and mechanical language skills does not ensure that writing will be of an acceptable academic standard, or even make logical sense.

Taylor (in Taylor *et al.*, 1988:55) argues that the "positivist movement has predisposed us to perceive the relationship between language and knowledge as unproblematic and also to believe that pieces of language in use can be judged right or wrong by applying to them universal formal criteria." While accepting Taylor's argument and recognising that the development of academic literacy depends on building familiarity, competence and even skill in the use of academic meta-languages, it seems necessary to argue a converse position: The lack of basic formal language knowledge and competencies necessarily precludes students from engaging meaningfully in academic discourse.

Extracts from student responses in this study are included in Table 3.4 in support of this argument. The basic difficulties with vocabulary and structure which are evident in some of the extracts must surely hamper these students in their studies. Conversely, the well developed language skills demonstrated in the last extract will clearly enhance academic performance. Further discussion of student perceptions regarding language competence is included in chapter 5.

#### Extract 1: Student with English as a foreign language

The problem in distance learning is the improvement of the social contract with other students. No way good opportunity to speak with the lecturer. Easily to learn how to pronounce new words in the course it is not easy because studying from home you don't hear the new words to explain yourself among other student or in the group. To make many workshop can be the answer on that problem and study group also is another way. More details in the study guide are nice.

#### Extract 2: Student with English as a second language

In my opinion first of all as I'm a student from UNISA my comments will be the transport. It was hardly to me to come to attend late tutors because I'm staying far from my institution. When I first stated [sic] study at UNISA it was very difficult because I didn't know that before I'm able to attend I must wait until they phoned me to tell me that they is lectures or not. I assume that as they were told me the classes/tutors will be stated on 7 January 2001 they never told me that there is a lack of student and most of the student didn't attend. In the classroom the lecturer will never taught student under minimum of 10 to 15. All am I trying to say is that I was never put in way that I must be aware of that maybe they might be a classes or not or must wait for them to call before I come to attend.

#### Extract 3: Student with English as a first language

Distance education is challenging and requires focus and dedication. The lecturers, tutors and course coordinators do a lot to present the material in an understandable way. I am using a learning centre for help and see by the level of achievement of subjects where I have attended classes compared to those when I have not, that it would be difficult to sustain my motivation and results without the additional help. When confronted with a section that I cannot understand, I am inclined to give up. This, for me, is the biggest problem with distance learning.

#### Table 3.4: Language competence in student responses

These three extracts show the differential in language competence between students with English as a foreign language, as a second language and as a first language. For the foreign language student, English language competence is at a level that makes

comprehension of the writing difficult. The communication of the second language student shows a number of surface errors and difficulties with idiomatic expression, but the basic sense of the communication does not suffer much as a result. The first language student is able to express meaning clearly, concisely and idiomatically. The extracts serve as a reminder that, in multilingual environments such as distance education institutions in South Africa, it is especially important to recognise that linguistic disadvantage exists as an important determinant of academic failure. This has implications across the board, but specifically, our concept of academic literacy should include basic language competence as a component; and secondly, any recommendations for practice in the area of developing academic literacy must take into account basic language competence.

#### 3.7.2.2 *Research skills and information literacy*

In addition to the skills of assimilating and comprehending academic material through reading, writing and oral communication, becoming academically literate requires the development of research skills. Broadly speaking, these skills enable a student to gather information, to select that which is relevant, to organise it meaningfully, to assess it critically and to communicate it effectively. In the information age research skills go hand in hand with what has become known as information literacy.

The centrality of information systems in the transformation of learning is highlighted by claims such as the following:

“Under the emerging vision for learning in the 21<sup>st</sup> century, information technology is a primary instrument of transformation. It is the key ingredient making feasible a network learning, distance free, knowledge navigation-based vision for the information age learner. The information infrastructure must be reconceptualised and viewed as an essential investment for the information age, not just another competitor for scarce resources” (Dolence & Norris, 1995:36).

The implication for the learner in the information age, according to Dolence and Norris, is that they must assimilate information faster, see information as spanning a wider range of disciplines, and master the information infrastructure earlier in their careers. To be academically literate in this age requires the learner to be information literate (Heller-Ross, 1999:2) - that is to understand the structure of information; to be able to interact with agencies and systems which deliver information; and to be able to access, select, process and evaluate information for their academic purposes (Hefzallah, 1999:21). Practically, this translates into a wide range of cognitive and information technology skills. The development of these skills needs practice, training and access to the necessary tools.

Information literacy is most commonly defined or described as a set of abilities, competencies or characteristics but some researchers also include values and attitudes which are thought to support these abilities, as the following lists from the literature show.

"An information literate individual is able to:

- Determine the extent of information needed;
- Access the needed information effectively and efficiently;
- Evaluate information and its sources critically;
- Incorporate selected information into one's knowledge base;
- Use information effectively to accomplish a specific purpose; and
- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally" (Association of College and Research Librarians (ACRL), 2002).

Langford (in Henri & Bonanno, 1999:51) cites Doyle in describing an information literate person as one who shows the following characteristics:

- Independent, self-directed learning;
- Implements information processes;
- Uses information technology;

- Values information use;
- Knows the world of information;
- Approaches information critically; and
- Has developed a personal information style.

The ACRL (2002) stresses the challenge that the explosion of information poses for the individual and society, arguing that it can even pose a threat to those who do not develop the abilities to handle it effectively.

Another line of argument pursued by the ACRL is that "information literacy forms the basis for lifelong learning" since it has an influence on all levels of learning and across academic disciplines. Information literacy is thus seen as an enabling and even emancipatory competency. Less positively, the converse can also be argued, with Dolence and Norris (1995:2), that individuals and societies which fail to develop the necessary information skills and literacy will be excluded from participation in the benefits of the Information Age.

"The uncertain quality and expanding quantity of information pose large challenges for society. The sheer abundance of information will not in itself create a more informed citizenry without a complementary cluster of abilities necessary to use information effectively" (ACRL, 2002).

Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and to extend their investigations, become more self-directed, and assume greater control over their own learning.

### **3.7.3 Cognitive learning strategies**

The term **cognitive skills** is used in a broad sense to include skills such as thinking critically, reflection, problem solving (Marland, 1997:94). Cross and Steadman (1996:57)

use the term more specifically to indicate “techniques that learners can use to improve their understanding, integration and retention of new information” and “methods learners use to focus attention, organise and rehearse new concepts and build connections to existing knowledge structures in order to facilitate later recall and use of the new information” (Cross & Steadman, 1996:60). The following classification of cognitive strategies has been adapted from Cross and Steadman (1996:60-61).

Skill	Purpose	Activities
Rehearsal	Builds the knowledge base	<ul style="list-style-type: none"> <li>▪ Highlighting</li> <li>▪ Flash cards</li> <li>▪ Recital</li> </ul>
Elaboration	Making meaningful connections with existing knowledge	<ul style="list-style-type: none"> <li>▪ Paraphrasing</li> <li>▪ Applying own experience</li> <li>▪ Comparison</li> <li>▪ Leads to 'generative learning' (Wittrock, 1974); 'meaningful learning' (Ausubel, 1968)</li> </ul>
Organisation	Provides a structure for organising knowledge	<ul style="list-style-type: none"> <li>▪ Outlining</li> <li>▪ Creating diagrams, timelines</li> <li>▪ Concept maps</li> <li>▪ Pictures, graphs</li> </ul>
Comprehension Monitoring	Checking whether knowledge has been internalised	<ul style="list-style-type: none"> <li>▪ Self testing according to objectives</li> <li>▪ Questioning</li> </ul>
Resource Management	Proactive management of time, environment and people	<ul style="list-style-type: none"> <li>▪ Schedules</li> <li>▪ Creating an environment free of distractions</li> <li>▪ Asking for help, regulating mood and motivation</li> </ul>

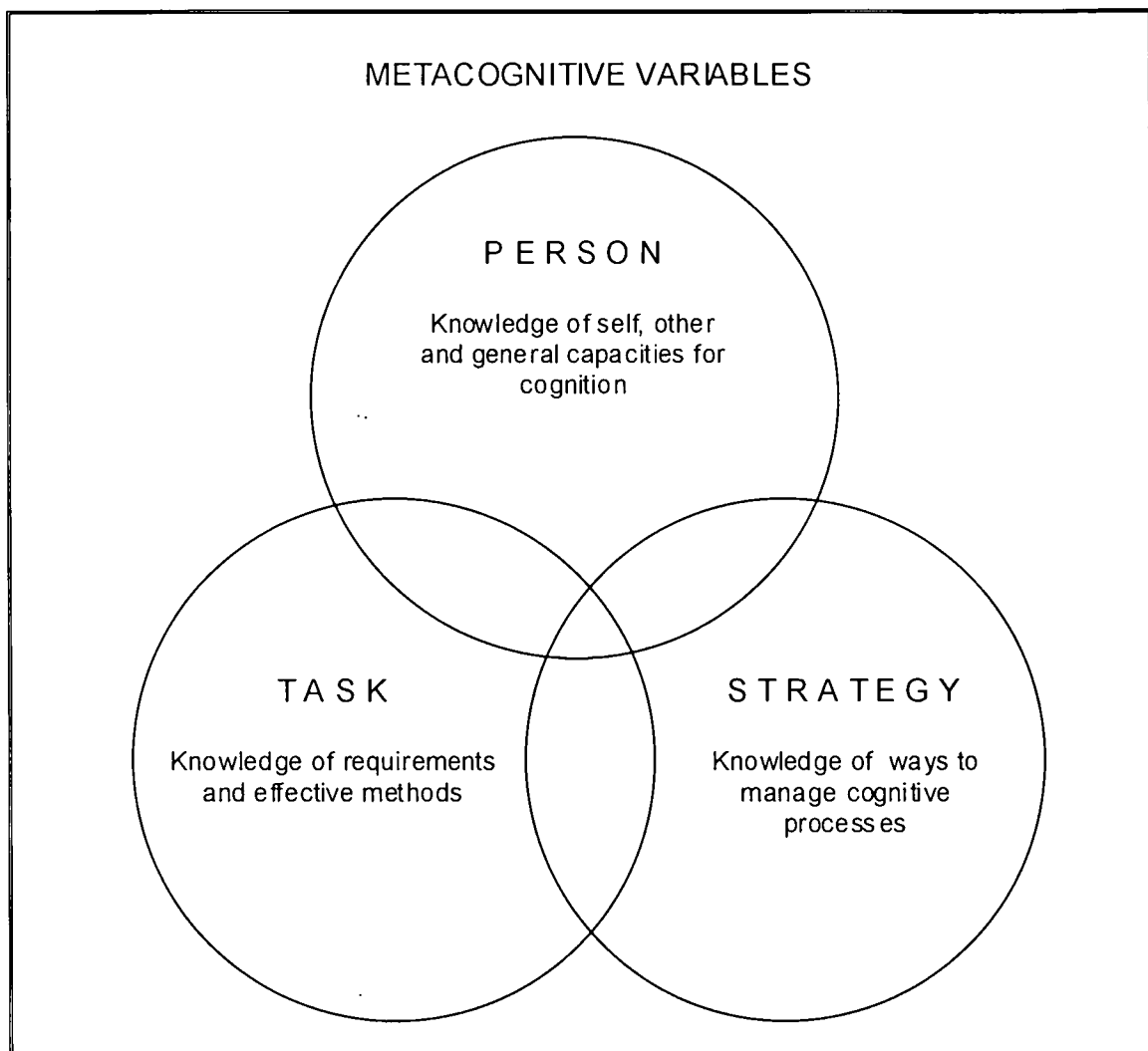
**Table 3.5:** Classification of cognitive strategies (Cross & Steadman, 1996:60-61)

The cognitive skills outlined in Table 3.5 are common skills employed by students. These skills are generic in the sense of being required for studying any discipline. In spite of the arguments that academic literacy is discipline-specific, it seems self-evident that at the general level of cognition, the skills can be taught and applied across a range of disciplines. These basic cognitive skills are highly relevant to the distance learner who regularly engages with learning material individually, outside a class or tutorial situation.

There is widespread agreement that students can benefit from training in the area of metacognition and learning strategies. Referring to a course on learning at the University of Texas by Weinstein in 1988, Cross & Steadman (1996:62) state: "Evaluation of the course showed self-reported gains in students' use of learning strategies, increased scores on a reading comprehension instrument, self-reported lower levels of anxiety and improvement on other performance measures such as course assignment grades".

#### **3.7.4 Metacognition**

Metacognition involves 'knowledge about knowledge'. It is the reflexive ability of learners to know and understand their own learning processes in terms of their abilities, the requirements of learning tasks and the ways in which learning can be monitored and controlled.



**Figure 3.5:** Metacognitive variables (adapted from Cross & Steadman, 1996:57-58)

Flavel (in Weinert & Kluwe, 1987:22-24; also in Cross & Steadman, 1996:57) sees person variables as that class of knowledge of the capabilities of self (intra-individual), how capacity differs between people (inter-individual) and knowledge of general capabilities such as the way in which short-term memory works (universal).

An example of task variables (knowledge of tasks requirements and effective methods) would be a learner's knowledge of how to process information of different densities, for example to process dense, precise information slowly and deeply.



An example of a strategy variable (knowledge of how to check and control processes) would be the skim reading a book to see what reading strategies might be adopted. Flavell (in Weinert & Kluwe, 1987:24) argues that there is always an interaction between these variables.

Metacognition is generally understood to involve two aspects - knowledge of cognition and control of cognition (Cross & Steadman, 1996:57-58; Brown, in Weinert & Kluwe, 1987:66). The following table shows the constituent parts of these two aspects.

Knowledge of cognition	Control of cognition
<ul style="list-style-type: none"> <li>▪ Knowledge about oneself</li> <li>▪ Knowledge of the learning task</li> <li>▪ Knowledge of strategies for task completion</li> </ul>	<ul style="list-style-type: none"> <li>▪ Planning learning</li> <li>▪ Monitoring learning</li> <li>▪ Regulating learning</li> </ul>

**Table 3.6:** Aspects of metacognition (adapted from Cross & Steadman, 1996:57-58)

In Flavell's description, metacognitive experiences are "any kind of affective or cognitive conscious experience that is pertinent to the conduct of intellectual life." He argues that the development of metacognition can be facilitated by the development of sense of self as active agent; increase in planfulness, through direct teaching, practice, and by the observation of role models (Flavell in Weinert & Kluwe, 1987:26). He also asserts that metacognitive experience is most likely to occur in the following conditions:

- When required explicitly;
- Novel situations;
- Important situations;
- When there is awareness that cognition is in trouble; and
- When not preempted by more urgent subjective experiences - e.g. pain and anxiety.

Cross and Steadman (1996:61-62) report on research which shows that training in metacognitive strategies can lead to learning gains including improvement in reading

comprehension, more effective use of learning strategies, decrease in anxiety and improved grades. They also suggest strategies for involving students in large classes in the use of metacognitive strategies by using a range of techniques including a diagnostic learning log. Such techniques are also suitable for distance learning.

Metacognitive skills are crucially important for the distance learner because, as shown in this study, much of the responsibility for managing learning falls on the distance learner, often without significant assistance from lecturers, tutors or other support staff, as would be expected by a student studying in contact mode.

In terms of the discussion of metacognition presented above, the distance learner must develop self-knowledge of cognitive abilities, an understanding of what is required in learning tasks and of strategies for task completion. Skills of planning, monitoring and regulating learning are indispensable to the success of the distance learner. It is often in this area where students lack skills and feel unsupported.

### 3.7.5 Learning styles

In a comprehensive review on research into learning styles which has been carried out over almost three decades by numerous researchers in campus based and distance education across a number of countries, Richardson (2000:178) concludes that the most important construct to emerge in relation to learning style is "the distinction between an orientation towards the underlying meaning of the course materials and an orientation towards simply being able to reproduce those materials for the purpose of academic assessment."

These two orientations to learning are commonly called the **deep** and **surface** approaches to learning and have been used as the underlying constructs for numerous inventories of learning and study processes in campus-based and distance education. Richardson (2000:178) claims that there is little support for the validity of a third facet of

the construct which is attributed to Ramsden, the so-called strategic approach. A general description of inventories of study processes is given in section 3.6 as part of an attempt to understand issues involved with the measurement of academic literacy and as an introduction to the methodology of this study.

A key finding of Richardson's (2000:178) review concerns the relationship between academic performance and approaches to learning. He argues, on the basis of a number of research studies, that interview-based research and correlations based on scores obtained from inventories such as the *Approaches to Studying Inventory* (Ramsden & Entwistle, 1983 in Richardson, 2000) that good academic performance tends to be associated with a deep approach to learning and poor academic performance associated with a surface approach to learning.

Another influential understanding of learning styles is that of Kolb (in Richardson, 2000:162). Kolb conceptualised an experiential learning cycle of four stages as depicted in figure 3.7.

As can be seen from figure 3.7, learning can be seen as a progression through stages but it is also thought that learners can be typified according to their preferred mode of perceiving the world (thinking vs feeling) and processing information (watching vs doing). These preferences translate into four categories of learning style as shown in the following table 3.8.

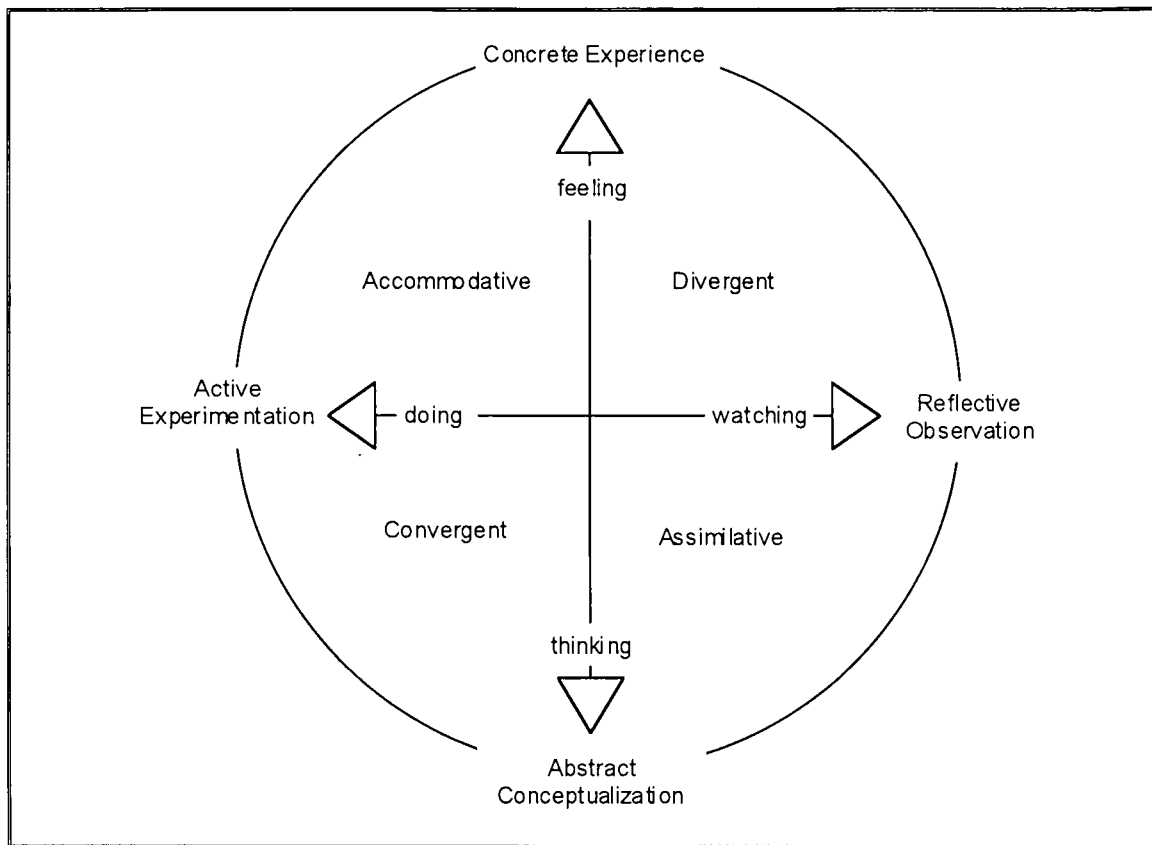


Figure 3.6: Kolb's learning cycle (Richardson, 2000:162-3; Kolb, 1984; Kolb, Osland & Rubin, 1995)

Learning Style	Strengths
Convergent	Problem solving Decision making Practical application of ideas
Divergent	Imaginative ability Awareness of meaning and values
Assimilation	Create theoretical models Integration of observations
Accommodative	Carrying out plans Involvement in new experiences

Table 3.7: Learning styles derived from Kolb's Cycle

The usefulness of Kolb's categories of learning styles and his experiential learning cycle for this study is in the insights that they provide for the interpretation of empirical data and for making recommendations about improved practice in facilitating a development of metacognitive skills as part of the development of academic literacy. In working with students on developing their knowledge of cognition and their control of cognition it is essential to provide a framework for understanding processes and preferences in learning, both for the learner and for the tutor or lecturer. Reflection on learning along the lines of Kolb's ideas is likely to sensitise the learner to the importance of a deep approach to learning.

Other author's have conceptualised learning styles in different ways. DePorter (1992), for example, sees a student's personal learning style as a combination of the student's preferences in perceiving, organising and processing information. There are individual differences in preferences for different modalities of perception like visual, auditory and kinesthetic. In relation to organising and processing information, DePorter hypothesises that learners can be placed on two dimensional plane according to their tendencies on two dimensions, vis. concrete-abstract and random-sequential. DePorter's ideas in this area tend to be populist to some extent, although they are based on psychological theory. The significance of such conceptualisations of learning is that they are accessible to students as an aid to improving their metacognitive skills in the sense of being more aware of their strengths and weaknesses as learners.

The concept of lifelong learning is included here as an aspect of metacognition on the grounds that, to the extent that it applies to the individual rather than being an instrument of social change (Methven & Hansen in Hatton, 1997:5), it is an attitude to the management and control of cognition which often characterises the commitment of distance learners to their learning.

Taylor (in Nightingale & O'Neil, 1994:54-55) argues that high quality learning is characterised by the following:

- Ability to discover knowledge;

- Long term-retention of knowledge;
- Ability to perceive relations between old and new knowledge;
- Ability to create new knowledge;
- Ability to apply to knowledge to solving problems;
- Ability to communicate knowledge to others; and
- Desire to know more.

Bonanno (in Henri & Bonanno, 1999) lists fourteen different ways of exploring a subject. These activities fall into different categories such as summarising, discussing, questioning, mapping, associating with music or rhyme, teaching, and valuing (deciding why something is important). Earlier research by Marland *et al.* (1992:215) classifies the thought processes which learners go through in learning from text into 19 categories. They describe these as mediating processes and include application, anticipation, generating and evaluating as some of the more common of these.

The approach in this section has been mostly theoretical in order to develop an understanding of the main aspects of metacognition and the control or management of learning. In section 3.8 a more practical description is provided of some approaches which have been use to try to facilitate the development of academic literacy.

### **3.7.6 Values and attitudes**

Although it is somewhat beyond the scope of this study, the influence of a student's values and attitudes on the development of academic literacy should be taken into account. For example a positive attitude towards, or valuing of, scholarship will assist in improving motivation in academic work.

### **3.7.7 Interpersonal skills**

Interpersonal skills play a potentially major role in successful distance learning for at least two important reasons. Firstly, the support needed from significant other people in the life of a distance learner is a major factor influencing success. Therefore, the distance learner's ability to negotiate and maintain that support is an important skill contributing to success.

Secondly, from a social constructivist point of view, learning is mediated by interaction between learners and between learner and teacher. In distance education the opportunities for interaction are fewer than in face-to-face interaction and often have to be negotiated, and in the case of contact with lecturers it seems, even fought for. Successful distance learning therefore will be influenced by the student's interpersonal skills in establishing and maintaining interaction which facilitates learning.

While interpersonal skills are not normally seen as integral to academic literacy, the preceding discussion shows their importance in the development of academic literacy and, as such, it is important to include interpersonal skills in an expanded model of academic literacy.

### **3.7.8 Motivation**

The distinction between intrinsic and extrinsic motivation is well known and it would appear that there is a complex relationship between these forms of motivation in distance learning. For example, Wisker and Brown (1996:160) report that the intrinsic motivation involved in innovative methods of assessment (e.g. journals, projects, portfolios) appears to be more powerful than extrinsic motivation which derives from the achievement of results. However, these results were obtained in a contact situation and it appears from the results of the present study (see chapter 5) that extrinsic motivation also plays an important role in distance learning.

“Most cognitive theories of motivation hold that if people do not believe they can do something or learn something, they are unwilling to take the risk that trying and failing will pose to their self-esteem” (Cross & Steadman, 1996:79).

Cross and Steadman outline three theories of motivation which are relevant to the discussion of academic literacy.

**Self-efficacy theories** of motivation claim that learners’ belief in their ability to succeed in a particular area of learning is more important than the skills which they have in that area of learning and more important than the difficulty of the task. Further, self-efficacy theories of motivation recognise that motivation varies from situation to situation, depending on the learner’s self-belief regarding the demands or challenges of the situation. A learner who has excelled in all areas of study may have a ‘block’ in one particular area which is likely to be related to their belief in their inability to perform in this area.

Cross and Steadman (1996:81) make the distinction between learners who believe that intelligence or ability are fixed, innate abilities and those learners who believe that intelligence and ability can be developed through effort and action. The former type of learner is less likely to take on challenges which they perceive are too difficult for their ability. The latter type of learner is less likely to give up in difficult situations.

**Attribution theories** of motivation (Weiner in Cross & Steadman, 1996:82) claim that motivation is determined by learner perceptions about factors which have affected past performance. These factors have dimensions of locus, stability and controllability. Briefly, if a learner believes that factors are located outside of themselves (locus), that they are unpredictable (stability) and not able to be controlled (controllability), that learner is less likely to be motivated to succeed.



**Self-worth models** of motivation (Cross & Steadman, 1996:82) are based on the premise that learning motivation is based on the learners desire to maintain a sense of self-worth. Academic failure is seen by the learner as resulting from a lack of either ability or effort. Learners would try to preserve their sense of self-worth by minimising the chances of possible failure being seen as a result of their lack of ability. Therefore, in Covington's view (in Cross & Steadman, 1996:83), learners typically fall into four categories regarding academic achievement: success-oriented (learners with confidence in their ability based on previous success), over-striving (learners who are anxious about their ability and try even harder to be the best), failure avoiding (learners who try to succeed at the minimum level so as to avoid failure at a higher level), and failure accepting (learners who have given up trying so as to avoid being seen to lack ability).

From the empirical data gathered as part of this study it is clear that motivation plays a major part in distance learners' approach to their learning. The extent to which they become academically literate is therefore affected by their motivation in ways which can be understood in terms of the theories outlined above. A detailed discussion of this aspect of the development of academic literacy is included in chapter 6.

Various means of building and maintaining learner motivation are mentioned in the literature including the role of mentors (Smith & Wade in Wade *et al.*, 1994:51), the maintenance of "high contact with faculty in and out of class" (Chickering & Gamson, 1991, in Cross & Steadman, 1996:19-26) and peer learning (McKeachie *et al.* in Cross & Steadman, 1996:21; Stratfold in Eisenstadt & Vincent, 1998:122).

### 3.8 ACADEMIC LITERACY IN DISTANCE EDUCATION

There is little in the literature on distance education to suggest that the process of distance learning is essentially different from the process of learning in other, campus-based and contact situations. Richardson (2000:181-182), in his conclusion to an extensive review of research into learning styles argues that:

"..the safest conclusion that one might reach from the available evidence is that students who are taking courses by distance learning show different approaches to studying from campus-based students, but that these differences are more likely to be due to the effects of background variables (most notably, age, previous qualifications or experience, academic discipline and level of study) than to the effects of different modes of study."

This conclusion seems intuitively acceptable since the culture of academia and the structure of academic disciplines is broadly similar across the different modes of higher education. Thus, becoming academically literate as a distance learner involves similar cognitive, metacognitive, social and motivational processes compared to those experienced by the student on campus. These processes have been outlined in the various sections of this chapter.

However, taking into account Richardson's conclusion above, it would seem that the mix of skills which are utilised is likely to be different for distance learners in comparison with that of on-campus learners, perhaps because of differences in the attributes they bring to the experience, but also because of differences in the demands of the learning situation. The case study literature on the experience of distance learners (e.g. Evans, 1994; Lea, 1998:8-14) and the empirical evidence gathered in this study supports this view. It is postulated that these differences in learning experience are typified by a relative dominance of the metacognitive and motivational aspects of learning in distance learning (as opposed to cognitive and social aspects) but that the process of learning is essentially similar.

The cultural, discourse based approach to understanding academic literacy (outlined in section 3.5) is useful as a way of understanding how the learner engages with the intellectual challenges of understanding an academic discipline and the value and attitude orientations which are commonly associated with professional practice within a discipline. However, it has been argued that, in order to gain a more holistic

understanding of learners' experiences in developing academic literacy, it is necessary to take into account a wider range of activities and skills.

In summary then, if academic literacy is that complex of knowledge, skills, attitudes and values which enable a student to be successful in a particular academic environment, then the concept of academic literacy must include schemas; language, information and academic skills; generic cognitive skills; metacognitive skills; and motivation. This is particularly the case in the context of distance learning where the onus is on the student to manage his own learning by using the entire range of skills at his disposal. While the narrower view of academic literacy as an engagement with the discourse community of the discipline is plausible in relation to a student intensively engaged in academic debate in lectures and tutorials, it is inadequate to describe fully the development of the student who manages his or her own learning in order to satisfy the intended outcomes of a course delivered at a distance.

### 3.9 MEASURING ACADEMIC LITERACY

A study by Loomis (2000) indicates that students' learning and study styles were important factors in their success in an online research methods course. The study by Loomis used the *Learning and Study Strategies Inventory* (LASSI) as a measure of learning and study skills. The LASSI scores were correlated to total class points, grades on examinations, projects and assignments. Results of the study showed that five LASSI scales correlated significantly with an aspect of course assessment and that the strongest correlation was between time management skills and final course grade (Loomis, 2000:1). Other scales for which significant positive correlations were found were attitude, concentration, selecting main ideas and study aids.

The study by Loomis is described here as an example of how researchers have gone about trying to understand the relationship between skills and attitudes in learning on the one hand and academic achievement on the other hand. Such studies have generally attempted to control for at least the most obvious of confounding variables and then

used inferential statistics to show a measure of association between approaches to study and performance, or to show statistically significant differences in approaches to study between different samples of learners, for example distance and contact students.

Many instruments have been used in this class of research. Richardson (2000) reviews more than five major instruments<sup>1</sup> and many variants of these and is able to come to only very general, but important conclusions on the basis of this substantial research tradition:

- Good academic performance is positively correlated with a deep approach to learning and negatively correlated to a surface approach to learning. This finding is independent of mode (on-campus or distance);
- Distance learners seem to “exhibit approaches to studying that are more desirable than campus-based students” (Richardson, 2000:187) in the sense that they seem to employ more higher cognitive approaches.

Richardson qualifies the second finding by pointing out that distance learners differ markedly from campus-based students in terms of age and experience and that these factors may be important in the differences observed.

It would seem from the results reported above that, in fields as complex as cognition and motivation in academic learning, a quantitative approach has limitations and results often need major qualification. Qualitative studies tend to be more fruitful in describing phenomena and experience in a way which others can learn from. More discussion is included in chapter 4 on the relative merits of these research orientations.

### **3.10 DEVELOPING ACADEMIC LITERACY**

Since the ultimate aim of research is the improvement of instructional practice and enabling more effective learning rather than simply understanding the processes better, the question must be asked: What can be done to develop academic literacy? As

detailed recommendations are made in the concluding chapter, a brief overview of methods will be sufficient at this stage.

Johnson, Elson *et al.* (1991) present a large number of teaching tips for developing motivation and effective learning strategies. These tips are based on cognitive theories of motivation and learning. While the intended outcomes are relevant to distance learning, the methods suggested are strongly dependent on the facilitation of a teacher in a contact situation. This highlights the challenge facing distance education in developing academic literacy.

Similarly, a common approach at traditional contact universities in South Africa has been the introduction of entry level courses which explicitly teach skills which have been clearly identified with developing academic literacy. The nature of these development and access courses has been outlined in section 3.5. They require a high degree of engagement between learner and teacher and typically involve peer learning strategies as well. Intensive practice is often given in acquiring the language of academic disciplines through processes of drafting and redrafting written work.

The strategies described above have been effective in many institutions in providing access to students who have experienced some form of disadvantage. However, because of the intensive contact required these it is often not feasible to employ such methods in more distributed learning environments. Consequently, resource-based methods have been tried to support students in developing a range of skills or competencies which cumulatively may assist in the development of academic literacy. Examples of such resources are the Good Study Guide (Northedge, 1990) and the Hawley Guide to Academic Success (Simpson College, 2001). These resources cover topics such as time management, study skills, problem solving, examination preparation, stress relief and motivation. The approach is clearly practical and does not pretend to engage at a deep level in developing more complex competencies within the culture of academic disciplines.

Another category of support in the development of academic literacy which is emerging, utilises the potential of maintaining on-line contact. For example, Shapley (2000) reports that an on-line course in Chemistry increased flexible learning options for students, improved contact between students and lecturers and improved examination performance in areas where higher order reasoning skills were required.

Rossmann (1999) reports that feedback is the most frequently mentioned concern of on-line learners, pointing out that those faculties who provide meaningful and frequent feedback are rated highly by learners, while those who respond superficially or infrequently are rated poorly. From the analysis of a learner discussion forum Rossmann developed a list of tips for good practice in responding to students. These include the sending of regular notes on class business, reminding students whose assignments are still due, encouraging students to complete course questionnaires, encouraging students to engage each other in debate, monitoring students' involvement in on-line discussions and encouraging those who need it, encouraging students to share their knowledge and expertise with other students.

### 3.11 CONCLUSION

This chapter has reviewed a wide range of writing in the areas of literacy, cognitive psychology, pedagogics and instructional design. Theories and perspectives which have seemed influential and relevant to the development of academic literacy in distance education in South Africa have been identified and discussed.

The context for chapter was set by arguing that transmission models of teaching and learning, though still prevalent in distance education, are less useful than constructivist models, which are seen as more efficient for the transfer of knowledge so that the learner engages personally and meaningfully. Accepted good practice in education has its origins in both models of teaching and learning, emphasising common elements such as meaningful contact between teacher and learner, prompt feedback, time on task and setting a challenge.

The main thrust of the chapter was an analysis of the concept of academic literacy, as a particular kind of literacy among the many different kinds of literacies which have been conceptualised. Central to this analysis was the detailed description of academic literacies in terms of the student's response to becoming literate in an academic culture, with its variability across disciplines. This traditional understanding of academic literacy was extended by including concepts related to cognition, metacognition, learning styles and motivation as integral to the students' holistic experience of learning and therefore also to a realistic concept of academic literacy.

The chapter ends with a discussion on how to evaluate and promote academic literacy, particularly in distance education where the student's ability to function as an effective independent learner is crucially important.

#### *Chapter notes*

1. The better known instruments include the *Language and Study Skills Inventory* (LASSI), the *Study Process Questionnaire* (SPQ), the *Approaches to Study Inventory* (ASI), the *Distance Education Student Progress Inventory* (DESPI) and the *Inventory of Learning Styles* (ILS). Details of references to these instruments are contained in Richardson (2000).

## CHAPTER 4

### RESEARCHING ACADEMIC LITERACY IN DISTANCE EDUCATION: ORIENTATIONS AND METHODS

#### 4.1 INTRODUCTION

"The act of enquiry begins with issues and/or concerns of participants and unfolds through a 'dialectic' of iteration, analysis, critique, reiteration, reanalysis, and so on that leads eventually to a joint (among inquirer and respondents) construction of a case (i.e. findings or outcomes). The joint constructions that issue from the activity of inquiry can be evaluated for their 'fit' with the data and information they encompass; the extent to which they 'work', that is, provide a credible level of understanding; and the extent to which they have 'relevance' and are 'modifiable' " (Schwandt, 1998:243).

The preceding discussions in chapters 1 and 2 have been intended to introduce the reader to those characteristics and dynamics of distance education which bear a relation to the development of academic literacy in distance learners. These discussions have proceeded by means of literature studies which have attempted to present a representative cross-section of observations, opinions and theories in the writings of researchers in the fields of distance education and academic literacy over roughly the last decade.

The present chapter presents a philosophical and methodological overview of the types of research which have been conducted in these fields as a means of locating the research orientation of the present study within a research tradition. It is argued that a broadly constructivist research orientation with an eclectic use of research methods is suitable for a study such as this, which attempts to synthesise and extend understandings of academic development in distance education. The chapter then



examines the research aims and the research problem of this study from a constructivist perspective. The body of the chapter follows, describing in detail how the research was conceptualised and operationalised and the specific methods which were used in the implementation of the design.

## 4.2 RESEARCH PARADIGMS

Research generally can be located within a paradigm which, according to Guba and Lincoln (1998), can be understood as a worldview, or beliefs which deal with fundamentals. Paradigms have distinctive orientations towards ontology (the nature of reality), epistemology (how things come to be known) and methodology (legitimate means and methods for enquiry) (Guba & Lincoln, 1998:200).

Paradigms have been classified differently by various research methodology theorists. Cohen *et al.* (2000:22) employ a broad bi-polar classification of methodologies into the **normative** and the **interpretive**. Their characterisation of normative research is that it is concerned with macro systems and searches for patterns of objective reality which can be induced from specific empirical observations. These in turn are seen as manifestations of impersonal forces which act according to rules. The interpretive paradigm, on the other hand, includes types of research which are concerned with micro-systems which are seen as being created most importantly by human agency. Such research aims to understand actions, meanings and constructs, mostly at an individual level.

Popkewitz (1984:35) differentiates research into three broad paradigms: empirical-analytic, symbolic and critical. In terms of the characterisations presented above, the empirical-analytic paradigm can be loosely equated with the normative. The symbolic and critical paradigms are both interpretive in Cohen and Manion's sense of being interested in human agency rather than impersonal forces of cause and effect. The paradigms differ in the important respect that research in the symbolic paradigm sets out primarily to describe and interpret phenomena in their own terms, whereas research

in the critical paradigm attempts to interpret events in historical context in terms of the vested interests and values of human groupings. Popkewitz (1984:45) argues that critical science can also be seen as normative in its attempt to understand macro social, economic and political determinants of phenomena.

Guba and Lincoln's (1998:203) characterisation of research paradigms is closely aligned to that of Popkewitz, although being a later conceptualisation, they have included specific interpretivist movements like constructivism which have become established in the intervening time since Popkewitz wrote. They include positivism, postpositivism, critical theory and constructivism.

The range of characterisations of research and enquiry paradigms which has been presented here is representative of that found in the social science literature and forms a common framework within which to locate the ontological, epistemological and methodological assumptions of particular research projects. The understanding gained in this section is used in the following sections to analyse patterns of research in the fields of distance education and academic literacy and also to describe the research orientation of the present study.

#### **4.3 PATTERNS OF RESEARCH IN DISTANCE EDUCATION**

The review of literature on distance education reveals a range of research orientations. There is much writing in this field which seems to be devoid of an explicit theoretical research orientation, focussing rather on procedural issues in the practice of distance education. The tone of such writing is instructional, the underlying logic is an appeal to experience and common sense, and the purpose is dissemination of good practice. However, 'good' in such writing is a given, usually based on authority and experience in the field rather than on a process of quantitative or inter-subjective validation. Examples of such writing can be found in Rowntree (1992), Rowntree (1994), Bourner and Race (1990) and Ridge and Waghid (2000). These writings cover such topics as supporting

distance learners, developing materials in distance education, study skills and the general improvement of teaching and learning in distance education.

Strictly speaking, this writing is not research as it does not set out to investigate theory or practice but rather to instruct the reader how to apply existing research findings and theoretical understandings.

Short research reports contained in journal articles or chapters of books often have a strongly positivistic orientation in that they attempt to describe phenomena in quantitative terms. Measures of association (correlation) and differences (analysis of variance) are commonly included in such research. The research of Loomis (2000) comparing learning styles to class performance, and that of and Hiltz, Coppola, Rotter, Turoff and Benbunan-Fich (2000) on collaborative learning in asynchronous learning networks, are examples of quantitative research located strongly in a positivist paradigm.

Richardson's (2000) extensive review of research into learning styles and approaches to studying also deals mostly with quantitative research using experimental designs. The value of Richardson's work, apart from its comprehensive coverage of issues in learning, lies in its enthusiasm for and its critique of research of this kind. He shows that very few claims for statistically significant effects in the area of approaches to study can be accepted without extensive qualification. The grounds of qualification are generally a combination of the following:

- Lack of appropriate sampling;
- Uncertainty about underlying constructs;
- Concerns about the reliability of instruments used to measure constructs; and
- Inadequate control of intervening and potentially confounding variables.

In addition to the need for qualification of findings, Richardson cites numerous examples of studies which, although they seem to employ acceptable experimental designs and process results by acceptable statistical methods, still produce conflicting

results. This demonstrates clearly the complexity of the underlying variables being studied and the critical influence of context.

As a result of Richardson's critiques, only the most general and fundamental results remain unchallenged. However, Richardson's enthusiasm for an empirical, 'scientific' approach to researching learning lies in the fact that such an approach is at least able to confirm these fundamental results with some certainty, namely, the effectiveness of a deep approach to learning, and differences between distance learners and students on campus with respect to their willingness to employ such methods.

Some writing about distance education is located in the critical theory tradition which is concerned with power relations in the struggle for a more equitable and just social order. From this perspective the individual's voice must be heard; differences between learners appreciated and practices which seem to maintain privilege of one group over another, questioned. Critical theory necessarily includes ideological critique and focus on emancipatory practices (Higgs, 1995:8).

Case studies are commonly used in critical theory to give voice to difference and Evans' (1994) work in understanding distance learners is an example of the use of case studies in a critical frame of reference. He is concerned to show the dynamics of various factors in power relations such as money, gender and institutional status.

A critical perspective has been considered important as an orientation towards the present study because the context of the study is a society which has a history of pronounced systemic inequality in which power relations play an important part.

There is also a substantial body of distance education research which is constructivist in conception and implementation. Ridge and Waghid (2000:78) claim that many changes that have taken place in distance education "can be attributed to the influence of constructivism". Their claim is based on the argument that the distance learner actively manages his/her own learning, thereby constructing knowledge rather than being a

passive recipient of instruction. Furthermore, the dialogue which is seen to occur between learner and teacher or institution in distance education, particularly with the possibilities of telematic tuition and newer communicative technologies, supports the constructivist view of knowledge being socially negotiated.

#### 4.4 RESEARCH ORIENTATION

Since the goal of this study is to illuminate the development of academic literacy in distance education, its primary orientation is **qualitative**. The emphasis is on understanding students' attitudes about their learning and on how they develop a degree of academic literacy. This understanding is developed by qualitative methods such as observation of students, interaction with students through open-ended items on questionnaires and in interviews, as well as through interaction and discussion with lecturers, tutors and support staff.

These qualitative methods are supplemented by quantitative items in the attitude survey which are included to assist in developing a profile of the characteristics of the sample of students which was surveyed. The descriptive statistics employed in constructing this profile are simply an aid to understanding common characteristics, concerns and issues among distance learners rather than as an attempt at verification or falsification of hypotheses or as a means of prediction. Because of the complexity of the variables involved and the fact that constructs such as academic literacy are essentially qualitative in nature, it would have been inappropriate to attempt a more rigorous quantitative experimental design. Certainly, an investigation of causative factors was out of the question.

The distinction between qualitative and quantitative research (van der Merwe, 1996:282-3) is therefore not rigid in this study although it leans strongly towards the qualitative. The leaning towards qualitative research is motivated by the need for flexibility in interpretation of complex and context-dependent variables in distance learning which are not amenable to control. A qualitative approach was also adopted on the strength of

critiques in the literature of strongly quantitative methods as being insensitive to context, and excluding motivations, meanings and purposes. These critiques claim that overly quantitative methods contribute to disjunctions between theory and local practices, and lead to generalisations which are inapplicable to individual cases (Guba & Lincoln, 1998:197-8).

Another useful distinction in describing the orientation of this research is that it adopts an interpretive approach rather than a normative approach (Cohen *et al.*, 2000:22). In these terms the behaviour and attitudes of students are not seen as being rule-bound and are therefore not able to be meaningfully investigated by the hypothetico-deductive methods of natural science. Theories about academic literacy in distance education are generally interpretive rather than predictive. The sense which each student makes of his or her studies is ultimately based on individual experience which cannot be described by a general predictive theory.

This is not to say that an interpretive approach is not useful in the building and testing of theory, but merely that shared meanings provide as secure a base for theory as do quantitative measures of variables. This claim is made on the basis of the complexity of variables in the field of learning and the uncertainty which often exists about the reliability and validity of quantitative measures as a result.

The study can be located best under a constructivist paradigm of qualitative research although it contains some positivistic and also some critical elements. This section motivates this view of the theoretical perspective of the study by considering attributes which are commonly used to typify theoretical orientations, such as those proposed by Guba and Lincoln (1998:210):

- the aim of the research;
- the view of knowledge and the accumulation of knowledge (learning) emerging from the research;
- quality criteria; and
- the voice of the researcher.

The aim of the study is the understanding and the reconstruction of student understandings of their own academic literacy and learning processes rather than the quantitative description and explanation of these phenomena in terms of hypotheses which are derived from a particular theoretical position. While this claim for a constructivist orientation on the grounds of the purpose of the research is true in a general sense, the study is influenced to an extent by the critical tradition in that it does offer a critique of distance education practice. This tradition is concerned with power relations, the privileging of certain groups of students in higher education and the extent to which the process of distance education may be implicated in reproducing systems of privilege and oppression (Kinchloe & McLaren, 1994, in Carspecken, 1995:4; Kanpol, 1999:29).

The view of knowledge which is adopted in this study is constructivist in nature. From a constructivist perspective, learning is seen as the construction or reconstruction of knowledge by the learner with the facilitation of teacher or peers, as opposed to the transfer knowledge from expert to novice (Belanger & Jordan, 2000:14; Stake, 1995:99). According to Candy (in Williams, 1995:4) knowledge consists of "a set of workable hypotheses or templates constantly being put to the test in interactions with other peoples' constructions of the same situation". Knowledge about academic literacy in distance education consists of the constructions of students, lecturers and tutors and the researcher about the nature of learning in this context. These constructions have been revised and refined as the study progressed. Although there are differing views or constructions about the process of studying at a distance, a degree of consensus and inter-subjectivity emerges from the attitudes and opinions of respondents in questionnaires, e-mail correspondence and interviews.

Guba and Lincoln (1998:213-4) list the following criteria which can be used in judging the quality of research:

Trustworthiness criteria:

- Credibility;

- Transferability;
- Dependability;
- Confirmability.

Authenticity Criteria:

- Fairness;
- Ontological authenticity;
- Educative authenticity;
- Catalytic authenticity;
- Tactical authenticity.

This study attempts to be self-critical in terms of these constructivist criteria for quality research. A detailed critique of the study in terms of these criteria is presented in the concluding chapter in section 7.2.4.

In summary then, the research conducted in this study was conceptualised and conducted within a constructivist paradigm, in terms of the research aims, the researcher's understanding of knowledge and the criteria which have been used to critique the effectiveness or 'quality' of the study.

#### **4.5 THE RESEARCH CYCLE**

The research was conducted using a cycle of deductive and inductive enquiry. This mix of qualitative and quantitative analytical methods is accepted as part of the natural cycle in scientific enquiry (van der Merwe, 1996:279). Seidman (1991:5) supports the use of multiple research methods on the grounds that research interests have many levels which are more or less quantitative or qualitative.



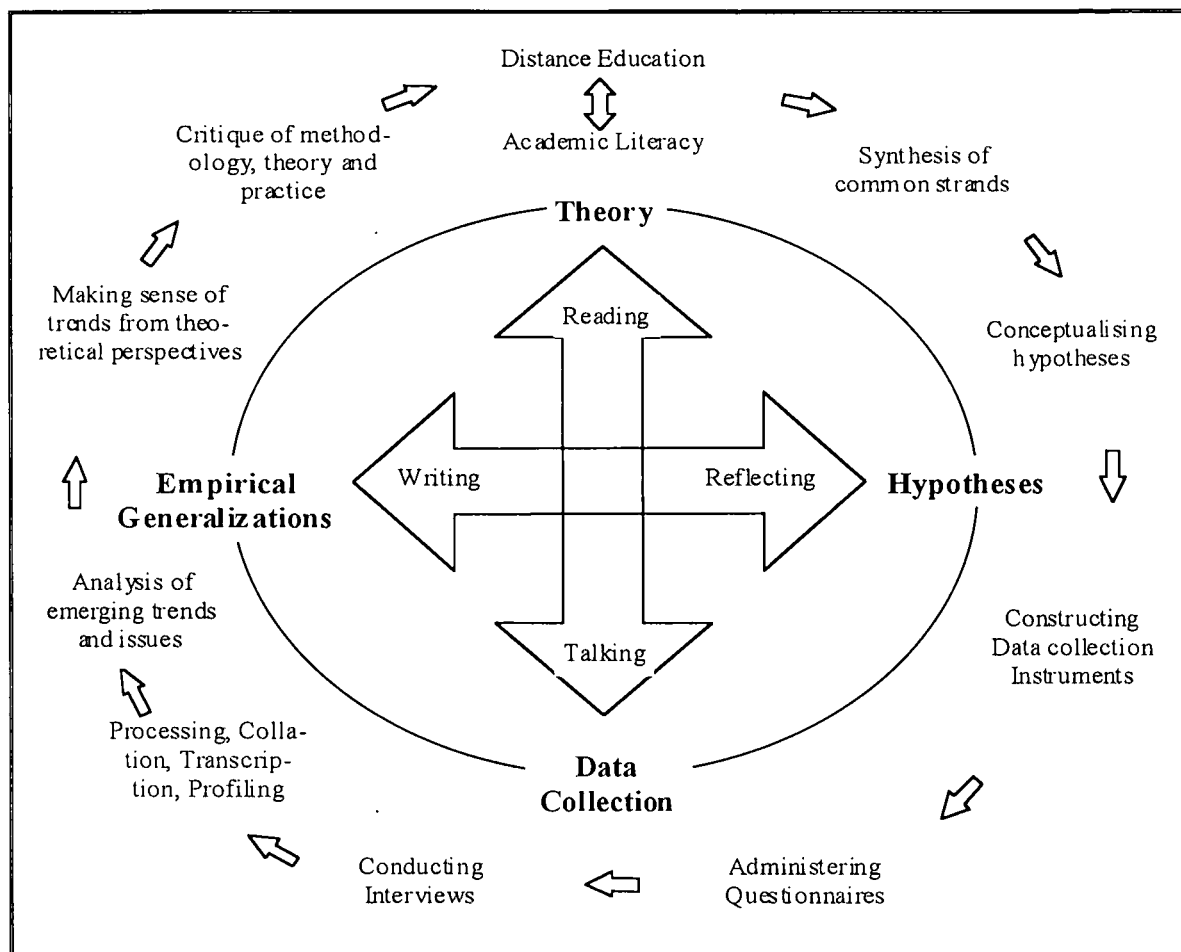


Figure 4.1: The research cycle

Figure 4.1 illustrates the research cycle as it was implemented in this study. The cycle illustrates a deductive phase involving the following: the process of familiarisation with theories of distance education and academic literacy, the formation of hypotheses from these theories, the conceptualisation and use of instruments designed to gather data related to these hypotheses. The cycle is completed by an inductive phase involving making empirical generalisations from the data gathered. These generalisations, usually in the form of key issues emerging from student experience, are arrived at through a process of analysis and interpretation of data from multiple sources. The inductive phase of the research cycle is completed by making recommendations for the improvement of practice in distance education and for new areas of research, and by a critique and extension of theory on academic literacy with specific reference to open and

distance learning. The analysis of the research cycle for this study is based on that of Van der Merwe (1996:280).

It should be noted that the phases and stages of the cycle were traversed a number of times in the course of the study. Planning, data collection, analysis and interpretation all lead to conclusions which influenced the formation of new hypotheses and plans for investigation at the start of a new cycle as described by Bassey (1995:60).

The remainder of this chapter revisits the research aims and problems in more detail (see brief outlines in chapter 1) and then provides more detail on the phases (deductive and inductive) of the research and the stages which make up these phases as described in this section.

#### **4.6 RESEARCH AIMS AND PROBLEMS IN CONSTRUCTIVIST PERSPECTIVE**

In this section there is a progression from the research question and the unit of analysis to the primary and secondary research objectives.

##### **4.6.1 The research question and hypotheses**

The fundamental research question addressed by the study is the following:

**To what extent do undergraduate students studying in a distance education mode perceive their academic literacy to be at a level which enables them to cope adequately with the demands of distance learning?**

The hypotheses which follow were constructed as guides to investigation process

#### 4.6.1.1 *Deficit hypotheses*

Students who experience problems with academic literacy are likely to do so for a variety of reasons including:

- The experience of shortcomings in their secondary education;
- limited contact with lecturers and tutors;
- limited contact with peers;
- limited opportunity for in-depth engagement in developing academic skills; and
- language difficulties.

#### 4.6.1.2 *Competency hypotheses*

The set of hypotheses in the previous section can be reformulated as converses as follows:

Students who believe that their academic literacy is adequate or well developed in relation to the challenges of distance learning are likely to hold this view for a combination of the following factors:

- An adequate secondary education;
- Sufficient and productive contact with lecturers and tutors;
- Effective contact with peers;
- Ample opportunity for in-depth engagement in developing academic skills;
- language competence.

#### 4.6.1.3 *Environment hypotheses*

- Study materials used by students have incorporated effective approaches to developing the academic literacy.
- Assessment methods support the development of academic development.

- Learner support structures are in place in distance education to support the learning of students effectively.

#### 4.6.2 Research objectives

Specific research objectives of this study are listed below with an indication of the sections of the study which address each objective.

- Investigate and describe students' perceptions of the nature, extent of the **orientation and information** received before and during registration with respect to its effectiveness in raising awareness of the academic literacy challenges of distance learning (see Sections 5.2.3.1, 5.4.4);
- Describe student perceptions of the **learning approaches** they apply to their studies, of their **cognitive and metacognitive skills** (Sections 5.2.4, 5.2.5, 5.3, 5.4.6 to 5.2.11);
- Describe student perceptions of the **course materials** they are exposed to in relation to the development of academic literacy (Sections 5.2.7, 5.4.15);
- Describe student perceptions of the effectiveness of the **learning support** received from their institution and its staff in developing academic literacy (Sections 5.2.6, 5.4.12, 5.4.14);
- Describe student perceptions of the extent to which **assessment** tasks and the feedback received on assessment assist the student in developing academic literacy (Sections 5.2.7, 5.4.14); and
- Contrast, where possible, student perceptions in the above areas with lecturer perceptions (Sections 5.5).

#### 4.6.3 General aims of study

The achievement of the objectives stated above contributes to the general aims of the study which include the following:

- Illuminate the processes of academic literacy development in distance education by building a model of the concept of academic literacy which is applicable to distance education in South Africa at the present, taking into account the particular conditions which exist in the sector (section 3.7);
- Illuminate student constructions of their development or 'acquisition' of academic literacy (Sections 5.4.8, 5.6);
- Identify and **describe current practice**, and narratives which interpret those practices, in facilitating the development of academic literacy of distance education learners, as they are related by lecturers, support staff and by the learners themselves (sections 5.5.6, 5.5.7, 5.5.8);
- Identify and **describe areas** in which there are pronounced strengths and weaknesses in practice in relation to the development of academic literacy (sections 6.4, 6.5);
- **Make recommendations** for improvements in practice, particularly in supporting student learning effectively so as to facilitate the development of academic literacy (section 7.5); and
- Identifying areas for further research in this area (section 7.4).

The pursuit of these research objectives and aims provides the basis for a synthesis and discussion of findings within a theoretical context.

#### 4.6.4 The object and demarcation of the study

The object of the study (or unit of analysis) is the **undergraduate student studying at a South African higher education institution in a distance education mode**. In particular the study is concerned with the **perceptions and attitudes** which such students have of their level of academic literacy in relation to the challenges that they face in their studies.

Those involved in the study are referred to as participants or as respondents (for questionnaires). They are drawn mainly from two institutions, UNISA and VISTA

University, with the great majority being registered with UNISA. The participants form a sample which was selected mainly by convenience sampling. Results (see chapter 5) indicate a high degree of diversity in learning backgrounds, learning situations and perceptions.

#### 4.7 RESEARCH DESIGN

The research design can be characterised as a **cross-sectional, synchronic** study of **individual** students using **multiple methods** for **exploratory and explanatory** purposes.

The qualitative nature of the research has been discussed in section 4.2 and is noted as a component of the research design. The research is cross-sectional in the sense that a range of participants was chosen, as outlined in the previous section. The research is synchronic as opposed to being longitudinal in that the gathering of data occurred over a limited period of time from May 2001 to May 2002. Although substantial, this period restricts observations of phenomena to a time period in which it is unlikely that there would be major underlying changes in the learning environment or in the developmental stage of the participants. Even though the time frame of observation of the study makes it synchronic it is important to keep in mind that the research process was cyclical in its implementation, involving phases of conceptualisation, data collection, analysis and interpretation.

As outlined in the previous section on the research problem and objectives, the purpose of the study is exploratory and explanatory. The tools of exploration and explanation are engagement with participants and critical evaluation of relevant literature. An important goal of the study is to synthesise and link understandings in the areas of distance learning and academic literacy.

The research design is therefore eclectic in its use of multiple methods, the details of which are documented in the following sections.

## **4.8 RESEARCH METHODS**

The choice of research methods and instruments was purposefully eclectic in order to facilitate the triangulation which is necessary for a broad synthetic study such as this. These methods are discussed in detail in the following sections.

### **4.8.1 Literature study on teaching and learning in South African distance education**

Over a period of roughly five years numerous books, journal articles, conference proceedings, policy documents and internet sites dealing with distance education have been identified and studied. A filter was applied to select those resources which were relevant to student learning. For instance, reading and study was directed towards the following areas: learner support; learning processes in distance education; materials development; and information and communications technology as they impact on student learning. The specific sources consulted are documented in Chapter 2.

Theories and models were identified which are useful in understanding what factors and conditions assist students to succeed in distance studies and an attempt was made to define terms and concepts which are fundamental to distance education as a distinct mode of education.

The literature study includes a study of writings about South African distance education. The aim here was to understand the particular conditions which prevail in this country in terms of national higher education needs, institutional characteristics, learner characteristics and the policy directions which have been pursued.

#### 4.8.2 Literature study on academic literacy

Secondly, a survey of literature on academic literacy was conducted in order to gain an understanding of the dynamics of how academic literacy is 'acquired'. This survey was done in order to understand theoretical perspectives on nature of the learning experience of students studying at a distance.

Since academic literacy is a specialised term and there is a relatively small literature dealing with it directly, it was necessary to extend the literature study to include more general writings on other literacies. Two areas received particular attention. Firstly, the concept of literacy *per se* was studied by considering a literature which is dominated by a critical theory orientation. This literature appeared relevant to the understanding of an educational environment which is historically contested as is the case in South Africa.

Secondly, it was considered important to consider carefully the available literature on information literacy since the influence of information and communications technologies is a powerful wave sweeping society which has radical implications for education in general and our models of distance education in particular.

The literature studies on distance education and academic literacy were understandably constrained by available resources in terms of time, cost and accessibility. Extensive use was made of the following resources: the libraries of the Universities of Southern Queensland, Free State and Rhodes, the SAIDE resources centre and the world wide web. The specific sources consulted are documented in Chapter 3.

#### 4.8.3 Postal survey of student perceptions

The main empirical component of the study consisted of a questionnaire designed to gauge student perceptions of their development of academic literacy in distance education courses. The design of the questionnaire is discussed in a separate subsection



(section 4.8.3.1). The questionnaire was piloted with students who had previously studied through distance education and refined as a result of their comments. The questionnaire was then administered to students who are studying or have recently studied through the University of South Africa and Vista University.

Convenience sampling was used to select the participants in the survey. This decision was taken for two main reasons. Firstly, since the objective of the questionnaire was to gather data so that trends and issues could be identified for later in-depth investigation, it was considered sufficient to sample by convenience. Secondly, the logistics and expense required for working with a random sample of such a diverse and dispersed student population were beyond the resources available for the study.

Participants in the survey were drawn from four main sources. Distance learners from the local town responded to a call for participation which was made through the local newspaper and by placing notices at the public library, a venue frequented by distance learners. Two further groups of UNISA students were contacted through UNISA learning centres in Johannesburg and Bellville. The assistance of learning centre staff was enlisted through telephonic and e-mail contact. Questionnaires were posted in batches to the learning centres and returned by participants using self-addressed envelopes. The last group of students was randomly selected from a list of students registered with the Vista University Distance Education Centre (VUDEC). Questionnaires were posted directly to these students and returned by self-addressed envelopes. Since only a small number of responses were received from this group they were included with the responses received from UNISA students.

The questionnaire results were collated and analysed using a spreadsheet and by applying descriptive statistics such as means and frequency distributions. Correlations between selected variables have been calculated. Even though some moderately positive correlations were obtained a decision was taken not to use these in the research since, as discussed earlier, the variables in question are quantitative abstractions of student perceptions and the reliability of constructs may be questioned.

The last question of the questionnaire (Question 10.1, p.8) invited respondents to make general comments of their experience as a distance learner and an open page was provided for handwritten comments. This question was included to elicit information from students which is more context sensitive. The rationale behind an open question was that only students who were particularly motivated to comment would do so. It seems reasonable to expect that the issues and topics raised in these comments would represent a cross section of the most important issues facing these students as seen from their perspective.

The method of content analysis used for these responses is broadly similar to that recommended by Kvale (1996:189). It consists of the structuring of data, followed by clarification by extracting essential units of meaning, followed lastly by the reconstruction of meaning by the formation of categories of meaning. Kvale (1996:191) identifies two processes in the analysis of meaning: condensation and categorisation. The method described below involved these processes in a natural way. Because of the relative lack of complexity of the responses it was not considered necessary to employ more technical methods such as coding, which proved essential in the analysis of interview data (see section 4.7.6).

The responses to this question were transcribed and a content analysis was done. This involved a careful and repeated reading of all the comments. Thereafter key words were highlighted in the text. A list of these keywords was made. On completion of this task the keywords were scanned and duplicate terms removed. During this stage of the analysis similar terms were identified and a choice of terms was made so as to reduce the overall number of terms.

When a satisfactory list of keywords had been established, the transcriptions were read again and comments which could be identified with a keyword in the keyword list were marked. A tally was kept of the number of references to each keyword while this

reading was in progress. In this way a measure of the frequency of mention of topics and issues was obtained.

#### 4.8.3.1 *Questionnaire design*

A copy of the questionnaire is included in Appendix A of this study. This is the final version which was used in the postal survey. Several revisions of the questionnaire had been necessary as a result of comments obtained from administering pilot versions. Comments were received from students and professional educators.

The purpose of the questionnaire was to survey a significant number of distance learners in order to gauge their attitudes to a number of factors in distance education which had been identified in the course of the literature study.

Personal and academic background was ascertained by the first batch of 11 questions which covered age, gender, race, language, academic registration and progress details.

Question formats contained a mix of three basic question types:

- Choosing one alternative from a list of options. This question type was used when the response expected was of a factual nature and the range of possible responses was considered to be mutually exclusive. An example would be a question to gauge the frequency of contact with lecturers.
- Choosing a number of options from a list. This format was used as described above but for items where the possible responses were not mutually exclusive.
- Questions designed to determine attitudes. The stem of the questions were in a declarative form and the respondent was asked to locate their response on a five point scale which represented a continuum of attitude or opinion.

These three types of questions correspond loosely to the three categories of questions identified by Gillham (2000:26): those dealing with fact, behaviour, and lastly, opinions, beliefs, and judgements or attitudes.

The questionnaire included a total of 11 biographical items and 60 items on distance learning. Topic areas included the following:

- Reasons for study;
- Reasons for choosing distance education mode;
- Motivation;
- Orientation on registration;
- Level of academic engagement (knowledge to evaluation);
- Cognitive skills employed;
- Metacognitive skills employed;
- Quality of academic feedback;
- Personal and time management;
- Extent and nature of contact with instructional staff;
- Extent and nature of contact with fellow students;
- Communication channels utilised;
- Learning materials;
- Relevance and applicability of courses and materials;
- Access to resources; and
- General quality of distance learning experience.

The topics selected for inclusion in the questionnaire were motivated by the literature studies as being representative of the most important factors influencing learning in distance education and those factors known to influence the development of academic literacy. Further details of questions are included in the results of the survey.

Care was taken to ensure confidentiality and anonymity (Allison, O'Sullivan, Owen, Rice, Rothwell & Saunders, 1996:71) by not including items which could be used to positively identify respondents and implementing a process which meant that questionnaire distribution and returns were handled by intermediaries. Other ethical considerations were taken into account such as the need to value the contribution of the respondent. This was recognised in a careful covering letter to respondents.

#### 4.8.4 Attitude survey of UNISA students by e-mail

UNISA students were selected from the UNISA electronic discussion forms which are set up on a course by course basis to facilitate interaction between students. The questions set out in Appendix B were put to these students in an e-mail message with a request to respond to as many of the questions as they were able.

As in the postal questionnaire, convenience sampling was used for this survey. The students were chosen on the basis of the availability of their e-mail address in the discussion groups. The selection was influenced by the quality of the student's interaction on the discussion group. Student who had made serious contributions were selected since it was judged that these students would have been more likely to respond and to respond meaningfully.

The questions were designed to elicit responses about the nature of the student's experience in areas which have a bearing on academic literacy, namely:

- Motivation and involvement;
- Orientation;
- Level of learning;
- Learning techniques;
- Academic skills;
- Time management;
- Learning materials; and
- Feedback.

In the introduction to the questions, students were asked to reflect on their perceptions, insights and feelings as well as the factual details of their learning experience.

A total of 20 students responded to the questionnaire. The average length of responses was 575 words. Bearing in mind that some of the responses were fairly brief, this indicates that a number of students responded quite extensively. In some cases

responses show an in-depth engagement with the questions. It is also significant that a number of students, particularly those who responded in more depth, voluntarily expressed their willingness to answer further questions and assist with the research. As with the postal questionnaire there were some students who expressed explicit appreciation for the opportunity to reflect on their distance learning as follows:

“Please thank all the people behind this research project for me. (Not all institutions care about how their students are coping or doing within the systems of education out there)”.

One of the advantages of the e-mail questionnaire is that the responses are returned in electronic format and therefore do not need to be transcribed as in the case of the handwritten free responses of the students who completed the postal questionnaire. A certain amount of formatting of text from the electronic mail format to a word processed format was necessary. The availability of the responses in electronic format facilitated the content analysis which is described below.

The responses to the questionnaire were read quickly first to get an initial impression of the range of opinions and attitudes expressed and also of the depth of engagement with the task. This was followed by a careful reading of all the responses to a particular question, highlighting words and phrases which were judged to be significant. A list of these keywords was made for the responses to each question. On completion of this task the keywords were analysed for similarity. Duplicate and directly synonymous terms were removed. From the remaining terms a new list was constructed to consist of a range of terms which adequately represented all the significant opinions or attitudes in the responses, whilst limiting the number of terms to a workable set.

When a final list of keywords had been established for each question, the responses were read again and comments which could be identified with a keyword in the keyword list were marked again. A tally was kept of the number of opinions which were judged to correspond to each keyword so that the frequency of mention of topics and issues could be obtained.

#### 4.8.5 Attitude survey of UNISA staff by e-mail

A similar e-mail survey of lecturers was conducted. Lecturers were identified and chosen from departmental staff lists on the UNISA website.

UNISA staff were selected in an ad-hoc way from the staff directory information available on the UNISA website. The questions set out in Appendix C were put to these staff members in an e-mail message with a request to respond to as many of the questions as they were able.

The questions were designed to elicit responses about the nature of the students' experience in areas which have a bearing on academic literacy, namely:

- Strengths and weaknesses of students' management of their learning;
- Cognitive Level at which students are competent;
- Cognitive level required by courses;
- Academic skills;
- Nature and extent of contact with students; and
- Learning materials.

A total of eight detailed responses were received from lecturers.

The lecturers' responses were processed using a similar method as that used for the student e-mail questionnaire except that tallies were not kept of the frequency of different responses. The responses tended to be more in-depth and there were also fewer responses making it possible to rework the emerging themes into a narrative which reflects the opinions of this limited sample of lecturers.

The return for this part of the survey was sparse but the quality of those responses which were received was good. Detailed, thoughtful comments were provided. This pattern would seem to confirm the findings of Schifter (2000) who notes that some of the strongest factors motivating lecturers to participate in asynchronous learning networks

include the motivation to use new technology, develop new ideas, improve teaching and improve flexibility of course offering and student contact. Demotivating factors include workload, lack of training and lack of support for involvement.

#### 4.8.6 Interviews

The questionnaires were followed up by semi-structure interviews which were designed to elicit student opinions and feelings about their distance studies and in particular attitudes, values and skills which are relevant to the development of academic literacy. The schedule used for these interviews is included as Appendix D.

The interview schedule consists of a front page for noting personal and academic details of the participant. The items used for this purpose are the same as those used for the personal and academic details on the postal questionnaire. Items known to the interviewer were filled in for respondents before their interview and the outstanding items were noted at the start of the interview.

The interview schedule itself consists of three parts: Part I deals with learning history; Part II with details of learning experiences in distance education; and Part III with reflections on meanings which emerge from the interview.

Each section consists of a number of questions which were used to guide the interview process. These questions were sometimes used verbatim in the order in which they appear in the interview schedule but at other times the questions were modified to adjust to topics which the participant raised. At other times questions were asked for clarification or to pursue a particularly interesting point. In these cases the questions would not necessarily have been included on the interview schedule.

Part I includes seven questions which was designed to elicit comment on key issues, themes or behaviour in the participant's earlier educational experience, such as incidents or factors which facilitated or hindered learning, the role of significant people in earlier



learning, specific learning skills which could be recalled from earlier experience, and attitudes towards learning in this period.

Part II consists of 38 questions in total distributed over the following categories:

- General quality of experience;
- Motivation;
- Discipline knowledge;
- Learning materials;
- Academic skills;
- Learning skills;
- Learning style and orientation;
- Managing learning;
- Interaction with lecturers and other students; and
- Learning support.

The participants for this part of the study were selected from distance learners who were known to the researcher and accessible by virtue of living in the same town. Five respondents were chosen so that there was representation of a number of groups in the parent population in terms of gender, ethnicity and previous educational experience.

Interviews were set up telephonically or by personal contact. During the initial contact the purpose of the interview was explained and an outline of the types of questions and issues to be discussed was communicated to the participant.

Each interview lasted for a period between 45 minutes and one hour. The participant was asked whether they were comfortable about the interview being taped. All participants consented to taping. Soon after the interview the contents of the tape were transcribed by the researcher.

Interview transcripts were read carefully and significant keywords or portions of responses were highlighted. These keywords were used as the components of a concept

map for each interview. These maps were first done manually in a form of entity-relationship diagrams. In these diagrams related keywords (representing entities) were linked by a line and the line was described by a word or phrase indicating the relationship between the entities (White & Gunstone, 1992:15; Buzan, 1993). These diagrams were then captured using mind-mapping software which improved presentation but was not able to represent relationships as effectively.

For each interview participant the mind-map was used in conjunction with the transcript to construct a case description which attempts to highlight the salient points of the participants experience of distance learning with specific reference to the development of academic literacy. These case descriptions include quotations from the transcripts where these seemed to make a point more powerfully than could be done by the researcher's reconstruction of the case in narrative form.

#### **4.8.7 Analysis of selected learning materials**

A selection of learning materials was studied where this was accessible from the participants who were interviewed. The purpose of this part of the research was to be able to reflect on the materials used by these students from a perspective independent of their perceptions of materials. The content and methods of these materials have been analysed and are discussed in the following chapter.

Rowntree (1994:10) includes the following as types of learning materials commonly used in distance education: text books, wrap-around study guides, self-teaching texts, action guides, worksheets, case studies, tutorial letters and assignments. To this list one should add audio-visual and computer-based material. This range of possible materials was kept in mind in interviewing participants in the study and in requesting to view the materials which they had used in their studies.

The following criteria were considered when evaluating learning materials:

- Content quality and accuracy;

- The effective use of outcomes and objectives;
- Structure and content mapping and alternative learning pathways;
- Range of learning modalities used through a mix of media;
- Examples and applications; and
- Self-assessment activities and questions (Rowntree , 1994).

#### 4.8.8 Triangulation

Stake (1995:109) argues that educational researchers have an ethical responsibility to minimise inaccuracy in observation and misrepresentation in the interpretation of results of research. To do this a researcher needs to observe and interpret data and phenomena from different perspectives in order to guard against an unbalanced or one-dimensional view.

In this study, the gathering of data from these different sources makes **triangulation** (Cohen *et al.*, 2000:288) possible: the analysis of student perceptions is informed also by an analysis of evidence from materials and from tutors. In its use of multiple methods the study is similar to predominantly qualitative studies which aim to describe student experience (Wegerif, 1998). Denzin and Lincoln state that qualitative research is inherently multi-method in focus. They see triangulation as an alternative to validation: "The combination of multiple methods, empirical materials, perspectives and observers in a single study is best understood, then, as a strategy that adds rigor, breadth and depth to any investigation". (Denzin & Lincoln, 1998:4).

Stake (1995:112) describes four different protocols which can be used for triangulation:

- Data source triangulation;
- Investigator triangulation;
- Theory triangulation; and
- Methodological triangulation.

Each protocol rests on varying the perspective, either in collection of data, the person doing the investigation, the theoretical lens through which phenomena are interpreted and the actual research method used.

Three of the above four triangulation protocols are used in this study. Data was gathered from different groups of students and from lecturers. Although the research is predominantly constructivist in orientation, at different points in the interpretation of results different theoretical perspectives are considered. Finally, a wide range of different methods for gathering data about academic literacy in distance education was used.

Although investigator triangulation was not feasible because of lack of resources and isolation of the researcher from a community of researchers, the other three triangulation protocols were used prominently, thereby striving to improve the reliability of observations and the validity of interpretations.

#### 4.9 CONCLUSION

This chapter has presented an overview of the types of research which have been conducted in the fields of distance education and academic literacy as a means of locating the research orientation of the present study within a research tradition. It has been argued that a broadly constructivist research orientation with an eclectic use of research methods is suitable for the study. The chapter has documented the research problem and objectives of this study and then described how the research was conceived and conducted. The specific methods which were used in the implementation of the design have been described in detail.

## CHAPTER 5

### EXPERIENCES OF DISTANCE LEARNING:

#### EMPIRICAL FINDINGS

##### 5.1 INTRODUCTION

In this chapter the quantitative and qualitative findings of the study are presented. The findings are presented in sections according to the research instruments used: the postal questionnaire; free responses by students; email questionnaire to students; email survey of lecturers; and case studies of selected students.

The results from the various sources are presented in this chapter with only explanatory comments about the nature of the results and the trends which emerge. In-depth discussion and interpretation has been kept for chapter 6 where results from different sources are integrated to form a more holistic interpretation of the experience of distance learning.

##### 5.2 POSTAL QUESTIONNAIRE

The postal questionnaire returns generated a substantial amount of data on the detailed perceptions of students about a range of factors which have a bearing on academic literacy. This data has been collated and processed using descriptive statistics and the main trends are reported in this section. Areas covered include demographics, motivational factors, skills, interaction and learning materials.

## 5.2.1 Sample characteristics and demographics

The sample for the postal questionnaire consists of 51 participants who responded to the questionnaire out of a total of 200 questionnaires which were distributed. The return rate of 25% is acceptable as it is sufficient to generate a wide enough range of student perceptions. It will be seen from the following sections that the return rate was also sufficient to include a satisfactory distribution of students in terms of gender, language and ethnicity.

For comparative purposes, a 'snapshot' of demographic information for UNISA and Vista University is provided in an endnote to this chapter<sup>1</sup>.

### 5.2.1.1 Gender

55% of respondents were female and 45% male. This is very close to the figures for UNISA for the year 2000 which translate into a female to male ratio of 54.7% to 45.3% as shown below in Figure 5.1.

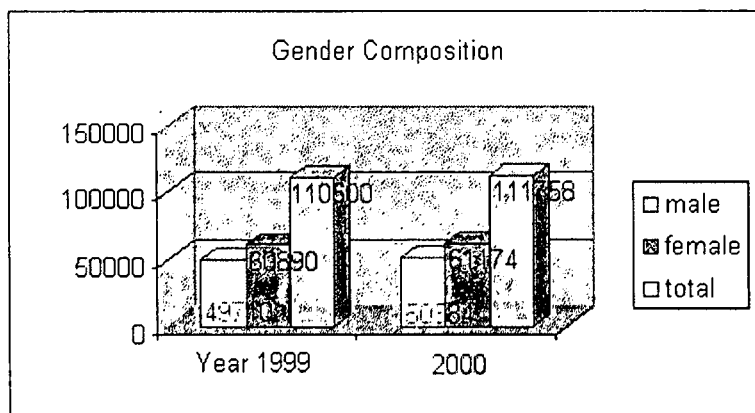


Figure 5.1: Gender composition (UNISA, 2001)

### 5.2.1.2 Age

The mean age of the respondents was 28.3 years. This is similar to the mean age of 30 for all UNISA students (UNISA, 2001) and is confirmed also by the analysis of age group presented by Gous (1995:41). These figures confirm that students studying through distance education are more mature in age than those at a typical campus based institution.

### 5.2.1.3 Language and ethnicity

60% of students responding to the questionnaire have English as a first language. Only very few have Afrikaans as a home language, which is atypical compared to the parent population. The home language of black students is distributed among the African languages with Xhosa speakers being the largest group. This is in line with national demographics.

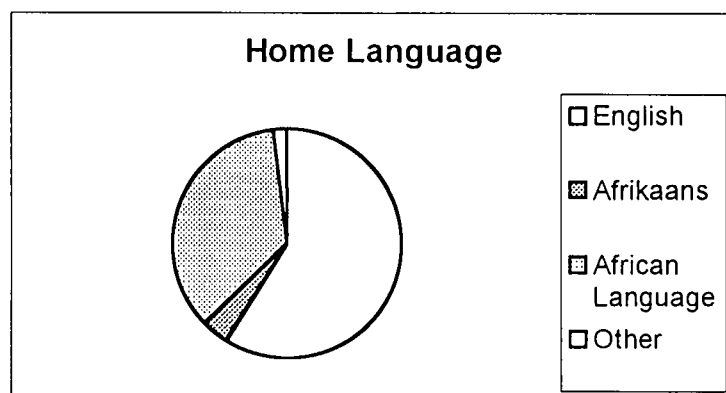


Figure 5.2: Home language distribution of postal respondents

English is the predominant second language for respondents who have an African language as a home language and Afrikaans is the dominant second language for those who have English as a first language. This is consistent with language preferences nationally and with the pattern of language teaching in secondary education.

It seems that the reporting of home and second languages by some respondents in the sample is inaccurate since some respondents with a home language other than English did not report a second language. This is clearly inaccurate since these students are studying through the medium of English and are at least competent enough to respond to the questionnaire which is in English. It is likely that respondents take it as a given fact that English is the (only) academic language. In spite of this inaccuracy, the data shows that a majority in the sample have English as a home language and that English is also the language most frequently reported as an additional language. These statistics are consistent with the responses to item 5.2.18 which indicate that the majority of respondents considered that they were not disadvantaged by the language medium required by the course.

The language preferences reported above should also be seen in the context of the racial distribution of the sample which is shown in Table 5.3 below.

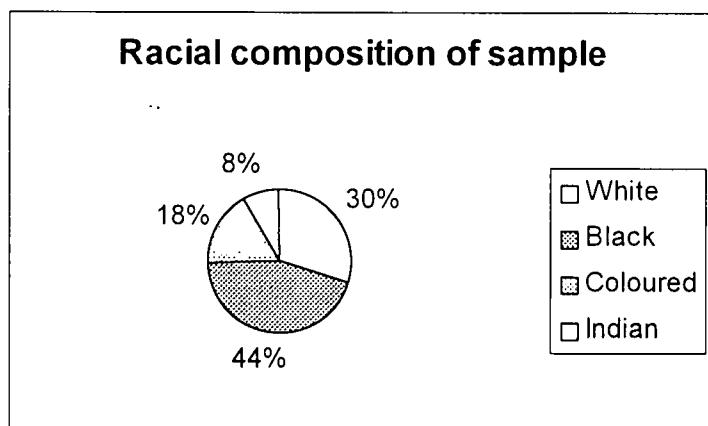


Figure 5.3: Racial distribution of postal respondents



#### 5.2.1.4 *Matriculation year*

Although the largest group in the sample completed matric five or fewer years ago, more than half of the sample had completed matric more than five years ago. Almost a quarter of the sample completed matric 15 or more years ago. In all this indicates a relatively mature sample.

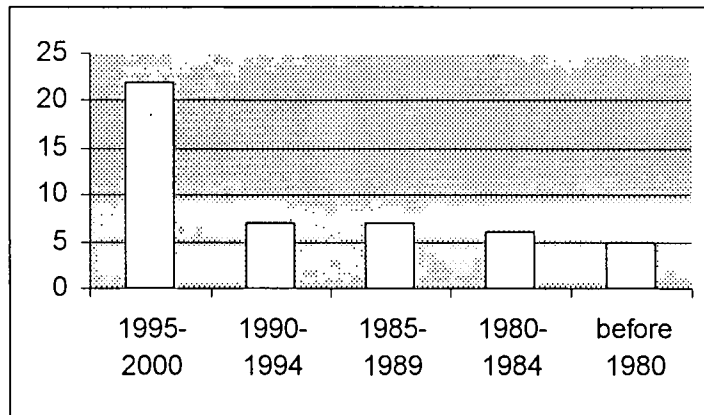


Figure 5.4: Matriculation year

#### 5.2.1.5 *Matriculation aggregate symbol*

Information on matriculation results was solicited in order to gauge the level of academic achievement of the sample. 11 respondents chose not to respond to this item, indicating that this was possibly a sensitive area because students may not have wanted to report relatively poor school results.

The results indicate a relatively low level of matriculation achievement with very few excellent aggregates. The distribution may even be positively skewed by the lack of responses as discussed above. Further discussion of the significance of this distribution is included in section 6.3.

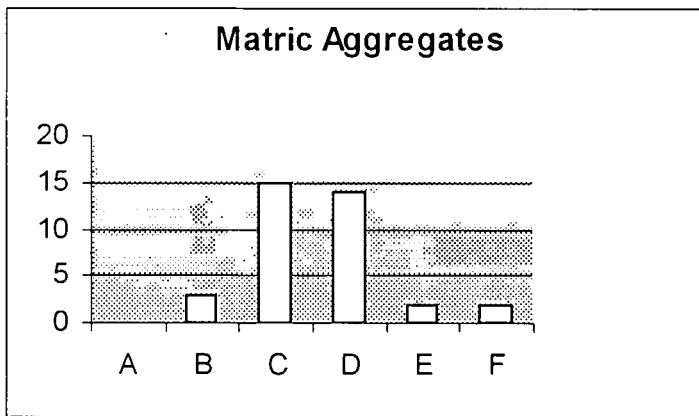


Figure 5.5: Distribution of matriculation aggregates

#### 5.2.1.6 Faculty / area of study

In order to gauge the representativeness of the sample, students indicated the faculty in which they were registered. The following results were obtained.

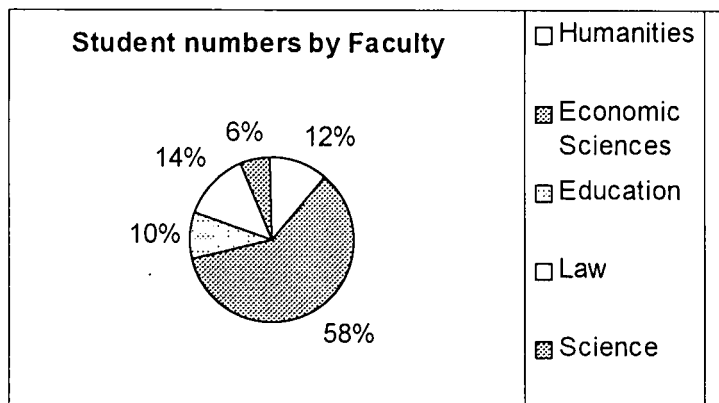


Figure 5.6: Student numbers by faculty

The distribution shown of this sample is broadly representative of the parent population. More detailed discussion of the distribution by faculties is included in section 6.3.

### 5.2.1.7 Year of registration

Over 50% of students in the sample were in their third (or higher) year of registration. This is a positive feature of the sample in that these students have shown persistence in their registration and will have had considerable time to reflect on the experience of distance education.

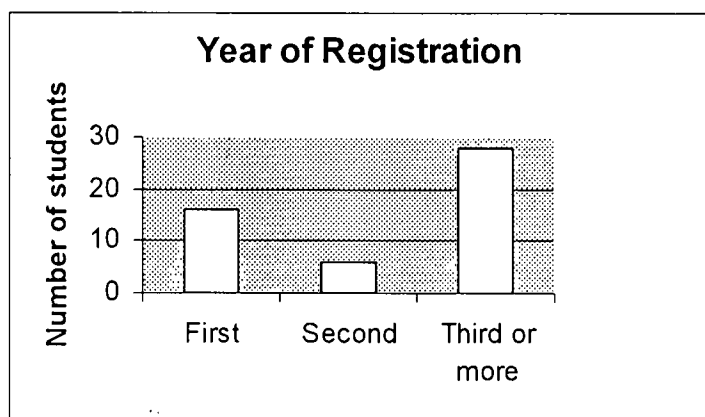


Figure 5.7: Year of registration

The sample is too small to make more general deductions about the significance of the distribution except that it is natural in more open systems for a greater majority of students to have been registered for a number of years because of the relatively slow rate of credit accumulation due to part time study and other commitments.

### 5.2.1.8 Number of modules passed

The range of success achieved by respondents as measured by the number of modules they have passed shows great variability. The sample includes students who have accumulated credits at a good rate and students who have not managed to pass many modules. This reflects a traditional characteristic of distance education in that students in this mode adjust their study rate to the other pressing needs in their lives. It is also likely to be connected to the wide range of ability of students in the sample.

## 5.2.2 Motivational factors

Questions probing the respondents motivation for studying included sections of reasons for studying *per se*, reasons for choosing distance learning, and perceptions of student ownership of their decisions in this area.

### 5.2.2.1 Reasons for studying

Students' reasons for studying were surveyed as a means of collecting data about motivation. For each of the items in the table below the figures reported represent a proportional distribution of responses as percentages. For example, in item 1 below, 62% of respondents 'fully' believed that they were studying to enter the profession or vocation of their choice.

In all subsequent tables showing responses to a five point scale, the figures which are shown represent percentages in the same way as explained here.

<i>Reasons for studying</i>		Not at					Fully all
		1	2	3	4	5	
1	<i>I am studying to enter the profession/vocation of my choice.</i>	10	2	10	14	64	
2	<i>I am studying because my employer requires me to.</i>	86	4	4	2	2	
3	<i>I am studying for personal interest and self-development.</i>	12	2	10	22	54	
4	<i>I am studying because I am unemployed.</i>	82	2	8	0	8	

Table 5.1: Reasons for studying

The results here show that the majority of respondents are studying to enter the profession or vocation of their choice and also that the majority are studying for personal interest and self-fulfillment. By contrast, very few respondents are studying because they are required to do so by their employer or because they are unemployed.

#### 5.2.2.2 *Reasons for registering with a distance education institution*

Although reasons for studying through distance education may be considered self-evident and have been reported extensively in the literature, this sample was asked to report their reasons so as to verify findings in the literature and to check for possible new motivations.

	<i>Reason for studying through distance education</i>	<b>% of sample</b>
1	<i>I was not accepted by another institution.</i>	14
2	<i>It is cheaper to study through distance education.</i>	49
3	<i>I could not leave my work to study elsewhere.</i>	35
4	<i>My family commitments demand that I study through distance education.</i>	25
5	<i>The courses I needed were only available through distance education.</i>	8
6	<i>(other, please specify)</i>	12

**Table 5.2:** Reasons for studying through distance education

The responses to this set of items show a range of reasons which respondents have for studying through distance education. The most common reason is that respondents believe it is cheaper to study through distance education. This is supported by the relatively high percentage of respondents who reported that they could not leave their work to study elsewhere. See also the analysis of respondents free responses (section

5.3) for further support for an argument that economic factors are dominant in students' choice of mode of higher education.

Besides the options given in the questionnaire, respondents also reported the following reasons for studying through distance education: post-graduate studies (presumably easier through distance education); required to do study through distance education as part of a school post-matric curriculum; distance education provides opportunity to study for self improvement/recreation; distance education facilitates part-time study; flexibility; and world-wide availability.

### 5.2.2.3 Motivational factors

<i>Motivational factors</i>		Not at all			Fully	
		1	2	3	4	5
1	<i>I believe that I will be successful in my distance studies.</i>	10	0	4	24	62
2	<i>The decision to study as a distance learner was mine alone.</i>	17	8	13	21	47
3	<i>My main reason for studying is my interest in the courses I have chosen.</i>	6	4	27	27	37
4	<i>I am studying only to get a degree.</i>	45	14	16	16	8
5	<i>It is very important to my progress in life that I succeed in my studies.</i>	0	4	14	16	67

Table 5.3: Motivational factors

### 5.2.3 Information received before or during registration

Responses in this area show a decreasing trend with more students having received information about degrees and courses than information about assistance and skills.

This is to be expected although the ideal would be that all students receive information on all of these aspects.

<i>Nature of information</i>		<b>% of respondents</b>
1	Information about curricula and degrees	86
2	Information about specific courses	84
3	Information about regional learning centres where you could get assistance in your studies	73
4	Information on the skills required for distance study	61
5	Other (please specify)	12

**Table 5.4:** Information received at registration

Under other information received respondents listed the following: contact numbers of people who could assist students; "found out about learning centres just over a month before exams."; "how to fund your studies"; "study techniques, time management"; "financial implications".

#### **5.2.4 Learning modalities and levels**

In this section a range of questions was asked to draw out responses in two areas. The first four questions explore students' preferred learning modality - feeling, observing, thinking and doing.

The next six questions attempt to gauge student perceptions of the cognitive level at which they are comfortable learning: from learning facts to comprehension, application, analysis, synthesis and evaluation (Davis in Cross & Steadman, 1996:136).

<i>Learning Modalities and Levels</i>		<b>Hardly ever</b>			<b>Very often</b>	
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	<i>When I learn I am often aware of my feelings towards the subject matter.</i>	6	6	39	37	12
2	<i>I tend to be an observer when it comes to learning tasks.</i>	22	26	26	18	8
3	<i>I like to think clearly about what I am doing when I am learning.</i>	2	2	6	41	49
4	<i>I prefer to be actively doing something when I am learning.</i>	14	6	18	24	38
5	<i>I like learning facts, procedures or principles.</i>	6	10	16	34	34
6	<i>I make an effort to <b>understand</b> new principles, procedures or theories.</i>	2	0	6	44	48
7	<i>I enjoy <b>applying</b> my knowledge to solve problems.</i>	0	2	4	30	64
8	<i>I like <b>analysing</b> a situation, argument or piece of creative work to identify main features.</i>	0	2	18	32	48
9	<i>I prefer to <b>develop my own ideas</b>, devise plans or programs and do my own creative work.</i>	0	8	20	36	36
10	<i>I enjoy <b>evaluating</b> a theory, a piece of writing or a design.</i>	4	10	28	32	26

**Table 5.5:** Learning modalities and levels

In terms of learning modalities there seems to be a preference in the sample for active learning as opposed to learning by observation. Respondents also feel that they think clearly about their learning.

In terms of cognitive level, the highest preference is for application and the least for evaluation, with a general trend for higher preference for the lower order cognitive skills.



## 5.2.5 Academic, cognitive and metacognitive skills

In this section the responses to questions on academic, cognitive and metacognitive skills are reported. Related to these questions is the section on time management.

### 5.2.5.1 Use of specific learning techniques

The questions in this section are of interest in gauging student use of specific learning techniques in their studies.

<i>Specific learning techniques</i>		Hardly ever			Very often	
		1	2	3	4	5
1	Mind maps	22	18	16	16	28
2	Tree diagrams	39	14	20	16	10
3	Structure charts	41	12	24	16	6
4	Summary notes	0	0	10	22	69
5	Mnemonics	35	14	24	18	8
6	Rhymes	55	18	16	4	4

**Table 5.6:** Specific learning techniques

The use of summary notes stands out as the clearly preferred learning technique. Further comment and interpretation is included in section 6.5.2.

### 5.2.5.2 Academic skills

Responses to a range of questions about academic skills and the feedback in relation to academic skills is presented in the table below.

<i>Academic skills</i>		<b>Hardly</b>			<b>Very</b>	
		<b>Ever</b>			<b>Often</b>	
1	<i>Before starting an academic task I make sure I understand what I need to do.</i>	2	6	8	42	42
2	<i>Before starting an academic task I make sure I have all the materials I need to complete it.</i>	0	2	24	30	44
3	<i>I set myself goals to make sure I complete academic tasks.</i>	2	2	10	44	42
4	<i>I do not continue with a task unless I am sure I am understanding it.</i>	2	6	36	34	22
5	<i>I sit for long periods daydreaming while doing academic work.</i>	27	39	16	8	10
6	<i>I test my understanding of academic material by asking myself questions or setting myself tests.</i>	2	14	38	30	16
7	<i>I understand what I read in the prescribed course material.</i>	0	2	24	45	29
8	<i>I am able to read quickly enough to complete my reading assignments without difficulty.</i>	2	8	20	45	24
9	<i>Reading material is written in a style which helps me to understand.</i>	2	4	34	34	26
10	<i>I use a standard dictionary to look up the meanings of words I do not know.</i>	16	10	10	34	30
11	<i>I use a specialist subject dictionary (e.g. Dictionary of Psychology) to look up the meanings of words.</i>	56	16	10	4	14
12	<i>I use a glossary (list of terms) to look up the meanings of words I do not know.</i>	20	14	18	24	22
13	<i>My academic writing skills enable me to complete assignments satisfactorily.</i>	2	4	26	40	28
14	<i>My course assignments have provided opportunities to improve my academic writing.</i>	6	12	22	33	27

15	<i>I receive feedback on my assignments which shows me how to improve my spelling and grammar.</i>	32	20	10	18	20
16	<i>I receive feedback on my assignments which shows me how to improve the structure of my writing.</i>	24	18	16	22	22
17	<i>I receive feedback on my assignments which shows me how to present convincing arguments.</i>	22	12	22	22	22
18	<i>I feel I am at a disadvantage because of the language medium required by the course.</i>	68	16	4	6	6

**Table 5.7:** Academic skills

An analysis of the responses indicates that the respondents' perception of their academic skills was generally positive. Only small percentages of responses to questions on academic skills (1-13) were negative, although a significant number were uncertain for some questions. The one exception to these trends was in the use of specialist resources for reference which may indicate a lack of depth of engagement with academic skills development.

Responses were less positive to the questions (14-17) which dealt with the extent to which assignments and feedback on assignments were instrumental in improving academic writing. These results cannot be taken at face value, particularly in the light of the fact that assignments are generally voluntary and the amount of academic writing done by students is likely to be small. Further critical discussion on the results reported in this section is presented in section 6.5.2.1.

#### 5.2.5.3 *Time management factors*

Responses to questions on time utilisation and management are reported in the table below.

<i>Time management</i>		<b>Hardly ever</b>			<b>Very often</b>	
1	<i>I am involved in extramural activities.</i>	14	10	26	18	32
2	<i>I study regularly throughout the year.</i>	6	4	22	32	26
3	<i>I spend more time on completing assignments than on preparing for examinations.</i>	24	26	26	16	8
4	<i>I find that I generally have enough time to do my assignments.</i>	8	20	24	33	16

**Table 5.8:** Time management

As would be expected, few students are not involved in extramural activities, confirming the range of demands on time experienced by distance learners. From the other results it seems that although more than half of the respondents believe that they study regularly throughout the year, the majority do not spend more time on assignments than on examinations. This may indicate that examinations are distributed through the year but it does seem to indicate the dominant place of assessment through examinations over on-going formative work by means of assignments.

## 5.2.6 Interaction with peers and lecturers

This section includes responses to questions on the frequency and nature of interaction with other students and with lecturers as well as the mode of communication.

### 5.2.6.1 Frequency of working with other students

The results shown in the table below indicate that only a quarter of students work with other students often or very often. This is a surprising result since the majority of the respondents utilised learning centres in some way. The implications for the

development of academic literacy of this relative lack of interaction between students is discussed in section 6.5.2.3.

<i>Frequency</i>		<b>% of respondents</b>
1	Seldom/ Never	31
2	Sometimes	45
3	Often	18
4	Very Often	6

**Table 5.9:** Working with other students

5.2.6.2 *Nature of contact with other students*

<i>Nature of contact</i>		<b>% of respondents</b>
1	Studying for examinations together	29
2	Cooperating on assignments	18
3	Clarifying content and concepts	39
4	Tutorials at a learning centre	45

**Table 5.10:** Nature of contact with other students

For those students who did have contact with peers the table above shows a range of the nature of involvement. It should be noted that students could choose a number of the options. The percentage indicated in each case is therefore a percentage of respondents who chose that option. The contact in tutorials at learning centres does not necessarily mean contact of a cooperative nature. It is also significant how few students cooperated on assignments, underlining the voluntary nature of assignments.

5.2.6.3 *Frequency of contact with a subject lecturer/tutor*

<i>Frequency of contact</i>		<b>% of respondents</b>
1	Daily	2
2	Weekly	24
3	Monthly	12
4	Seldom/Never	63

**Table 5.11:** Frequency of contact with lecturers

As with contact with peers, only about a quarter of students have a regular contact with a lecturer or tutor. Over 60% seldom or never have contact of this kind. The likely consequences of this isolation are discussed in depth in section 6.5.2.2.

5.2.6.4 *Nature of contact with your lecturer/tutor*

Note again that students were able to choose more than one option here. It is significant that just on half of the respondents had contact through the lecture or tutor teaching them directly. This confirms the strong need expressed by respondents for this kind of support of their learning and the tendency to seek support in the form of teaching rather than task-based learning assistance (note the low response for question 2).

Percentages in this table should be interpreted carefully in conjunction with the results shown in Table 5.11. The fact that roughly a quarter of the respondents reported that they had received assistance with how to study should be discounted to some extent because of the high number of students reporting little or no contact with lecturers.

<i>Nature of contact</i>		<b>% of respondents</b>
1	Teaching	49
2	Help with assignments	16
3	Help with how to study	24
4	Checking on completion of assignments	16
5	Motivation/encouragement	29

**Table 5.12:** Nature of contact with lecturers

5.2.6.5 *Means of communication with lecturers*

<i>Communication method</i>		<b>% of respondents</b>
1	Postal	22
2	Phone	37
3	Fax	4
4	E-mail	25
5	Internet	8
6	Personal	39

**Table 5.13:** Communication method

The results here confirm the low levels of contact with lecturers. In addition the more direct verbal modes of communication (personal and phone) are more used than written communication (postal and e-mail). This is an interesting find which may indicate again a relative lack of engagement of students and teaching staff in detailed processes of academic literacy development such as the submission of written assignments and the response to these.

The results show a relatively low usage of e-mail, but significantly, it is higher than postal use. The low level of internet usage for communication indicates the lack of development of web-based learning management at this stage in the institutions studied.

### 5.2.7 Learning tasks and materials

This section reports findings on student perceptions of the learning materials to which they are exposed. It includes questions on cognitive level required of students, the relevance and applicability of content and the accessibility of materials.

#### 5.2.7.1 Learning activities and skills required in academic work

<i>Learning activities and skills</i>		<b>Hardly ever</b>			<b>Very often</b>	
1	Learning facts or the details of procedures or principles.	2	6	15	31	46
2	Understanding new principles, procedures or theories.	0	4	21	21	54
3	Applying my knowledge to solve problems.	0	4	18	24	53
4	Analysing a situation, argument or piece of creative work to identify main features.	4	10	15	35	35
5	Developing your own ideas and arguments or doing your own creative work.	6	20	16	27	31
6	Evaluating a theory, a piece of writing or a design.	12	14	22	29	22

Table 5.14: Learning activities and skills



A discernable trend in Table 5.14 is the greater percentage of respondents who felt that the higher order cognitive skills of analysis, synthesis and evaluation (questions 4-5) were not required when compared to the lower order skills (questions 1-3). However, responses to this effect were still in the minority, with over half of the respondents considering that higher order skills were necessary. Interestingly, these perceptions are directly contradicted by perceptions of students expressed in interviews (see sections 5.6.1 and 5.6.3). The significance of these perceptions is discussed further in section 6.5.2.4.

5.2.7.2 Course materials

<i>Course Materials</i>		<b>Hardly ever</b>			<b>Very often</b>	
1	<i>The content presented in the course materials is relevant to what I should be learning in my courses.</i>	0	2	10	44	44
2	<i>I have opportunities to apply the knowledge I gain (for example through practicals or through assignments or in my workplace).</i>	10	8	20	29	33
3	<i>I have been able to access study materials and library resources satisfactorily.</i>	10	14	24	27	24
4	<i>I am required to use E-learning (e-mail/world wide web) for accessing my course material.</i>	69	6	10	6	8

**Table 5.15:** Course materials

The great majority of respondents perceived course content to be relevant to their needs. Fewer (62%) of students felt that they had the opportunity to apply the knowledge that they had gained. Question 3 brings to light the significant proportion of students who often or sometimes had difficulty accessing study materials and library resources satisfactorily.

The result of question 4 confirms that the use of e-learning through e-mail and the internet is still at a very low level for this sample of respondents. Considering the demographic fit of the sample it would seem reasonable to infer that this is more generally the case as well.

### 5.2.8 Overall experience as a distance education learner

Responses to the question on whether the experience of distance education was positive, show the following distribution.

Almost always	Often	Sometimes	Seldom	Hardly ever
27 %	47 %	22 %	2 %	2%

Table 5.16: Overall experience of distance learning

A very low percentage of respondents felt that their experience of distance education was seldom or hardly ever positive. This finding emphasises the strong motivation and sense of ownership felt by distance learners.

### 5.3 FREE RESPONSES IN POSTAL QUESTIONNAIRE RETURNS

Respondents were invited to make free responses on the last page of the questionnaire about their experiences of distance education. 40% of respondents wrote about their experience with the extent of responses ranging from a few short sentences to a full page of reflection.

Transcription and content analysis methods have been described in section 4.7.3.1. The methods yielded two forms of summary of content - a mind-map (see Figure 5.7) and a table (see Table 5.17).

The mind-map helped to demarcate themes and factors emerging from the responses. The main categories (e.g. learning experience) were constructed by the researcher from the details of the student comments, which are listed next to the categories (e.g. knowledge intensive, understanding, spoon-feeding).

Table 5.17 presents the same information as is contained in the mind-map but it includes an indication of the nature of student experience. Responses are coded as follows:

- ✓ Positive experience;
- X Negative experience;
- ^ A need experienced / attribute is experienced as an important requirement;
- ? Value or standard was questioned.

<b>Administration</b>	course co-ordination career guidance communication scheduling registration exam timetables systems efficiency staff - level of training	✓	x xx xxx x x xx xx xxx	
<b>Resources and infrastructure</b>	learning centres places to study vacation schools computers electricity transport and travel	✓✓		^ ^ ^ ^ ^^ ^^
<b>Communication</b>	phone - availability ,		xxx	

	cost			^
	internet			^
	e-mail			
<b>Academic standard</b>	quality of courses	✓	x	?
	level of achievement			?
<b>Learning mode</b>	distance	✓		^ ^
	contact			
	full-time	✓✓✓		
	part-time		xx	
<b>Teaching and contact</b>	lectures	✓✓		^ ^ ^ ^
	tutors		x	
	lecturers	✓✓✓	x	
	study groups	✓		^^
<b>Learning materials and tasks</b>	notes			^
	study guides	✓	x	
	texts		x	
	assignments			
<b>Motivation and independence</b>	maturity			^ ^
	discipline			^ ^ ^ ^ ^ ^
	/determination			^ ^
	focus			^ ^ ^
	dedication			^ ^
	will power			^
	initiative			^ ^
	perseverance			^ ^ ^ ^ ^ ^
	self-reliance			
<b>Skills and competencies</b>	language		x	
	planning		x	
	research skills		x	
<b>Learning experience</b>	knowledge intensive	✓		
	understanding	✓✓✓		
	spoon-feeding	✓	x	
	creativity	✓		

	lateral thinking	✓		
<b>Affective / feelings</b>	neglect		xx	
	elation	✓		
	satisfaction	✓		
	disappointment		x	
<b>Competing demands</b>	family		x	
	jobs	✓	xxx	
<b>Life goals</b>	dreams	✓✓		
	goals	✓✓		
	survival	✓		
	opportunities	✓		
	rewards	✓		

**Table 5.17:** Free responses by category

Since the number of responses is relatively small, no strong claims should be made about the distribution of responses as an indicator of more general trends in the perception of distance learning by students. However, for this sample some trends can be inferred by identifying areas where responses are wholly or strongly of one type only.

Perceptions of administrative services were mostly negative. This does not necessarily imply that poor service is the norm. It is more likely that respondents focus on negative incidents because these stick in the mind. However, the balance of negative comments does indicate that problems were experienced with schedules, timetabling, the efficiency of systems and the level of staff training.

A consistent pattern emerges in the area of resources and infrastructure where students indicated the need for places to study and computers, and at a more basic level, electricity and transport to attend lectures or support sessions. There is an indication that the services provided by learning centres are highly valued but that the resources for utilising them are sometimes lacking.

A strong theme emerged in relation to the need for distance learners to be motivated and self-reliant. These respondents communicated clearly the level of commitment and perseverance which is required for successful distance studies.

Lastly, the respondents valued the learning experiences offered by distance education and the opportunities afforded by for pursuing life career and life goals. Responses were remarkably clear of negative or cynical tones in this respect and the impression was created that distance learners are generally positively motivated because they have taken responsibility for their choice of study mode.

## **5.4 E-MAIL QUESTIONNAIRE RESULTS**

In this section the analysis of the responses to the e-mail questionnaire to distance learners is presented and discussed. Details of the number of responses and analysis methods have been presented in section 4.8.4.

### **5.4.1 Reasons for studying**

The most commonly cited reasons for studying were to get a degree and to improve career prospects. For some participants studying is seen as a way of breaking through an employment ceiling, or it is linked to a desire to improve skills and competencies in order to do a job better. For a few participants the reason for studying was simply to secure employment and to make a living.

For a smaller number of participants studying is a way of occupying spare time, a means of self-improvement in order to enrich their lives. In the same vein some participants stated that they enjoy studying for its own sake and that it provided an opportunity to keep mentally and intellectually active - to 'train the brain' in the words of one participant.

Individual participants cited more specific reasons for studying, such as the desire to study a language (Afrikaans) and the desire to make a better contribution to society by becoming better qualified.

The main reasons for studying confirm the findings from the postal survey in which vocational/professional and personal development was chosen by 64% and 54% of the respondents respectively.

#### **5.4.2 Reasons for registering with a distance education institution**

Although the reasons for studying at a distance are generally well known, this issue was addressed by the research in order to form a comprehensive picture of the sample of respondents and their particular circumstances.

Most of the participants in this sample are in full time employment and cited this as the reason for studying through a distance education institution. In some cases the need to stay in full-time employment was linked to being the sole breadwinner. The need to support a family yet to have time with the family was mentioned as related factor in choosing distance education. The proportion of participants in this sample for whom full-time employment is the major factor in choosing distance education is somewhat higher (over 50%) than for the postal questionnaire sample (34%) which may indicate a different profile for this group of students.

The flexibility afforded by studying in the distance mode was mentioned by approximately a third of participants as being important. This flexibility was seen in terms of studying at ones own pace during a course, having a flexible schedule for the completion of a programme of study, valuing the choice time and place of study. For one participant, international travel precluded full-time study in attendance while another participant valued being able to live in the country and continue to study. Place

of residence was also a factor for a few participants who lived overseas, having recently moved from South Africa.

Distance learning was chosen by a small number of participants because it is considered less expensive than face-to-face institutions. The good reputation of UNISA over a long period was also given as a reason although this respondent was concerned about the transformation and amalgamation of UNISA into OLUSA, fearing that the identity of the university would be lost and possibly its reputation as well. This concern is voiced strongly on some of the discussion groups which are hosted on the UNISA Students On-Line system (SOL). Christensen, Anakwe and Kessler (2001) show that reputation is a significant factor the receptivity of students to distance education.

The range of reasons for studying presented here and in the results of postal survey confirms the most common reasons documented in the literature on distance education in South Africa (Corry & Lelliott, 2001:4).

### **5.4.3 Motivation for studying**

There were no clear patterns in responses to the question about motivations for studying. The question was perhaps too close to the question on reasons for studying and some participants may have interpreted it as a repetition of that question. As a result some of the reasons which have been reported in section 5.2.1 were repeated. Those participants who interpreted the question as having more to do with motivation than purpose mentioned the following categories of motivations:

- The will to succeed and determination to complete studies;
- Intrinsic enjoyment of study;
- Results orientation;
- Family and peer-group belonging; and
- Increase in socio-economic status.



#### **5.4.4 The nature and usefulness of information received before or during registration**

The nature and usefulness of information received before or during registration was seen by participants to be either adequate or better than that. Approximately half of the responses fell into each category indicating general satisfaction about this function of UNISA. The only perception contrary to this was one participant who felt that the registration process was confusing.

Participants mentioned the following factors which contributed to their positive attitude to this function:

- clarity and structure of written materials;
- ease of use of internet registration process and information on the UNISA website; and
- the professional assistance of the student counseling section on the UNISA campus in advising about with course decisions, advice about studying, time planning and examinations.

Areas of concern which emerged were the possible lack of proper qualification of registration assistants at regional centres and the difficulty of using phones and e-mail as a communication medium for this purpose.

#### **5.4.5 Degree to which participants are personally involved when studying**

The great majority (81%) of participants felt that they were highly involved in their studies, describing the nature of this involvement and citing reasons and evidence. It emerges from the comments that students who make a serious commitment to their studies through distance education, see their studies as one of the most important areas of their lives. They therefore devote a great deal of dedicated time and energy to their studies and not surprisingly they invest emotional and psychological energy in this part

of their lives, making it into a meaningful experience. As one participant expressed it "concentration and motivation take over ... I psyche myself up."

Other ways in which participants reported getting involved were in the way that they engaged in a 'conversation' with themselves and analysed themselves. A respondent claimed that studying was a challenge to her attitudes and lifestyle, indicating a relatively deep level of engagement of the self in the process of studying. Another respondent pragmatically realised that the engagement of self in studies made the process easier: "It's easier to remember when you personalise concepts."

The social aspect of learning emerges from responses to this question. A number of participants gave as evidence of involvement their frequent contacting and engaging with other students.

For a minority of students involvement in the studies was conditional upon how interesting the course was. For two students from this sample personal involvement was minimal and they claimed to spend as little time as possible on their studies, mostly during examinations in an attempt to pass.

#### 5.4.6 Preferred cognitive level

In order to gauge participants' preference for different levels of cognitive functioning the following question was asked:

"At what levels are you most comfortable learning:

- a) *learning facts, procedures or principles;*
- b) *understanding new principles, procedures or theories;*
- c) *applying your knowledge to solve problems;*
- d) *analysing a situation, argument or piece of creative work;*
- e) *developing your own ideas, devising plans or programmes/ doing your own creative work;*
- f) *evaluating a theory, a piece of writing or a design".*

The choices of response offered are equivalent to the scale of cognitive learning objectives which is widely used and which originated with Bloom's taxonomy of educational objectives. This question was also included in the postal survey.

The table below shows a frequency distribution of the responses which were received from 18 respondents. Two students did not respond to this question. It should be borne in mind that the alternatives were not meant to be chosen in a mutually exclusive way, so that a particular participant could choose a number of alternatives. The percentage shown under each response option is therefore the percentage of respondents who chose that option.

The pattern of responses showed that about half of the respondents chose three of the levels, the rest chose fewer with the exception of two participants who chose all but option (e) on the grounds that they were mature students who were capable and comfortable at most cognitive levels.

A	B	C	D	E	F
35%	45%	75%	30%	30%	10%

**Table 5.18:** Preferred learning level - email group

It is interesting to compare these results to the responses of to the postal questionnaire as shown below:

A	B	C	D	E	F
34%	48%	64%	48%	36%	26%

**Table 5.19:** Preferred learning level - postal group

The second set of results includes only those respondents who rated their preferences for the levels very strongly (5 on a 5 point scale.) When compared in this form there is a clear similarity in the distributions. The results from both sources confirm a learner preference for the application of knowledge in solving problems. Less enthusiasm was shown for straightforward acquisition of knowledge or for more complex forms of processing or constructing knowledge such as synthesis and analysis.

#### 5.4.7 Cognitive levels most often required in completing assignments or preparing for examinations

The options given in this question were the same as for the previous question. A distribution of the frequencies of responses is shown below for this sample:

A	B	C	D	E	F
55%	45%	55%	25%	0%	20%

Table 5.20: Required learning level - email group

The equivalent distribution for the responses to the same question in the postal survey yielded a rather different profile:

A	B	C	D	E	F
46%	54%	53%	35%	31%	22%

Table 5.21: Required learning level - postal group

The responses were qualified in the following ways. Firstly, some participants pointed out that the cognitive level required varies across courses. This seems to be a rather obvious point but an important one cautioning the researcher and reader not to read too much into quantitative measures such as these. They are abstractions and aggregations

of actual experience which is more complex than can be depicted by the table of frequencies.

Secondly, the point was made that assignments tend to be more applied with respect to the nature of the tasks required than did preparation for examinations. A critical reading of the question reveals that it may be asking about two distinct experiences and therefore be difficult for the participant to answer.

Thirdly the view was expressed by two respondents that courses which have been recently re-designed according to outcomes-based principles seem to require the student to function at most of the cognitive levels, thus broadening the learning experience and making it more challenging. This was seen as a positive development in course design.

#### **5.4.8 Specific learning techniques**

Respondents were asked to comment on specific learning techniques which they felt worked effectively for them. There was a wide range of responses to this question from extensive to very brief and one got a strong sense that this was an area in which some participants had developed their skills and some had very rudimentary methods of approaching their learning.

From a methodological point of view it is unavoidable that participants vary in the extent of depth of the answers which they are able and prepared to give. This is a general difficulty in processing responses in qualitative research and judgement has to be applied to the weighting given to responses. The problem is mentioned specifically in relation to responses about learning techniques because this, perhaps more than the other areas explored, is an area in which subjective, personal perceptions are being reported. Depending on the introspective ability of the respondent they will be more or less able to report in a reliable way about how they go about their studies.

The more naive class of responses to the question indicated that participants viewed learning as simply a matter of reviewing material as a means of refreshing the memory. In the minds of these students learning consists of scanning material and then reading it more carefully, or reading the material and then studying it. Clearly this begs the question as to how the material is studied and indicates a low level of awareness of the respondents' learning process and, almost certainly, a lack of sophistication in techniques applied.

Many participants reported the use of different methods of highlighting important content. Predictably, various methods were mentioned including underlining, colour coding, pencil marking, highlighting. One participant clearly identified that for him remembering was assisted by colour association.

A common class of technique used for understanding is the making of notes and summaries, sometimes based on the learning objectives of the relevant material being studied. Students also test their understanding by writing short essays. A variant of this method employs the same technique (summary) but a different learning modality - some students repeat material to themselves, explain concepts to themselves, ask themselves questions or record summaries which they later play back. This type of activity used the auditory learning modality.

An interesting response from a few students was that they claim to use their willpower to remember things and make use of visualisations to assist in the recall of material. While the exact methods used here are unclear, the mention of this class of activity points to the importance of intentionality, determination and motivation in learning.

Students reported that an effective learning method is to relate material to facts and concepts already learnt or to apply new concepts to situations within the students' own experience in order to test them and make them more concrete. This method fits well with a constructivist view of learning.

The theme of constructing knowledge is further reflected in the use of mind maps to link key words, themes or concepts. The use of creative design and colour assists some students in their construction of knowledge in this way.

The scheduling and management of the time required for learning is an important consideration for some students. Various approaches reported include explicit utilisation of time planning including the actual recording of time on specific tasks and making study schedules and sticking to them. The benefits of attending to this area are reported as the development of discipline and the ability to anticipate problems. The importance of regular study and the discipline of doing exercises in study guides and doing assignments is stressed by some students.

Students report that participation in unofficial tutorials and study groups improve motivation. The opportunity to discuss academic material with other students in learning groups is important for these students. These groups also provide the opportunity for cooperative work and mutual help, for example, by making notes available to other students.

Apart from one student who reported on detail on the different learning techniques he uses (see insert on the following pages), very few of the participants provided comment on actual learning techniques which were used in more detail than has been described above. A few students reported using anagrams as an aid to recalling factual material. Only one student reported the explicit teaching of learning skills as part of a course. This finding would seem to be consistent with the lack of detailed comment on learning techniques. A few students reported that they 'cram for exams' and one student admitted to having no technique at all.

The following 'mini case study' is presented as an example of one student's reflection on his approach to learning. It shows an exceptionally strong awareness of cognitive and metacognitive processes on the part of the particular student.

This student has clearly spent considerable time and effort developing his cognitive and metacognitive skills in support of his distance learning. The contrast between this planful, pro-active approach and the lack of skills and awareness exhibited by other respondents is striking and shows how much more can potentially be done to support distance learners in developing effective approaches and attitudes to their studies.

#### 5.4.8.1 *Mini case study: A participant's specific learning techniques*

Here, I have a lot to say. For a long time, I was using poor study techniques. I never studied at school, and managed to get by like this. Then since starting at UNISA, I found it very difficult to study, and work full time. So over the years I have tried various techniques, and the winning formula that I use now is a combination of techniques.

1. There is a book called "Thank-You Brain", written by a South African. It is excellent. It advises using Baroque music while studying. Now, I will never study again without it.

2. I use mind-maps, fashioned after Tony Buzan's principles. I do not strictly adhere to his techniques, but do use a lot of colors. Mind-maps, and frequent revision of them, are a winner for successful studies. I also put many sketches to the various topics being studied. It seems true that our minds work in images, not words, and images are easier to recall in the exam.

3. A new trick, which I only recently learned, is Audio Tapes. I drive 30 minutes to work each morning, and 30 minutes home again. I have created audio tapes of my notes, and listen to them on the daily commute. This puts in 60 minutes of extra studying each day. I also listen to them if I want to relax, lie down, and study at the same time.



4. I record the time that I study. I make up a spreadsheet for each subject, and record the exact time that I spend studying each day. Then, I can see how much time I am really spending on a subject, instead of relying on a gut-feel of how much time I am really putting in.

5. I correspond with other students through the UNISA Students-online web site. This has helped tremendously to keep me motivated. I also talk about my studies at work, and talk to others that may be studying as well. This is a great motivator.

6. I use visualisations, and positive thoughts. When I sit down to study, I say to myself, things like "I really love studying Accounting, and am good at it". I visualise getting the exam paper, and just flying through it. I can imagine the emotions of feeling that it was a very easy exam, and that I enjoyed it.

7. I explain the work that I have studied to anyone that will listen. Sometimes, I explain the studied material to myself, and sometimes I will explain a topic to a friend.

8. If I can, I apply the material that I have learned. If I have studied Social Psychology, I will try to apply it to a work situation.

9. I sit down to study, then study. This is probably the hardest part of studying for me. I know that I need to study, and will promise myself to do chapter 4 on Saturday, but then it seems that there are 20 other, more interesting things that need to be done at the time. It does take a lot of discipline to start studying, so I make sure that I have excluded all distractions by going to my office, and then I clear the desk, and the only work on my desk is my study material. About 95 percent of the time, this works to get me going.

10. Some times I just cannot study. I am sometimes just too tired, or stressed out. Then I just accept it, and relax, believing that I will still pass my exams even if I miss this one study session.

11. I type up my notes, and then make mind-maps of my notes. I try to get the notes into electronic format as quickly as possible, so that they can be corrected, manipulated and shared. I make them available to other students.

#### **5.4.9 Managing learning**

Participants were evenly divided into those who felt that they experienced some difficulty in managing their learning and those who felt that they managed their learning well or very well. Difficulties experienced in this area include a haphazard approach to studying, the tendency to work only for examinations and the difficulty of doing justice to studying in the face of family and work commitments.

#### **5.4.10 Academic reading and writing**

A clear majority of participants considered that their academic reading and writing skills were well enough developed to enable them to succeed in their studies. Some students considered their skills in these areas to be excellent and one student claimed that they were better than those shown by the authors of the courses she was studying.

These findings are consistent with comments made by lecturers that English first language (EFL) students do not experience difficulties in this area as this sample was predominantly EFL. However, it is questionable how critically participants were able to assess their own skills. For example, two participants commented on difficulty with handwriting which is a surface feature of academic writing. No students engaged in any deeper assessment of skills such as the ability to construct an argument in a

particular discipline. This is an area which requires further interpretation and it will be taken up in the following chapter.

#### **5.4.11 Research and reference skills**

The comments in response to this question show clearly that not much research is required at the undergraduate level in the courses taken by this group of participants. Participants report not using any materials except those prescribed and the majority felt that these skills were not required at their level. A small but significant group considered their research skills to be 'good' or 'well developed'.

#### **5.4.12 Extent, quality and importance of interaction with lecturers /tutors**

A very consistent picture emerges from the responses to this question. The great majority of participants in this survey have little or no contact with lecturers or tutors. Of the entire sample only one student reported that lecturers were available and helpful. The majority of participants also rated contact with lecturers as important or very important but a few felt that contact was not important and even a waste of their time.

Difficulties reported in establishing or maintaining contact included the following:

- Web site lecturer links inactive;
- Lecturers are hard to contact;
- Phone contact is expensive; and
- Internet contact lacks a personal element.

These findings confirm the findings in this area which were obtained from the postal questionnaire (section 5.2.6) and from interviews (section 5.6).

#### **5.4.13 Extent, quality and importance of interaction with other students**

The responses of participants to this question fell into categories. Approximately half of the sample had limited or no contact with other students. Of this group almost half considered contact to be unimportant whereas the rest felt that it was important even though they had not managed to have much contact.

In the group which enjoyed regular contact with peers there was a range of reasons reported for the importance of the contact:

- Breathes life and enjoyment into learning;
- Counters the isolation experienced by students in remote areas; and
- Enables students to discuss study issues.

The Students On-Line (SOL) system was, in the opinion of some participants, effective in establishing contact with other students, maintaining regular contact and keeping aware of study issues.

#### **5.4.14 Extent and usefulness of feedback on assignments**

The clearest trend emerging from the responses to this question were that assignments are not compulsory which means that most students do not do them. As a result there is no possibility of feedback for these students. This finding is consistent with all other data gathered through other methods in this study and, in particular, the low rate of completion of assignments reported by lecturers.

Among the participants who had received feedback there was a range of opinion as to its usefulness ranging from 'useless' to 'good' and 'appropriate'. There were slightly more negative responses than positive. Some students elaborated on their negative responses claiming that the amount of feedback was very little and not specific enough, particularly as regards feedback on essays. One participant reported being shocked that

UNISA had out-sourced marking to an unqualified marker who had given incorrect feedback.

#### **5.4.15 Quality of the learning materials**

The responses to this question were consistently positive. The only qualification of this positive rating of learning materials came in the form of isolated comments that particular materials lacked clear objectives or that specific texts were of limited use.

Positive aspects of UNISA learning materials were perceived to include the following:

- The structure provided by way of content maps;
  - The questions and exercises;
  - The quality of explanation;
  - The scheduling of learning activities; and
  - The statement of learning outcomes and objectives.

Positive comments were made about new OBE style materials which are perceived by the students who commented on this aspect as friendlier in presentation, including study methods and being more challenging. Suggestions for other ways of improving materials were made to the effect that more interactive materials such as videos could be included in the set of materials provided with courses. These suggestions are in line with findings in the literature on the effectiveness of video in improving the interactivity and authenticity of learning materials (Flanagan in Adey, Steyn, Herman & Scholtz, 1994:272) and confirms needs expressed by some interview participants.

#### **5.4.16 General experience of distance education**

Almost without exception participants in this survey felt that in general their experience of distance education had been a positive one. Almost half of the participants rated their experience as strongly positive and some participants reported recommending this

mode of study to others, indicating a strong commitment to it. A single student felt that her experience was not positive but "lonely and unfulfilling through lack of contact".

## **5.5 RESULTS FROM E-MAIL SURVEY OF LECTURERS**

This section reports results from the e-mail survey of lecturers. The questionnaire sent to the lecturers is shown in Appendix C and a discussion of the method of the survey and analysis of results is included in section 4.8.5.

### **5.5.1 Lecturer perceptions**

In the reporting of findings from the responses to the questionnaire which was sent to lecturers by e-mail, evidence of a trend or a common perception is weighed up on two counts. Firstly, a point of view must have been expressed by the majority of participants. Secondly, there should be no strong contrary opinions expressed on the particular topic. Under these conditions the perceptions are described as 'general' for the purposes of this study. The degree to which it is general in the sense of being held by the majority of lecturers involved in distance education is clearly dependent on sampling and research design factors which are discussed in section 7.2.

### **5.5.2 Cognitive levels**

There is general agreement among lectures who responded to the questionnaire that undergraduate students at UNISA are required to work mainly at the lower cognitive level i.e. knowledge of facts, procedures and theories; comprehension of this knowledge and its application in solving problems. From the responses it seems that undergraduates are seldom required to work at the level of analysis and that it is expected that the cognitive skills of synthesis and evaluation are developed only in post-graduate work.

It is to be expected then that lecturers would rate students' skills at the various cognitive levels according to the hierarchy expected of them and this was indeed the case. Most lecturers rate students' ability to learn new facts and procedures as being generally of a good standard. Likewise, the understanding of new material and the ability to apply this knowledge are rated as satisfactory, although at these levels the less able students have more difficulty. There is a strong indication that English second language students experience more problems at these levels than do English first language students (compare Cilliers *et al.* 1997). The differential rating of student groups in these areas was described by one lecturer in racial terms (i.e. black students have more difficulty than white students).

Analytical work is rated as being more difficult for undergraduate students with a clear indication of difficulty for English second language (ESL) students. Tasks involving synthesis and evaluation are seen by the respondents as being too difficult for undergraduate students and generally only expected at the post-graduate level.

### **5.5.3 Strengths and weaknesses of student management of learning**

Lecturers perceive the following problems in the way students manage their learning:

- Poor academic skills;
- Unrealistic expectations of success;
- Difficulty in taking responsibility for studies;
- Need to rely on instruction from a tutor;
- 'regurgitation of written texts';
- Poor time management/lack of sufficient time devoted to studies.

Few strengths were reported except in the sense that students who do utilise their time well have excellent materials and opportunities for self-paced, flexible learning.

#### **5.5.4 Level of academic reading and writing**

A common theme emerging from the responses to this question is that generally ESL students have difficulty with academic reading and writing and that EFL students seem adequately skilled in these areas to succeed in their studies. One lecturer felt that the passive visual culture of television viewing is a factor which impacts negatively on the development of academic skills for all students.

Another factor affecting the cognitive level at which distance learners can operate effectively is the general level of academic achievement of entering students. In the words of one lecturer: "Students with good matric results usually end up going to residential universities. Those who don't get in to residential university often end up at UNISA which means that we automatically get the lower end of the academic achievers."

#### **5.5.5 Research skills**

There is general consensus that research skills are not assessed at the undergraduate level although one lecturer reported the introduction of a project component in an undergraduate course. This component required students to use the library and the internet and the lecturer reports being impressed "with what students can do when they have to".

#### **5.5.6 Interaction between staff and students**

Interaction between staff and students is generally seen as being vitally important for both students and staff. Staff report that interaction is predominantly through telephone, occasional visits of students to the main campus, and through discussion groups at regional learning centres. Contact through correspondence is not mentioned



as a viable alternative although some lecturers believe that e-mail may have potential to become a better option for maintaining contact.

Face-to-face contact is still regarded by lecturers as the most desirable contact for enabling a deeper engagement with subject matter. One lecturer claims that the feedback from discussion groups at regional learning centres is "invariably positive". Another lecturer rates face-to-face classes as essential to his students' progress in their course.

Clearly there is great variability in the desire and need for contact between students and staff. In the words of a lecturer: "Some students interact often, others I never get to see or hear from." The fact that some students choose not to have contact emerged from the student e-mail questionnaires and is confirmed by responses by lecturers. Some lecturers also feel that many students do not take advantage of the opportunities for contact which are offered. This is a perception on the part of lecturers which may not fit with the experience of students who express a range of reasons why contact, though desirable, has not happened for them. More discussion on this point is included in section 6.4.4.

### **5.5.7 Feedback on student work**

One of the opportunities for contact which seems to have been reduced in the past few years is the exchange which can take place around the completion of assignments. Lecturers confirm the finding from student data (see section 5.4.14) that assignments are generally not compulsory in most courses. An estimate by a lecturer of student take-up of this form of 'contact' is as follows:

"Since assignments are not compulsory, less than 5% take the trouble to submit assignments. Part of the problem is that the new semester system has drastically eroded the time for correspondence, especially with far-flung areas. I provide written feedback on each assignment which, I think, helps the students tremendously."

An additional point to bear in mind in this regard is that many assignments are multiple choice, negating any chance of qualitative feedback.

There is the perception that the majority of students are not interested in feedback but rather simply in the mark that they achieve. Exceptions to this attitude are perceived to be mature students with a high level of intrinsic motivation for their studies. This type of student is vitally interested in feedback as a reflection of their progress.

### **5.5.8 Quality of learning materials**

Lecturers rate the quality of learning materials highly although one lecturer admitted the probability of bias in this perception since lecturers themselves are involved in writing materials. However, the perception of quality in this area is supported by positive ratings from students on both the postal and the e-mail questionnaire.

### **5.5.9 Learning assistance in materials**

Lecturers comment that materials are revised regularly and that there has been a major effort to convert materials to include OBE principles. Most of these materials are fairly new and as a result there is still uncertainty about the effectiveness of the new approach. The degree to which materials explicitly assists students in developing academic skills was not commented on significantly by many lecturers although one claimed that his course materials did include this aspect: "First year tuition material includes study skills, life skills, critical thinking skills etc. as related to content. Sections are dealt with in learning opportunities that give some structure to content and include processes to develop the student's thinking."

### 5.5.10 Benefits of distance learning

Lecturers perceptions of the most important benefits which students may derive from distance learning include the following:

- Students can work at their own pace, doing fewer courses if necessary;
- Flexibility;
- Cost.

## 5.6 SELECTED CASE STUDIES OF INTERVIEW PARTICIPANTS

The following case studies have been constructed from the interviews held with distance learners. The particular cases were chosen because they yielded relatively rich data on these students' experience of distance education. The cases studies have been constructed according to the methods which are described in detail in section 4.8.6. To recap, the methods consisted of the use of a three-part interview schedule including questions on the student's learning history and on distance learning experiences. Interviews were transcribed, transcriptions were analysed for emerging themes which were mapped, and a descriptive narrative of the student's experience was constructed from the map and the details of the content.

### 5.6.1 Case Study 1

D is a student of Information Sciences with a distance education institution. She is in her final year of study, having studied her major subjects through distance education institution and obtaining credit for BA subjects previously completed at a contact university. D's focus and determination to succeed in her studies are immediately apparent when speaking with her.

D has mixed feelings about her experience as a distance learner. On the one hand she values the opportunity that distance education has afforded her to get a qualification in her field. She chose to study because she felt that a degree in her field would certainly lead to a better salary and career advancement. Other options for obtaining a qualification involved full-time study and re-locating and she was not able to consider this for work and family reasons. On the other hand, D has been disappointed in the learning experience that she has been involved in for a number of reasons which relate to course content and relevance, interaction with lecturers and peers, perceived lack of progression in the curriculum over the course of the degree, and perceived inadequacies in assessment.

D considers her learning style to be predominantly one of learning by doing. "If say they want you to look at an encyclopaedia and what it offers, I'll go through that encyclopaedia and try it." She likes to apply concepts to real situations and see how they work. She has felt the need for doing more applied work throughout her degree and now that she has the chance in her final year to design a system using a computer-based tool, she has been most discouraged to find that the tool provided for the design is out of date and only used in isolated places.

D is clearly motivated by opportunities to do independent research but was frustrated to find that this was not encouraged in her courses. "I find that very frustrating because they tell you what they want you to read and then you find something really exciting and you want to go and read and then you realise that its actually a waste of time because they don't want you to do that. So I find that very ... very restricting". For D the contrast between distance learning and learning on-campus in her previous experience was marked in that she had previously felt encouraged to read widely and exploratively.

Through her course D has had no significant contact with her lecturers. She claims that she made an effort early in her degree to make contact but later gave up trying, having experienced it as fruitless. She experienced that requests for help were mediated by an

administrative staff member who relayed queries and responses to and from lecturers. This for D defeated the purpose of contact which she hoped would have facilitated engagement at the level of the disciplines she was studying. D found her attempts at remote contact with other students equally frustrating and fruitless.

Where D did receive support was in her workplace where her supervisor had previously studied through distance education and a colleague is studying the same course at the same level as D. D was able to obtain clarification of difficult concepts from her supervisor and other more senior staff. She stays in close touch with her colleague and they are able to support each other and work cooperatively, even though they have somewhat different approaches to learning. Ironically, her colleague whom she describes as a thinker (compared to her D's more practical approach) seemed often to opt for a more mechanical approach to reproducing (regurgitating) the required information, with excellent results.

"I mean if you are prepared to take one of their assignments and do it word for word, but not plagiarise it ... my one colleague who's doing the same subjects I am she gets 90 to nearly 100 % for her assignments and she literally, takes the study guide, moves it around a little, shoves it on the computer and there we go. I use my own language and I get about 80% ".

D's work also provides an ideal learning environment since she can apply what she learns to her work.

"... They ask you to do practical activities, go and use some of the tools in your own library, if you are working in a library. There again I am lucky, I do work in a library, a lot of people don't and I imagine that they would find it difficult to have access... I've got everything here. We often had this discussion, me and my colleague... what about those people who don't?"

Besides D's general inclination towards application as a style of learning she employs one predominant learning technique - that of precis or summary and learns from the notes she makes in this way. D traces the use of this technique back to her school

experience of a language teacher who taught her this skill. As it worked well for her in this subject she generalised its use to other subjects. When pressurised to learn more effectively in her second year of initial on-campus studies, she again adopted this method which became established almost exclusively as her learning method.

D reports no difficulty in academic reading and writing and considered her previous experience in these areas completely sufficient in enabling her to cope very well with the academic demands in her distance studies. She is conscious of her advantage in having English as a first language and suspects that the standard of work required of her has been diluted by the need of the institution to cater for increasing numbers of students whose first language is not English.

In D's situation the rewards which are likely to accrue on completion of a degree are a major motivating factor and the main source of her obvious determination. Disciplined work habits and the support of significant others in her life have contributed to a sense of achievement in managing her studies successfully and this provides further motivation. The schedule provided by the institution, the clarity and organisation of learning materials such as study guides and the compulsory nature of assignments all contribute to her maintaining a positive momentum in studying which overrides her feelings of disappointment in the lack of engagement in the learning process which was expressed as follows:

“...if it wasn't for the fact that I wanted more money at the end of the day, I would have given up, really .... And the fact that I started something I wanted to finish. To tell you the truth it's just been discouraging.”

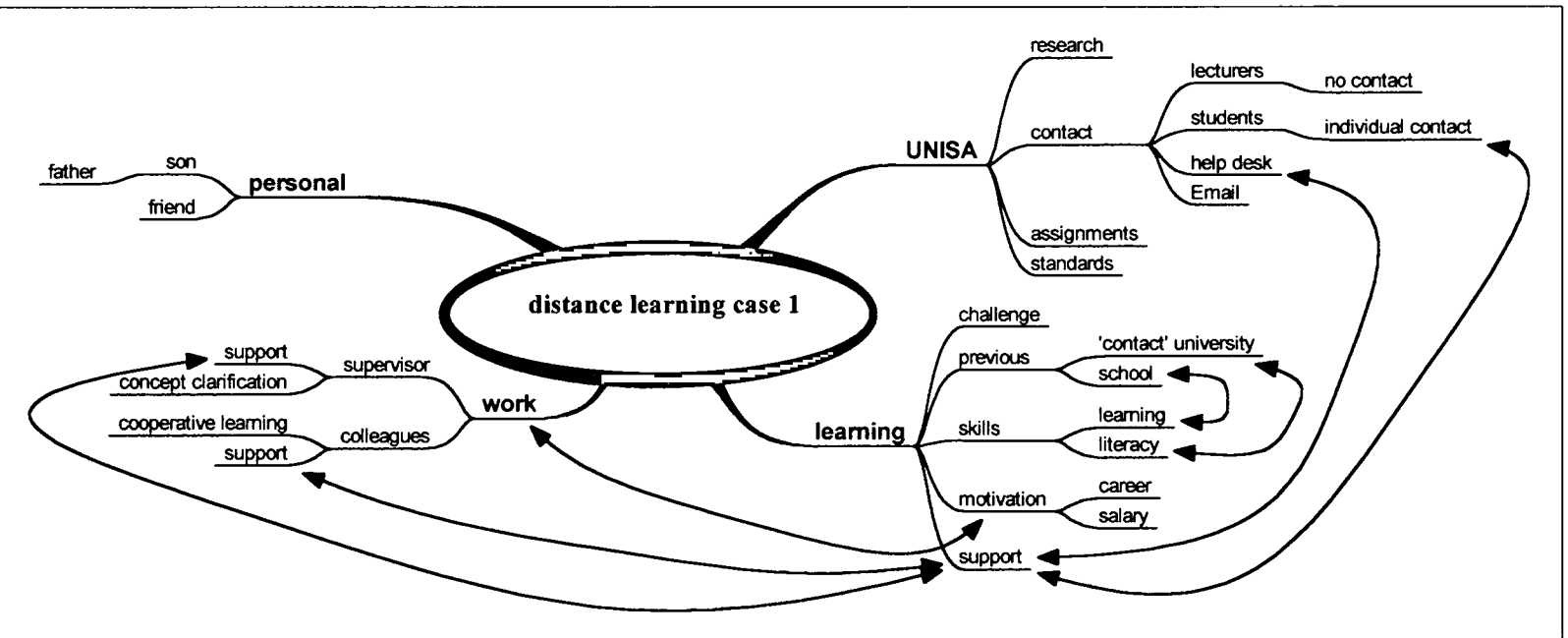


Figure 5.8: Map of themes and issues emerging from Case 1

### 5.6.2 Case Study 2

S is at the end of a long period of distance learning. She registered for a Commerce degree ten years ago and has just written her last examination. In the intervening time she has had a family, helped build the family business from home and moved homes. S's distance learning experience can best be described as one of correspondence study as she has done almost the entire degree on her own with the aid of only print materials from her institution. Her experience has been lonely and tough and emotionally, she is done with studying. While she would not take on any more studies in this mode she still considers it all worthwhile and that she has gained a great deal in a number of ways from the experience.

S's previous learning experience reveals how significant one event or situation can continue to affect learning for an extended period. S considered Mathematics her strongest subject at school and felt she was strong also in Accounting. During her matriculation examinations she fell seriously ill before her Mathematics papers but, determined to complete her schooling that year, she wrote Mathematics and did poorly. She achieved a matriculation exemption but was unable to study computer programming at the university of her choice because of her poor Mathematics result. She registered for a BA with mostly social science subjects but soon dropped out of full-time study. She then studied data processing at Technical College and excelled. She ascribes her success in this course to her strong numeracy skills and the relatively unchallenging level of the courses.

S then married and started a family. She registered for one course through distance learning to see whether it suited her, enjoyed the course and kept going. Her passage through the course seems to have been challenging. At one stage she needed to drop courses through illness. She wrote a number of supplementary examinations and repeated some courses. Pressure on her time was a constant factor: "Time and work



were my biggest factors. It was the quantity of work, because of the time factor, which was always my problem."

S characterises her orientation towards learning as being predominantly one of thinking. Her main learning method is to read very carefully, thinking about facts and concepts and trying to understand them. She claims that she will re-read a section until she is confident that she understands it. S also makes notes while she is reading, trying to put the material into her own words and relating to her experience. Occasionally, when she feels that she has the time, she constructs anagrams to help her to memorise important points.

S concedes that reading a lot of academic material is difficult for her, especially when she feels that it is theoretical and has little practical application. S also finds academic writing difficult, especially in examination situations. She feels that she lacks skill in this area and that the exercises and assignments in her courses did not adequately prepare her for writing well considered, well constructed arguments. Her lack of engagement with anyone about her academic writing seemed to her to be a contributing factor to her difficulty in this area. In spite of her acknowledged difficulties with academic reading and writing, S felt that the language used in her courses was generally accessible and easy to understand. She did have difficulty with one important text and ascribed this difficulty to the structure and flow of the text and its lack of clear practical examples. Her response to this difficulty was to find another book on the same subject which seemed quite easy to learn from.

S believes that studying disciplines which are closely related to the work she does (broadly in the fields of accounting and management) has improved her competence in her work and made the studying more enjoyable because it could be applied. She believes that the level of education she has reached through distance learning is very good and compares very favourably with qualifications from 'contact' universities.

As mentioned in the introduction to this brief case study, S had virtually no contact, either with lecturers or with other students throughout the considerable duration of

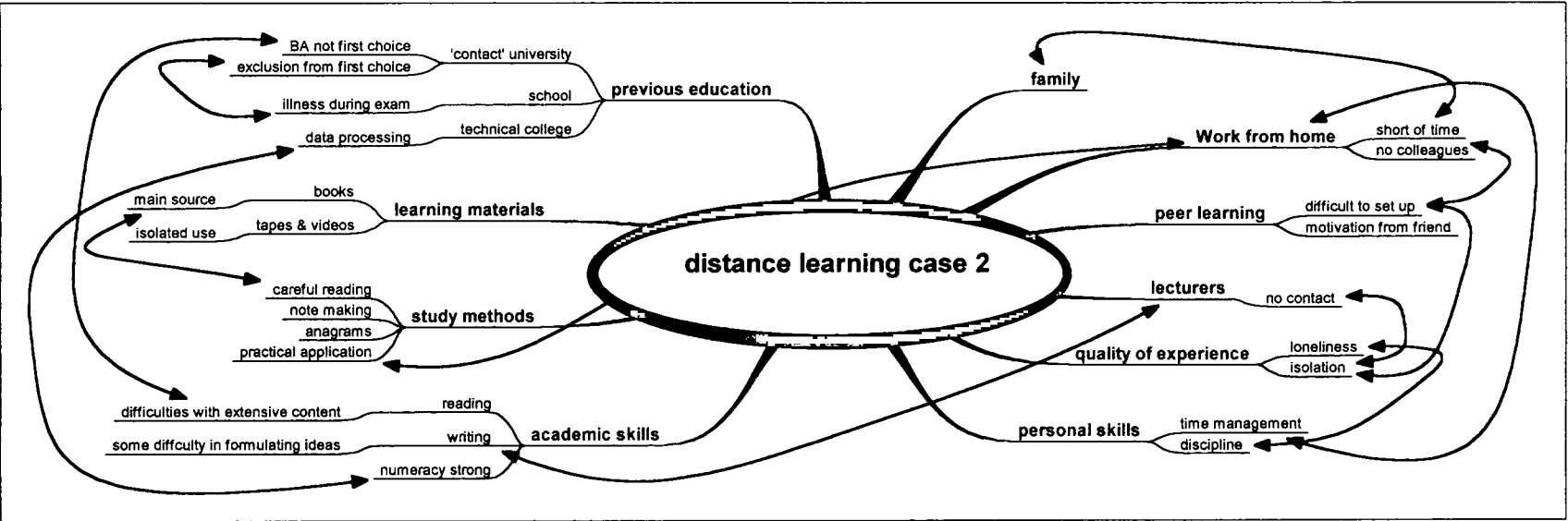
studies, except for a two day lecturer course organised by a commercial venture. She explained that contact with the lecturers of her institution by telephone was too expensive and that visiting regional centres was out of the question because of time and expense. Notwithstanding these obstacles S had seriously considered attending some lectures to overcome her feelings of isolation. She greatly valued the one opportunity she had to attend lectures and reported buying video-taped lectures on another occasion to compensate for the lack of contact: "It was wonderful to hear a voice. He helped me tremendously" (compare Carmichael, 1995).

S feels that her institution could do a lot more to make interactive materials available to students in order to compensate for the lack of contact and to involve students in learning other than just the study of printed material. She felt that there had been no discernable movement in this direction over the course of her studies. Some courses did provide audiotapes which were useful. S conceded that the institution had recommended the use of their internet site but she felt that sites were of limited use because they were not updated regularly enough. Sustained internet access was also costly for S.

Apart from contact over a number of years with a friend who was studying the same degree, S has had no contact with other students. Her contact with the friend was limited to mutual moral support: "We seemed to just miss each other every time. [They were not studying the same course at the same time] We used to try to motivate each other but we never actually sat down and did work together. I had my books."

S felt that it was too difficult and time consuming to set up learning groups with other students working in her town. She felt awkward contacting them because she did not know them well and they seemed to form a natural group already: "Also the people in the [accounting] firm knew each other well enough. For me to go and join them would not have been easy. If you don't know the people its very difficult and the thing is that time is always of the essence so to try to find each other at the same level and stage at the right time of the year is not easy."

Figure 5.9: Map of themes and issues emerging from Case 2



### 5.6.3 Case Study 3

The third case study involves two students in their first year of study, having just finished Grade 12. The students are doing a post matric year at a school and doing four UNISA subjects as the academic part of their curriculum for the year. These students, referred to in the following description as P and R and in an atypical situation in that, for the most of their studies, they are in a contact situation with a teacher presenting material and guiding them through reading and assignments as well as setting and marking tests based on the UNISA courses. Their 'distance' studies did involve some independent study, particularly in one course where they were encouraged to do a lot of their own reading.

The students felt that they wanted more opportunities than they got for independent study and consequently enjoyed the course where there was more scope for this. They felt that they had the necessary skills to cope with independent study, having developed these at school, through repeated exposure to examinations which required them to develop an effective personal approach to studying. One of the students felt that study skills which had been dealt with in guidance at school had been useful in his UNISA studies. These included mind-maps, time management and an awareness of the importance of an environment which is conducive to study (see Marshall & Rowland, 1993:11).

The students' evaluation of the texts and study guides which they had used was illuminating. They found one text difficult to use. It used text almost exclusively and the students found its elaborate sentence structure difficult to follow and to learn from. The other texts used graphics, lists and summaries extensively and the students were far more comfortable learning from these texts. They found the study guides useful for course orientation and organisation but felt that the content in study guides was dealt with in too simplified a form to be useful.

A consistent theme emerging from the interview was that the content of the courses which these students were studying was largely factual. They felt that they were not involved to any great extent in any cognitive level but knowledge acquisition and to a minor degree in application of that knowledge. They felt that they were not required at any point to form or give their own opinion, to synthesise their understanding of a topic through project work or to evaluate the theories which they were exposed to. They rationalised this by thinking that the courses were introductory and so had to introduce them to the basic terminology and factual details of the disciplines in preparation for subsequent courses. However, they felt that this approach to first year courses was unsatisfying and not what they would have expected from university studies.

The content based nature of the materials and teaching approaches experienced by the students in this case study is consistent with the approach to assignments and assessments which were described by the students as being focused narrowly on examination preparation. Assignments, although voluntary, were completed. These were considered useful for revision of content and examination preparation in that the assignments questions were similar to what could be expected in examinations. The students felt that they had not been challenged to write or argue and had therefore not had the opportunity to develop skills in these areas. P described his experience as follows:

“Everything was factual so it was quite basic. You didn’t have to process the information and give your own point of view, there was none of that – it was very straight-forward – give the right answer.”

In spite of the lack of challenge perceived by these students because of the strong focus on factual content, they felt that they had learned a lot from their experience of learning in a more independent mode than they had previously needed to do.

#### 5.6.4 Reflection on case studies

The case studies reveal the great variety of factors which influence distance learning and the development of academic literacy at an individual level. For example, the prior educational experience of the participants varied from case one, whose prior experience developed academic literacy to the point where the student expected to be challenged at a high level through further distance studies, to case two, whose prior experience left significant gaps in academic literacy, to case three, where students had not yet been significantly extended in their academic studies.

The clearest common issue emerging from the first two case studies is the strong need for interaction with lecturers in the development of academic literacy and the difficulty of sustaining this interaction. This was in marked contrast to case three where the students had more contact with staff than would often be experienced at a contact university. The main concern in this case was the level of academic challenge presented by the course materials and assessment.

### 5.7 CONCLUSION

In this chapter a range of empirical findings has been presented in order to illuminate the experience of academic literacy development in distance learners. Comment has been restricted in most cases to clarification, explanation and identification of trends. The interpretation of these findings is presented in chapter 6.

The findings presented span the range of instruments used in the study: the postal questionnaire to students, the e-mail questionnaire to students and staff and the interviews conducted with students. Demographic details showed that the sample is satisfactorily representative of the parent population. A picture emerges from the results of well-motivated set of learners, involved in their studies, who value their experience of distance learning as a means of personal and professional growth.

Although their perception is that their academic literacy is adequate for the demands of their studies and that they are capable of working at various cognitive levels, there is a lack of evidence of deeper engagement in the learning process and a lack of richness in learning behaviours and techniques. This tends to weaken the claims made by the respondents about their level of academic literacy.

### Chapter notes

1. "Student enrolments at UNISA have increased with 118 168 registered on 1 June, compared to 111 758 at the end of last year. The second semester registrations have not yet been finalised, but indications are that student enrolments have now reached about 130 000.

The June figures show 51 894 enrolled in the Faculty of Economic and Management Sciences, 26 433 in Arts, 14 933 in Education, 10 163 in Law, 7 050 in Science and 1 145 in the Faculty of Theology and Religious Studies. The remainder are registered for non-degree purposes. The faculty of Education's figures rose before the second semester registrations by about 9 000 which include students from the colleges incorporated by UNISA.

UNISA has 54 681 black students,. However, English leads as home language for 42 126 students, while 21 360 speak Afrikaans at home, 14 068 speak Zulu, 9 869 speak Northern Sotho. Other home languages of UNISA students include, Tsonga, Swati, Xhosa, Ndonga, Ndebele, Shona, Venda, Tswana, Southern Sotho, Greek, French, Hebrew and Italian" (UNISA, 2001).

## CHAPTER 6

### INTERPRETING EXPERIENCES OF DISTANCE LEARNING

#### 6.1 INTRODUCTION

In this chapter the results presented in chapter 5 are interpreted from a theoretical perspective. The chapter begins with a discussion about the nature of interpretation in qualitative research, and then proceeds to an interpretation of the results from two main vantage points. The first is from the point of view of distance education as a system. The characteristics of the system as they influence learning are discussed in the light of the specific findings of this study. The second point of view is an individual one in which an attempt is made to understand the process of academic literacy development as it is experienced by participants in this study, using an interpretive filter which is constructed from the theoretical perspectives on academic literacy.

The approach outlined above is intended to draw together the theoretical, methodological and empirical strands which have been woven in the two literature study chapters, the chapter on methodology and the chapter in which empirical results are presented. The intention of this chapter is to make sense of the experience of the participants in the study in a way which takes note of theory but remains true to the meaning that participants would be likely to attach to their experience.

#### 6.2 INTERPRETATION IN QUALITATIVE RESEARCH

The process of interpretation of the data reported in chapter 5 is undertaken in this chapter by forming conceptual categories and identifying themes, whereas the data was reported mainly with the aid of descriptive categories. This process approaches the method of grounded theory which involves the 'discovery' of theory from data (Merriam, 2001:159) in which consideration of data leads to making categories of meaning. This is an iterative process which continues until a point of saturation is



reached at which no more conceptual categories or themes are suggested by the descriptive categories in the data.

In the process of interpretation one attempts to achieve a 'higher order of abstraction without compromising the authenticity of the data' (Bryman & Burgess, 1994:219). This is achieved by constructing a narrative to explain or make sense of the data. The author's judgement and application of theory that authentically fits the given data, is central to this process.

Mason (in Bryman & Burgess, 1994:99) suggests a useful guide to developing an analysis from different forms and sets of data. This involves posing and answering three classes of questions:

- What do the data tell me about and what can they not tell about?
- Strength of claims: How well do the data support claims? What are the strongest claims that can be made based on the data?
- How can different sets and types of data best be integrated so as still to satisfy the answers to the first two classes of questions?

In this chapter the above guide is followed in making sense of the findings presented in chapter 5.

### 6.3 SAMPLE CHARACTERISTICS

In the postal questionnaire there was a gender distribution which was very close to the gender distribution for UNISA. In the other two samples the gender mix was comparable. It is therefore reasonable to assume that the results reported in this study are not affected by gender bias. Moreover, Richardson (2000:184) reports that studies have not been able to show significant gender differences in approaches to studying.

The mean age of respondents in the postal questionnaire sample was slightly less than that of the mean for all UNISA students. However, in keeping with age profiles in

distance education internationally, the mean age is substantially higher than the mean age of students at 'contact' universities. Therefore, with respect to the age, the sample is satisfactorily representative for the purposes of this study.

The results presented in section 5.2.1 show that the distribution by race of the postal questionnaire sample is also close to that of the total UNISA student population.

In terms of language, the samples are somewhat unrepresentative in that there is a very small number of participants whose first language is Afrikaans (4%) whereas this percentage for all UNISA students is close to four times that number. There is a disproportionately high percentage of English first language speakers in the sample. However, the total number of participants with an African language as their first language is similar to the overall UNISA figure.

Distribution by faculty in the postal questionnaire sample is broadly representative of the distribution by faculty for all UNISA students, with Economic Sciences by far the largest, followed by Arts, Law and Education, with Science well below these faculties in numbers.

The information regarding the matriculation aggregates supplied by participants in the survey is unreliable. However, the figures from those who did respond to this item indicate that the great majority of the sample achieved either a C or a D aggregate in their matriculation examinations. Comparative figures for UNISA could not be obtained. However, it is likely that the average academic level of entrants to UNISA, as measured by matriculation aggregate is substantially lower than the level at 'contact' universities. This is consistent with opinions expressed by lecturers.

Reviewing the sample characteristics it can be concluded that the sample of participants in the postal questionnaire shows marked demographic similarities with the general UNISA student population. It is thus reasonable to expect that the attitudes and perceptions of this sample are broadly representative of the range of attitudes which

may be held by UNISA students more generally. Furthermore, the demographic 'fit' of the sample justifies the view that strong trends which emerge in the attitudes of the sample are likely also to be found in the population of UNISA students as a whole.

#### 6.4 REFLECTION ON DISTANCE EDUCATION CHARACTERISTICS

In chapter 2 the following characteristics of distance education were identified and discussed: **distance, openness, flexibility, contact and interaction, learner-centredness and accessibility**. In this section the significance of the results of this study are discussed in terms of these characteristics.

##### 6.4.1 Distance

The results confirm that for many of the students surveyed, the distance dimension of distance education is still experienced as a physical or geographical distance. This experience emerged in a number of ways:

- The high percentage (35%) of students who felt they could not leave their work to study at a university (section 5.2.2.2);
- Difficulties with transport to attend lectures (section 5.3; compare Corry & Lelliott, 2001:3);
- A strong feeling of isolation from the institution (section 5.6.2).

One of the criticisms of South African distance education which was documented in chapter 2 was that there has not been significant change in the way that distance education has been conceptualised and that in essence it is still based on the correspondence model (see Taylor's models in section 2.3.3). There is evidence from all three main data sources (postal, e-mail and interview) that this model is still prevalent in South African distance education: a number of students use the terminology of correspondence; and print seems to be by far the dominant medium. The continued prevalence of the correspondence model in South African distance education

emphasises the physical distances which engender a feeling of separation for many students.

However, it also emerges from the study that there are significant moves by distance education institutions to mediate 'distance' as it is understood by Evans (see section 2.2.1). Three major thrusts by UNISA in this direction are:

- The establishment of regional centres;
- The rewriting of materials according to OBE principles;
- The establishment of on-line administration and learning facilities.

These are significant developments towards creating a learning environment which would be more conducive to the development of academic literacy (as discussed in more detail in section 6.5), the mediation of distance as an isolating factor (Evans, 1994), and the ideal of removing the 'distance' from distance education (Garrison, 1999).

#### **6.4.2 Open learning**

In chapter 2 open learning was characterised as an approach which seeks to improve access to learning opportunities by removing artificial, systemic obstacles to participation in the learning process. This study provides copious evidence of the fact that distance education institutions in South Africa provide access to higher education for many students who are not able to register with contact institutions. Significant percentages of students study through distance education because they are either not accepted by other institutions, could not leave their work to study elsewhere, or need to do so because of family commitments (see Sections 5.2.2.2 and 5.4.2). Opening access in this way is one aspect of removing obstacles to learning. As a consequence of this aspect of open learning, the kind of student studying through distance education is more varied than in 'contact' institutions. It has already been shown that distance learners are more mature. Because of access criteria many are more likely to need more intensive support for their learning. This in turn has a bearing on what should be done to facilitate the development of academic literacy in these students.

Another feature of open learning is the degree of flexibility in the mode and pace of learning and in forms and timing of assessment. The surveys conducted in this study provide evidence that South African distance education provides this kind of flexibility. Importantly, the period over which a qualification can be obtained enables people to study who would not manage a full-time curriculum. The second case study illustrates this point.

In section 2.2.2 it was argued that openness in terms of entry requirements and study schedules are to some extent surface features of open learning systems. Openness in the sense of participation and negotiation in the process of designing the curriculum and specific learning activities is a deeper feature of open learning. In this respect there is little evidence of an open learning philosophy from the reported experience of the participants in this study. On the contrary, the typical experience of a distance learner emerges as one of disempowerment in relation to the content and processes of specific courses. While the distance learner has a great degree of freedom in choosing courses and scheduling their completion, the materials and assessment instruments within a course are experienced as relatively inflexible, with little possibility for negotiating assessment tasks or sources for research.

The claims made above are based on the following evidence from the study:

- Case study 1 (section 5.6.1) documents the frustration of a highly motivated student who wishes to research more widely than is required by the courses she takes. She argues that she has been penalised for doing so. She is also frustrated at having to use a development tool which she considers to be out of date.
- Evidence that distance learning at the undergraduate level is pitched more strongly at the lower levels of cognitive functioning (Sections 5.2.8.1, 5.4.7, 5.5.1).
- The high percentage of students having very little contact with lecturers (section 5.2.7.3).

This evidence points to a lack of engagement between students and lecturers in South African distance education which leads to the conclusion of a lack of openness in the

educative process. This fits with the indications from the study that many students experience an external locus of control in their studies. This aspect is discussed in more detail in the section on learner-centredness.

The conclusions reached here on the degree of openness which can be claimed on the basis of survey data must be qualified by recognising that the study deals with a massive system with a great degree of inherent variability. Conclusions are motivated by the strongest and most frequently expressed opinions of the particular sample selected for this study. Conclusions in this kind of study are valid to the extent that they authentically highlight real issues and concerns arising from the experience of students. There is no sense in which a statistical measure of openness, for example, can be determined.

In summary, the results of this study show openness in the distance education process at a surface level but also reveal a lack of openness and engagement at the deeper level of the educative process and the interactions between the student and the lecturer and the institution. In these terms, Jakupec and Nicoll's (1994) caution against the use of the rhetoric of open learning in order to commodify the process, should be heeded by South African distance education institutions.

Although it is not included in the specific recommendations of this study, it would seem that South African distance education institutions should commit more resources to ensuring that their systems and processes become more open, that systemic barriers to learning are progressively removed and that an ethos of openness in the educative process is promoted.

### **6.4.3 Flexibility**

The definition of flexibility adopted in chapter 2 relates to the degree of freedom which the individual student has to choose by which methods course material will be accessed. In the samples surveyed there is evidence of a number of students making use of

lectures and discussion groups at UNISA regional learning centres. There is also evidence from the e-mail survey of students using of web-based resources for learning. However, no strong indication emerges from any of the sources that many courses are being offered with a truly flexible mix of learning opportunities. On the contrary, the norm appears to be that course materials and methods are relatively inflexible, having been planned before the course and communicated to the student at the start of the course, and using a limited range of media. From the case studies it seems that more could be done to provide a wider range of multi-media learning materials.

Although a number of 'contact' universities have become heavily involved in offering some courses in distance mode, the students registering for such courses are generally off campus. While this can be seen as a type of flexibility, it is restricted once the student has chosen a particular mode. True flexibility would allow any student to choose a mix of contact and self-study options as their individual needs dictate. The process of convergence of distance and conventional education (Tait & Mills, 1999) seems slow in developing in distance institutions as well, becoming a reality only for those students with ready access to learning centres or to the internet.

Flexibility in the sense discussed here is important in the development of academic literacy for a number of reasons:

- It is likely to improve the sense of ownership of learning which students will experience;
- A wider range of media in materials, flexibly used by the individual student is likely to utilise more effectively the stronger learning modalities of individual students whereas an overemphasis on printed texts and study guides uses a restricted set of learning modalities.

From the evidence of this study, this kind of flexibility is clearly needed in order for South African distance education to succeed in its transformation agenda.

#### 6.4.4 Contact and interaction

The survey and interviews yielded clear indications about the amount of contact and nature of interaction between distance learners and their lecturers and between students and their peers. The general finding is that there is a low level of contact in both cases.

Over 60% of participants in the postal survey reported that they seldom or never had contact with their lecturers (section 5.2.7.3). This result is confirmed by the responses in the e-mail questionnaire (section 5.4.12). When this is combined with the finding that the nature of contact was reported as 'teaching' by almost half of participants who had contact, and as 'help with assignments' by only 16% of those participants, it appears that very few students are in regular contact with lecturers with the purpose of 'in-depth' engagement with subject matter. This conclusion is supported by the low percentage of students choosing to complete assignments, which traditionally have been the stimulus or occasion for meaningful contact between students and tutors or lecturers (Holmberg, 1995:106).

The question may be asked whether 'teaching' as reported in this context should not be interpreted as in-depth engagement. From the comments made it appears that the need for teaching stems from the difficulties which students have in working with materials independently and their reliance in previous learning situations on 'teacher-tell' methods. It is possible that the teaching referred to in this context fulfills this need (Bertram, 2000:12).

In the same way that face-to-face contact between students and their lecturers is limited, so contact through on-line systems is also at a low level. A number of observations from the study support this conclusion:

- Only a quarter of postal respondents who have contact with lecturers do so through on-line systems (section 5.2.7.7);
- Free responses to the postal survey indicate a need for better on-line communication (section 5.3);



➤ A range of difficulties is experienced by students in establishing or maintaining contact with lecturers (section 5.3.12); and

➤ Interview participants report difficulties in making on-line contact with lecturers.

These findings contrast with those by Daugherty and Funke (1998) who reported student claims of improved interaction both in quantity and quality as a result of web-based instruction. Bates (2000:46) argues that it is important to develop academic plans for the incorporation of technology into teaching and learning and it may be that such planning has not taken place effectively for the courses taken by the respondents.

Given the limited contact and the nature of interaction which emerges from the discussion above it must be concluded that for many students the development of academic literacy is not facilitated by in-depth engagement between teacher and student, commonly considered as the most important opportunity for doing so. This situation is discussed in more depth from a theoretical perspective in section 6.4.4.

It should be recognised at this point that the somewhat pessimistic tone of the conclusions reached about contact and interaction is not intended to imply that institutions have not made significant attempts to improve opportunities for contact. Work in the area of learning centres, on-line systems and materials development is referred to in section 6.1.1. Students who are in a position to utilise these facilities effectively doubtless benefit in developing their academic literacy. However, this study indicates that at this stage in the development of distance learning in South Africa such students are clearly in the minority.

The results indicate a similar pattern of limited contact between students and their peers (sections 5.2.6) although participants in the e-mail survey had somewhat more interaction with their peers (section 5.4.13). Distance learners therefore typically have considerably less opportunity for co-operative learning with peers. Vorster (2000) documents the importance of such learning for the development of academic literacy in a contact university. Cooperative learning can be effective in assisting students to acquire the language of a discipline in relatively non-threatening situations. Together

students can try out expressing themselves with the freedom to make mistakes and get feedback from peers and facilitators. Students also learn techniques from each other and benefit from the insights of others (Bertram, 2000:9). Johnson, Johnson and Smith (1991:38-52) claim a wide range of beneficial learning outcomes from cooperative learning in the following areas: effort to achieve; critical thinking competencies; and interpersonal relationships.

In summary, there is a considerable body of research and strong claims for the beneficial affects of cooperative learning. The isolated student (see section 5.6.2) has no such opportunities for developing their academic literacy with the help of peers. It is a matter of considerable concern raised by this study that the richness of interaction required for meaningful development of academic literacy seems to be largely absent in the experience of many distance learners.

#### **6.4.5 Learner autonomy and learner-centredness**

The results of this study highlight at least three important issues in relation to learner autonomy and learner-centredness:

- The development of learner autonomy is an important benefit of distance learning for many students;
- The development of a strong sense of autonomy is not necessarily an indication of learner-centredness in courses;
- Institutions are moving towards more interactive, learner-centred ways of presenting courses but this movement appears to be slow in relation to the scale of need.

One of the most reliable findings in this study is that a great majority of the students surveyed are positive about their experience of distance learning. Almost three quarters of the participants in the postal survey, and over 90% of participants in the e-mail survey rated their overall experience of distance education as positive.

This finding may be considered surprising in the light of the considerable difficulties which confront distance learners, many of which are also documented in this study. The key to reconciling these apparently contradictory findings may lie in the strong determination typically shown by distance learners to achieve their goals. This determination stems from a sense of ownership and responsibility for learning (sections 5.2.2.3, 5.4.3 and 5.4.5) and a combination of extrinsic and intrinsic motivation for learning. For example a high proportion of students from the samples are studying for vocational or professional enhancement but many also are studying for reasons of personal development (sections 5.2.2.1 and 5.4.1).

It appears therefore that most distance learners see themselves as autonomous because they have taken the decision to study in this mode since it offers rewards which cannot be obtained otherwise. The fact that the process of distance learning requires a high degree of self-discipline and self-reliance reinforces this feeling of autonomy provided the student is reasonably successful. By the nature of the data gathering method employed in this study, students who have been unsuccessful in distance learning were excluded from the sample. It is likely that among unsuccessful students there would be many who lack a sense of autonomy and ownership of their learning.

Turning to the second point made at the start of this section, it appears that although most successful students experience a strong sense of autonomy, this sense is derived more from personal motivational factors than from an experience of enhanced autonomy in their engagement in course processes. While study schedules are flexible and there is a degree of autonomy in choosing whether to do assignments or not, but course content and assessment methods often seem rigid (see section 6.4.3 for further discussion on flexibility). One could argue that in this respect students experience an external locus of control.

The third point made at the start of this section relates more to learner-centredness. Movement by institutions towards a greater degree of learner-centredness by providing more opportunities for contact through learning centres, and by providing on-line

systems to introduce more interactivity in the learning process, are appreciated by the students who are in a position to utilise these facilities effectively. Positive comments were also made about the friendliness of newer OBE style materials and this would seem to be a fruitful avenue to pursue to reach more students in a more learner-centred way. Clearly these efforts at innovation require resources and it is questionable whether institutions have sufficient resources to take these developments to the required scale so that the majority of students will benefit.

#### 6.4.6 Access

In section 2.2.6 a number of factors were discussed which enable distance education to open up access to more students. These included the ability to reach isolated students, part-time study for students in full-time employment, affordability, flexibility of the system to handle fluctuating and particularly increasing student numbers. The claim was made that UNISA was a particularly good example of an institution which has enabled access for a large number of students who would otherwise have been denied higher education in South Africa.

The results of this study have confirmed the claim made above and shown evidence of the different ways that distance education has enabled access for individual students. The case studies in particular, show the value of distance education in enabling career enhancement for people whose professional options would otherwise have been severely restricted because of their personal circumstances.

On the other hand, it must be recognised that graduation rates in distance education remain relatively low. Many students do not complete higher qualifications, some because they study individual courses for self development or other specific reasons and others because the demands of distance learning prove to be beyond them. The onus is on distance education institutions to gather information on student progress to ascertain to what extent opening access may lead to students being accepted who do not have the resources or the skills to complete their studies.

In section 6.4 the results of this study have been interpreted in terms of the features of distance education which were identified and discussed in chapter 2, namely, **distance, openness, flexibility, contact and interaction, learner-centredness and accessibility**. The data gathered shows that South African undergraduate distance learners experience many of the same dynamics as learners do in other parts of the world. However, some major issues emerge from the surveys and interviews which are specific to the South African situation and apply in particular to UNISA. A summary of these issues is presented below:

- Distance is still experienced as isolation by many South African students who do not have the resources to mediate distance by on-line access or regular attendance at a learning centre.
- While UNISA subscribes to an open learning philosophy which is evident in its admission policies and its course offerings, it is a matter of concern that there is little flexibility within many courses to negotiate the process of learning and assessment.
- The lack of flexibility with regard to learning modes and alternative materials is a matter of concern.
- Constructive contact between lecturers and students and between students themselves appears from the surveys to be relatively rare, with many students experiencing isolation in their studies.
- While students experience autonomy in the management of their studies, and in spite of the move to rewrite materials in an OBE style, much of student interaction at a course level is still highly teacher/materials oriented.
- Access to distance studies is enabled for many students who otherwise would not study at the higher education level. There is, however, concern at the low level of learning support for the considerable number of students who find the challenges of distance learning beyond them.

All of these issues have important implications for the development of academic literacy in individual students. Having analysed the results of this study in terms of general

characteristics of distance education and established particular concerns about the South African situation it is important now to discuss the process of academic literacy development in the light of these findings.

## 6.5 THE PROCESS OF ACADEMIC LITERACY DEVELOPMENT

In this section the process of academic literacy development is discussed as it is experienced by the individual student. As signalled at the start of this chapter this is done using an interpretive filter which is constructed from the theoretical perspectives on literacy and academic literacy which were presented in chapter 3.

It has been argued (section 3.7.1) that a broader rather than a more specific concept of academic literacy is suitable for the purposes of understanding the experience of students in coming to terms with the demands of distance learning. A working definition of academic literacy was put forward as "a complex of knowledge, skills and attitudes which enables a student to be successful in a particular academic environment". In these terms academic literacy is a multi-dimensional concept, including the development of schemas in the disciplines being studied; language, information and academic competencies; generic cognitive skills; metacognitive skills; motivation and values.

It is necessary at this stage, with the benefit of understanding gathered from the literature and from the results of this study, to clarify the nature of this understanding of academic literacy. Most importantly, it is a concept or a construction which is intended to be helpful in understanding the experience of learners rather than being a unitary attribute which learners possess. There are a number of consequences of this claim.

Firstly, students differ in the degree to which they are skillful or effective in the different areas which are relevant to academic literacy. They also differ in their material circumstances, their motivation and the values which they hold. Strengths and weaknesses in all of these areas combine in complex ways to enable or disable a student

in their studies. For example, an intense motivation to succeed may override weaknesses in other areas. Conversely, a prior educational experience which developed a range of competencies and a broad literacy which is compatible with the academic culture of the university, may enable even the moderately motivated student to succeed.

Secondly, the concept of academic literacy is a dynamic one when applied to the individual in the sense that they are developing a particular kind of literacy through their experience of distance learning. Successful students become more literate in the culture of distance education over the course of their studies. However, for different students the quality of this literacy will be different even though they may be equally successful.

Thirdly, when understood in these terms, academic literacy is not an objectively quantifiable attribute of an individual student, even though a student may be described as being academically literate. The best that can be done is to understand the complex interplay of knowledge, skills and values which are embodied in an individual.

Fourthly, though accepting the variability in the concept of academic literacy, from research and experience, we can identify conditions, practices, behaviours and attitudes which are likely to contribute towards the development of academic literacy in learners or towards their failure to become assimilated into the academic culture.

Fifthly, the concept of academic literacy carries with it an idea of the prevailing culture of the academic institution, and for the purposes of this study, the culture of distance education. While it may be possible to identify common elements of such a culture across different institutions, an uncritical acceptance of an ideal academic culture should be guarded against. In fact, educational practices and cultures vary a great deal. This introduces a difficulty into the definition of academic literacy as developed in this study in the following way. If the practice of a particular institution is such that students may succeed in their studies without developing what are commonly regarded as acceptable academic, critical and ethical competencies, could those students still be regarded as

academically literate? These are essentially unanswerable questions in any absolute sense. It depends on who is doing the judging. It is useful to think in terms of a discourse community as being both the creator and the guardian of fluid standards, practices and ways of speaking and interpreting.

In summary, the thrust of the argument above is that the way the student faces the challenge of studying at a distance will vary from individual to individual according to his or her circumstances and personal and academic resources but also according to the requirements of those who are responsible for administration, teaching and learner support in the institution through which the student is studying. What follows is an analysis of the results of this study in terms of the process of academic literacy development at the individual level. This analysis is done in two stages by considering first the influence of prior education and experience on the student entering distance education and second, the learning process once the student has begun his studies.

### **6.5.1 The entering student**

The social and economic environment from which students come influences their reasons for studying at a distance, their expectations of the experience and the resources which they have at their disposal. The prior educational experience of the student also clearly has a profound influence in their further education.

The results presented in section 5.2.2.2 on the reasons for registering with a distance education institution show that economic factors are likely to be the most powerful determinants of the choice of mode of study. Free responses to the postal questionnaire indicate that a significant number of students experience difficulty with resources required for distance learning such as places to study, electricity, computers and transport. For half of the sample surveyed by post, the affordability of distance education is an important factor and for a third of the sample, the need to stay in employment was a deciding factor. These results tie in with the large percentages of students studying specifically to enter a profession or to secure employment. The fact



that Economic Sciences is by far the largest factor is also related to economic needs. It can be concluded with some confidence then that in South African distance education, the envisaged benefits of study in enabling economic advancement of the individual strongly influence the motivation of many students. This motivation appears to be powerful and strongly extrinsic.

It is not possible to typify the prior educational experience of distance learners on the basis of the samples studied since there is a wide range of experience. However, it is clear that students registering for distance education have on average achieved at a lower level in secondary education than those students registering at contact institutions (see Sections 5.2.1 and 5.5.4). The reasons for this difference in achievement are complex and involve a combination of factors, including individual ability and motivation, quality of secondary schooling, and socio-economic characteristics (Corry & Lelliott, 2001:3). A thorough analysis of these factors is beyond the scope of this study but the consequences of differential secondary achievement are highly relevant.

Lower achievers have by definition been less successful in assimilating the academic culture of secondary schooling. This implies that, on entry to higher education, the following will be true for many of these students (when compared with the cohort of students entered 'contact' institutions):

- less well developed schemas of the academic disciplines which they have studied;
- weaker academic skills such as reading and writing;
- poorer cognitive skills;
- under-developed metacognitive skills.

These claims are borne out by the observations of lectures on strengths and weaknesses of their students as reported in Sections 5.5.3 and 5.5.4.

#### 6.5.1.1 *Language background*

The fact that many students entering higher distance education have English as a second language clearly influences the process of academic literacy development. There is an interesting disjuncture between student views on this factor and what has been reported in the literature, the assessment of language competence in the writing of these students and the opinions of lecturers reported in this study.

Very few students (12%) in the postal survey felt that they were at a disadvantage because of the language medium required by the courses they are studying (section 5.2.5.2). In addition, few students (10% and less) report difficulties with academic reading (either comprehension or speed) or academic writing (section 5.2.5.2). However, the quality of writing in the free responses to the postal questionnaire (section 3.7.2.1) indicates some significant problems in expression. It is reasonable to expect that these problems would be amplified in writing on more complex academic tasks as opposed to simply reflecting on personal experiences. Lecturer opinions also point to language difficulties experienced by ESL students (see section 5.4.4).

#### 6.5.1.2 *Prior educational experiences*

While the prior experiences of students in secondary education was not a focus of the surveys in this study, their relevance to the development of academic literacy is self-evident. Some perspective on the nature of this experience is therefore necessary. This experience is clearly variable, but the problems in secondary schooling are well known and have prompted major national attempts at transformation of the curriculum using outcomes based models. At the risk of being simplistic the significance of this move is to make learning more relevant and meaningful and less by rote. Teaching and learning models to which learners have been exposed in secondary education have in many cases dominated by the transmission of facts. In addition, due to problems of resourcing, home language issues, teacher training and socio-political instability, basic skills in

secondary education in many cases are not at adequate levels to enable successful progression to higher education.

It is highly likely then that many of the students participating in this study will have experienced these difficulties in their secondary schooling and will therefore start with a deficit in skills and knowledge compared to the expectations of their lecturers. This would clearly hamper academic literacy development from the start of their higher studies.

On the positive side, distance learners are often more mature in age and have experience of other post-secondary education and work which have enabled them to develop their skills and academic literacy. This is clearly evident in two of the case studies (5.6.1; 5.6.2). For such students there are added benefits of the goal-directedness which results from having to integrate study with other important life commitments.

#### 6.5.1.3 *Motivation*

It appears characteristic of the participants in this study that their motivation is positive. This can be deduced from the high percentage of participants who:

- believe that they will succeed in their studies;
- 'own' the decision to study by distance education; and
- believe that success in their studies is very important to their general progress in life.

In summary it is important to affirm that students entering distance education are essentially no different from those entering traditional education except that there is a greater likelihood of their being subject to a combination of the challenges which have been outlined above. To the extent which it is useful to construct a profile of the 'typical' distance learner, that which emerges from the study is consistent with that commonly presented in the literature: more mature, likely to be in full time employment, having

family commitments, having limited financial resources and time to spend on studies, and motivated to achieve a qualification.

The core challenge in distance education is that the cohort of students which are most affected by educational and socio-economic difficulties is also the cohort which is in the most challenging learning environment.

## **6.5.2 The experience of distance education**

In this section the results reported in chapter 5 are used to construct an interpretation of the individual student's experience of distance education. This experience is made up of the various interactions which the student has with the system and its processes, with lecturers and tutors, with other students, and with learning materials. Through this experience the student develops a learning style and a level of academic literacy.

### *6.5.2.1 Teaching and learning processes in distance education*

In chapter 3 (section 3.3) orientations to teaching and learning as they apply in 'industrial age' organisations and as they are emerging in 'information age' organisations were outlined. In addition, comparisons were made between 'transmission' and 'constructivist' models of teaching and learning. In this section these orientations and models are used to reflect on the experience of participants in this study.

There is evidence in the results as presented in chapter 5 that the experience of learners in South African distance education is consistent with what would be expected from learning in an organisation with an industrial orientation. However, there are signs that systems are being implemented which have information age characteristics.

Central to Dolence and Norris' (1995:4) characterisation of industrial age education is the distinction between a teaching franchise and a learning franchise. The former locks the learner into fixed course and degree structures controlled by the institution with which they are registered. The latter provides learning opportunities to those who need them. Industrial age organisations, including universities, drive the learning process in a relatively rigid bureaucratic way, whereas information age organisations add value by providing customisable 'just-in-time' opportunities for learning which are subscribed to by learners as they are required.

From the results of this study it appears that the learner's experience is most often that institutions are operating in an industrial mode:

- Fixed nature of courses;
- Relatively little opportunity to negotiate course outcomes with lecturers;
- Bureaucratic communications processes; and
- Individual technologies not integrated.

However, some aspects of UNISA's organisation which bring it more into line with the information age include innovations such as:

- Web-based communication;
- Access to face-face tuition at regional learning centres;
- Encouragement of learning groups at regional centres.

The significance for academic literacy development of the foregoing discussion is that information age organisations potentially provide a learning environment more conducive to meaningful construction of knowledge, taking ownership of learning, relevance of courses, and the integration of study with other facets of life.

However, there is one important proviso - living in the information age means having skills and resources to get involved and keep managing one's own learning. If a learner initially lacks the skills and resources, how do they break into a positive self-sustaining cycle of learning?

In section 3.3, Young and Marks-Maran's comparison (in Tait & Mills, 1999) between transmission models of teaching and learning and constructivist models of teaching and learning is presented. The learner's experiences emerging from the results of this study are analysed below in terms of these dimensions of teaching and learning.

There is relatively little evidence from the results of this study that the participants have been involved in learning processes which are constructivist in nature. This claim is made on the basis of a combination of indicators:

- Low level of assignment completion (section 5.4.14);
- Limited contact between students and lecturers and the nature of this contact (sections 5.2.6.1; 5.2.6.4) ;
- Lack of richness of study methods reported (sections 5.2.5.1; 5.4.8);
- Predominance of note making as a study method (section 5.2.5.1);
- Low percentage of students reporting that they are required to develop their own ideas (section 5.4.6; compare section 5.6.3);
- Low level of cooperative learning (Sections 5.2.6.1; 5.4.13);
- Direct observations of interview participants (section 5.6).

It would seem then that the transmission model is strongly in evidence. Many students experience learning as a process of assimilating academic content from learning materials for examination purposes. There seem to be relatively few opportunities for active application of this knowledge, of testing it in cooperative learning situations, or of confirming it in interactions with lecturers. The implications of these observations for the development of academic literacy are discussed in more detail in the following sections.

In summary then, from an organisational development perspective and from a teaching-learning perspective, it has been argued that many students are experiencing distance education which is located in an older industrial/transmission paradigm which has significant shortcomings.

### 6.5.2.2 *Engagement with lecturer and tutors*

In section 6.4.4 an analysis of the results in relation to student contact with lecturers was presented. It showed the generally low level of interaction and speculated that the nature of the interaction which does take place for this sample of students is often a transmission of knowledge in face-to-face tutorials or lectures. In this section a more detailed analysis of the dynamics of this scenario is presented with the emphasis on the implications for the academic development of the individual.

Interaction with a lecturer or tutor facilitates the development of academic literacy in a number of ways. Most importantly, the lecturer is a role model who should embody the academic literacy to which the student aspires. Since academic literacy is a complex of knowledge, skills and values it cannot be embodied, demonstrated or taught through learning materials without the mediation of a lecturer or tutor who has reached a certain level of literacy. Becoming literate is a cognitive and a social process which requires the student to become part of a discourse community, moving from an outsider position to an insider position. The lecturer or tutor is the student's mentor and guide in this process. Even the cognitively very capable student needs to feel a sense of belonging in a discipline. That sense of belonging comes mostly from the assurance of other people who belong.

Secondly, the lecturer or tutor has an indispensable role in engaging with the cognitive development of the student as they attempt to understand the structure and meanings of an academic discipline. Dison and Rule's analysis (in Angéilil-Carter, 1998) of the structure of an academic discipline (see section 3.6) postulates that codes, conventions, concepts, values, canons and skills make up an academic discipline. For the uninitiated student this is an extremely complex structure and much of it is implicit.

Distance learning materials will introduce students to the canon of a discipline by prescribing and suggesting reading. The main concepts, debates and theories are

usually highlighted by various means such as study guides, tutorial letters, assignments and perhaps face-to-face sessions.

Very often the skills required to engage with the canon (primary texts, theories, authorities) and major concepts of a discipline are taken for granted as an outcome of secondary schooling. These cognitive skills such as rehearsal and elaboration and academic skills such as reading, writing and note making. In a face-to-face situation the deficiencies of a particular student's skills in these areas become apparent. Without engagement with a lecturer or tutor these deficiencies are often only seen in a final examination by which time it is too late for many students. Distance courses may attempt to develop cognitive and academic skills more explicitly and better courses do this. But these skills need practice and refinement and that requires interaction between the student and someone more experienced in the discipline.

At the level of concepts and skills therefore it is essential that structured interaction takes place between the student and academic staff. Assignments are the time-honoured method of doing this in all education. If assignments are optional, most students avoid them, as shown in this study. The primary means of developing academic literacy is then not used. Unless the student is very capable and resourceful through previous experience what is left in the absence of developing academic literacy is studying, that is the memorisation of discipline content. The making of meaning about this content is then a matter of chance. As thinking beings, students will make meaning but whether this meaning is aligned with the expected literacy of a discipline cannot be counted on or predicted if the student is learning in isolation. Practically students need to be set tasks which give them the opportunity to make their own meaning of concepts by reading and writing about them and getting feedback on their progress and remediation if necessary. This is a complex process which needs to be mediated by a lecturer or tutor.

So far this discussion has been in the realms of teaching and learning which in some courses at least may be dealt with explicitly. Building on a foundation of fundamental skills and a knowledge of discipline concepts, becoming academically literate in a



discipline requires an understanding of and an ability to engage with the conventions of the discipline. In Dison and Rule's scheme (in Anglelil-Carter, 1998) this involves understandings of structural features of typical forms of communication in the discipline and research methods. The student first needs to comprehend these and then to be able to use them for participation in the discipline. Post-graduate work provides a model of academic apprenticeship which, if extrapolated to undergraduate work, implies a level of lecturer engagement with these processes of comprehension and production in modes of expression. Practically, students need to try it out by writing essays, producing reports, conducting research projects and they need feedback on how they are progressing.

Building then on a structure of knowledge and skills in relation to concepts and conventions in a discipline the student, in order to become more sophisticatedly literate in a discipline, would need to engage with codes (linguistic, intuitive and creative) which have currency in the discipline. In addition, the student would start developing a value system relating to the discipline by understanding what counts as knowledge, and evidence in the discipline and what ethical stances are accepted as valid.

Reviewing the processes outlined in a loose hierarchy above it should be obvious that the student is involved in a highly complex process of acquiring a particular literacy which, to be successful, requires the mediation of someone who has walked the path before, at least part of the way. Distance education fails in its educative mission if it leaves this process to chance or attempts to automate and de-personalise it. It will succeed in turning out graduates with knowledge of discipline content but not of the discipline itself.

#### 6.5.2.3 *Engagement with other students*

Wegerif (1998) argues that people who do not have a feeling of community are likely to be anxious, defensive and that they may be unwilling to take the necessary risks which are required for new learning to take place.

The potential benefits of cooperative learning have been outlined in section 6.4.4. From a theoretical perspective the socio-cultural model of constructivist learning (Young & Marks-Maran in Tait & Mills, 1999:176) is the most useful for explaining the dynamics of academic literacy development as it relates to a student's engagement with fellow students. According to this model, learning is by its nature interactive and co-constructive. The learner evaluates and regulates knowledge and values with reference to a learning group. Therefore, if the distance learner does not interact with a learning group, an important aspect of learning cannot take place and social-constructivist theorists would claim that no authentic learning has taken place. This view is in accordance with the concept of academic literacy as advanced in this study in the sense that academic literacy can be seen as competent functioning in a discourse community. Fellow students are important members of that community as is the lecturer who sets the tone and facilitates and guides interaction.

On-line communication has potential for establishing learning communities for distance learners who experience difficulty in forming face-to-face groups. A caution is necessary in this regard. Kanuka and Anderson (1998) report that much of the interaction in an on-line conference was at the level of 'sharing and comparing' and very little at a more detailed level of engaging with issues, contesting viewpoints and constructing new knowledge. They speculate that this may have been due to a lack of more vigorous facilitation, or a lack of familiarity of facility with the medium. In the South African context there is a strong chance of these conditions holding, so attempts to establish on-line learning communities should incorporate strong facilitation and training in the medium.

#### 6.5.2.4 *Engagement with learning materials*

Naidu and Bernard (1992) describe two models of cognitive processing of content material - generative and mathemagenic. The generative model stresses activities under the user's control which construct an understanding of content, such as concept

mapping. The mathemagenic model stresses activities, under the control of the materials designer through instructions in the text, which serve to focus attention and recall, such as inserted questions and instructional objectives.

The research conducted into learning materials as part of this study has not been comprehensive enough to make general claims about the quality of students' experience in this area. However, the following impressions have been gained from responses to the postal questionnaire and from interviews.

The mathemagenic model is strongly in evidence in materials used by respondents to this study. Materials such as texts and study guides were often described as adequate or not lacking in the essential information. Reading material is rated readable (74% of respondents in the postal questionnaire, see section 5.2.5.2) and understandable (60% of respondents, section 5.2.5.2). Study guides in particular were praised for a number of attributes such as structure, scheduling of learning activities, quality of explanations and statements of outcomes (see Sections 5.4.14 and 5.6.3). When considered with perceptions that courses are strongly content-oriented and also that the balance of learning activities require lower order cognitive skills, an impression is gained of a predominantly mathemagenic model of engagement with learning materials.

The implications of introducing OBE principles in materials design are that changes to the quality of materials and the level of engagement by students with the learning materials are likely to be in the direction of a more generative approach to learning materials. This would involve students more intensely and continuously in making meaning from their learning materials rather than in priming them for content-based examinations. It would also require more activities which challenge students at a higher cognitive level.

If material design is based on OBE principles then, in addition to there being critical outcomes for courses, there will also be specific learning outcomes and assessment of these outcomes. If assignments are voluntary the only way that OBE can operate in

distance education is for assessment to be self-assessment and this is limited by the students' knowledge and metacognitive abilities, which are not yet well enough developed to enable impartial self-assessment. The implication for distance education institutions is that more engagement and contact is necessary with students for the purpose of assessing learning outcomes.

#### 6.5.2.5 *The learning environment and learner support*

The last three sections have looked in detail at the dynamics of academic literacy in relation to the individual's engagement with lecturers, with other students and with learning materials. It is primarily in these interactions that academic literacy is developed. These interactions also form much of what can be described as the learning environment. Other important components of the learning environment include administrative, library and counseling services, which together form the support services provided by an institution. The learning environment is also affected by the living environment of the student, the support of family and friends and access to public facilities which support learning, such as libraries and learning centres.

This study reveals ambivalent attitudes toward support services. In section 5.3, the content analysis of the free responses to the postal questionnaire reveals an almost exclusively negative perception of a range of support functions in the areas of administration, career guidance, communication, scheduling of assignments and examinations and registration. Concern was expressed in a few cases with the level of efficiency of systems and the training of staff. On the other hand, a number of favourable comments were made here (also in section 5.3) about the availability and helpfulness of lecturers and the usefulness of contact sessions at regional learning centres. However, this study also documents students' criticism of the extent and usefulness of feedback on assignments.

#### 6.5.2.6 *The adoption of a learning style by the student*

Ultimately the distance learner must take responsibility for learning by adopting a distinctive personal learning style which facilitates successful development of academic literacy.

In section 3.7.5 Taylor's characteristics of high quality learning and Bonanno's methods of exploring a subject, as well as the work by Kolb and that by de Porter in postulating learning styles, illustrate the range and complexity of behaviours involved in effective learning. The process of developing academic literacy involves an intensive engagement in these behaviours over the duration of a student's course of study. In this process the influence of lecturers and tutors and support systems more generally assists the student to develop a learning style and a level of academic literacy.

With one notable exception (documented in section 5.4.8) very few of the participants in this study showed a well developed sense of a personal learning style and an engagement with a rich array of learning methods. There is little evidence from this study of a systematic approach by institutions to provide effective learning assistance and development which would improve this situation.

Finally, the successful student is one who develops a positive sense of identity as a learner. This will be influenced by many of the factors which have been discussed above: personal attributes, the literacies which have been acquired and the learning style which has been developed through interactions with self, mentors and peers. It will also accord with the life goals of the student. 'Identity construction is a dynamic process grounded in biography and history, subjected to description and reflection, and constantly presented to and negotiated with other people' (Walker, 2000:7).

## 6.6 CONCLUSION

The intention of this chapter has been to make sense of the experience of the participants in the study in a way which takes note of theory but remains true to the meaning participants would be likely to attach to their experience. This interpretation has been approached from two perspectives: the systemic and the individual.

In drawing together the empirical and theoretical strands of this study a complex image of distance education has emerged which is made up multiple patterns. These most dominant of these patterns include the following:

- A confirmation of the increasingly central place of distance education in higher education provision for students who need flexible and open learning systems;
- A system in transition, attempting to transform towards more openness, to provide more effective teaching, learning materials and support structures;
- A legacy of stereotyped patterns of learning, teaching and interaction in the 'transmission' mould, with pockets of innovation tending towards more progressive, 'constructivist' approaches;
- A critical lack of contact and engagement between students and lecturers and between students themselves, coupled with a dearth of formal opportunities, such as assignments, for developing academic literacy;
- Major needs for intensive learning support and development for students, only peripherally met by recent interventions in the areas of course design, on-line learning and support, and regional contact centres.

In response to the image of distance education which has emerged through reflection on the results of this study, the final chapter makes recommendations for more effective practice and further research.

## CHAPTER 7

### CONCLUSIONS AND RECOMMENDATIONS

#### 7.1 INTRODUCTION

The final chapter of this study is devoted to the presentation of research conclusions and recommendations for further research and for distance education practice. The chapter begins with a critique of the research methods as a justification of the conclusions and recommendations which follow.

#### 7.2 CRITIQUE OF RESEARCH METHOD

The nature of this study is highly eclectic in its use of a range of methods and instruments. It is therefore all the more important to review critically the mix of methods and instruments used as they do not fall neatly into a particular paradigm with standard answers to questions of sampling, reliability and validity.

In this section a critical review of methods is presented, sampling techniques are evaluated and questions of reliability and validity are discussed.

##### 7.2.1 Combining quantitative and qualitative methods

In chapter 4 the research cycle was described (section 4.4) as consisting of a deductive phase (familiarisation with theory and hypothesis formation) and an inductive phase (analysis and interpretation of data leading to conclusions and recommendations). The process of data gathering lies somewhere between these two phases, being neither inherently deductive nor inductive. The instruments used in data gathering are the result of a deductive process of applying knowledge (gathered from literature surveys)

to form hypotheses. Inductive processes are applied in interview situations as some questions are formulated by the interviewer on the basis of generalisations which start forming in the mind of the interviewer as a way of explaining and interpreting the reported experience of the interviewee.

In this study a mix of quantitative and qualitative methods were used with a stronger emphasis on the qualitative. Quantitative aspects were restricted to the postal survey in which responses to a range of questions were gathered using a five-point scale. Descriptive statistics were used to report distributions or means of responses. The only other area of the study where quantitative methods were used was in categorising and tallying free responses. The significance of this limited use of quantitative methods is simply that it gave the researcher an overview of opinions based on a representative sample. Where there were strong quantitative indications of important issues these could be followed up in more depth in by qualitative methods.

The combination of quantitative and qualitative methods used in sequence in investigating general trends in attitudes through to trying to understand the specific issues at the level of individual experience gave the researcher confidence that issues identified were based on real experience of a representative sample as well as giving the freedom to investigate specific cases in more depth. Implementing the research cycle was also combined with progressively more specialist reading in the areas which emerged from the empirical work. This served to deepen understanding of phenomena and assisted in being able to conduct interviews. The researcher's experience of the research cycle supports claims in the literature (van der Merwe, 1996:279; Seidman, 1991:5) that the use of multiple methods is part of a natural cycle of enquiry and that it is necessary in investigating various levels in a research interest.

### **7.2.2 Reliability**

In this section the concepts of reliability and validity are explained and discussed in relation to the research design and implementation of the study. The reliability of



student self reports is assessed and the reliability of survey data is evaluated in relation to sampling and the practical implementation of the research.

The validity of empirical findings and interpretations is critiqued in relation to the constructs used in the survey and interview instruments. Finally the quality of the research is assessed according to the criteria suggested by Guba and Lincoln (see section 4.4).

#### 7.2.2.1 *Reliability of self-reports*

In a study such as this, the reliability of the responses by participants needs to be examined critically. Grayson (1999, 116-118) presents evidence from a range of studies to suggest that self-reports tend to correlate positively with objective test measures of knowledge, skills and values. The magnitude of this positive correlation ranges from low to moderate with higher correlations being obtained in conditions where there is a very strong correspondence between objective test items and survey questions. Grayson also reports higher correlations for self-reports dealing with knowledge than for reports on more complex cognitive processes. The conclusion that must be drawn from this evidence is that results from self-reports need to be interpreted with caution. In the surveys conducted in this study there are a number of questions which deal with more complex cognitive process and the results from these in particular should be interpreted critically.

Grayson (1999:116) also notes that the validity of self-reports are influenced by the clarity of questions asked and the seriousness with which surveys are treated by participants. For the postal survey it was difficult to judge the seriousness with which the participants completed the questionnaire since the majority of items required a responses on a five point scale. However, a small number of questionnaires (3) were discarded from the sample either because a substantial number of responses were missing or because the pattern of responses seemed suspicious (5,4,3,2,1,2,3,4,5). The fact that almost 60% of participants took care to complete a voluntary reflection of their

experience of distance education increased confidence in the seriousness of the other questionnaire items.

Further, whereas the fact that participants in this study volunteered and were sampled by convenience introduced difficulties in judging the representivity of the sample, it increases the likelihood of responses being serious, thus increasing the validity of results.

In a multimethod study such as this, the individual nature of all the data collected may be questioned. Barbour and Kitzinger (1999:5) outline the usefulness of focus groups as a method for exploring attitudes and opinions which may be sensitive to group interaction processes and group norms. From a theoretical perspective, Barbour and Kitzinger argue that the individual nature of opinions can be challenged by questioning whether opinions are not more a product of interaction within a particular context than a stable attribute of individual subjects. The lack of group data on any aspects of the present study is a possible weakness of the research design and further research on attitudes to the development of academic literacy should take account of this potential criticism.

For research conclusions to be reliable it is necessary that the sampling methods used in this study can be defended as yielding samples which are sufficiently representative of the population which is the object of the study, namely undergraduate distance learners. Three main questions arise in this regard: firstly, the advisability of only sampling students who are still in the system (i.e. have not been unsuccessful); secondly, the sampling methods used; and thirdly, the size of samples.

#### *7.2.2.2 Sampling of successful students*

One of the difficulties in sampling for a study of this nature is that the selection of a sample of students who are currently registered with a distance education institution restricts the sample to students who still have a chance to be successful in their studies

(Grayson, 1999:114). For example, when asked about whether they believed that they would be successful in their studies, only 10% of the participants in the postal questionnaire responded negatively. This bias in favour of selecting successful students is increased by the fact that students volunteered to complete questionnaires (Allison *et al.*, 1996:73). It is likely that students who are succeeding in their studies would be more inclined to participate in studies like the present one.

The question therefore arises to what extent the finding of this study would have been different if a representative sample of students had been chosen from those who have been successful and those who have been unsuccessful in studies. Clearly this would have changed the nature of the study since students would have been participating with the benefit of hindsight. There is an added difficulty in identifying 'unsuccessful' students because in many cases it is difficult to say when a student is unsuccessful since it is in the nature of part-time and distance studies that many students return to their studies at a later date, having been relatively unsuccessful at a first attempt.

As a consequence of the sampling difficulty outlined above it must be accepted that the results and recommendations of this study are based on samples of students which are somewhat skewed towards 'success'. In this sense the findings and recommendations represent a best-case scenario.

It can be argued that a best-case scenario is a strong outcome from a research project such as this in the following respects:

- Positive work being done in distance education is acknowledged.
- Concerns or problems which are raised are unlikely to be isolated expressions of discontent from disaffected students. Such concerns or problems can therefore be accepted as needing serious attention.
- The quality of reflection of the kind of student who is inclined to participate is likely to be higher than that of students who are de-motivated by their experience.

### 7.2.2.3 *Sampling methods*

Convenience sampling was used to select the participants in all of the surveys conducted. This decision was taken for two main reasons. As argued in section 4.8.3, this was dictated by the lack of the necessary resources to conduct random sampling on such a large, diverse and dispersed student population. Random sampling for such a population is simply beyond the means of an individual researcher.

It can also be argued that the sampling for the study as a whole has elements of purposive sampling (Cohen *et al.*, 2000:99) in that a suitable sample was built up, over the course of the various surveys, which suited the purpose of the researcher. That is, to collect a sample of opinions which was representative enough to highlight the major issues facing distance learners. The fact that the sample was drawn from two institutions and a range of locations, using different methods, ensured a satisfactory degree of representativeness of the opinions expressed.

Finally, the nature of the research is largely qualitative. Since statistical significance of results is not used as a research tool, the judgement of appropriateness of sampling methods rests on the extent to which a diversity of opinions was generated. In these terms, it is argued that the sampling methods employed were appropriate and effective.

### 7.2.2.4 *Sample sizes*

The sample sizes which were obtained (see Sections 4.8.3 to 4.8.6) were typically lower than the researcher had hoped for. In general terms sampling error is proportional to the variability of the population and inversely proportional to sample size (Cohen *et al.*, 2000:97). Therefore bigger samples would have engendered more confidence in inferences and deductions which have been made in the study. This can be seen as a relative weakness of the research. In mitigation of this weakness it should be noted that purposive sampling and the use of multiple instruments ensured a wide enough range of opinions to be useful for the qualitative purposes of the study, namely description

and interpretation. Further confirmation of the reliability of the data is provided by the relatively close correspondence between the samples and the parent population on a range of demographic measures such as gender, language and distribution according to academic faculty (see section 5.2.1).

### 7.2.3 Validity of constructs and interpretations

Validity of research commonly refers to the extent to which the methods and instruments used in the research measure what they are supposed to measure. This is known as **face validity** (Cohen *et al.*, 2000:105). A further meaning of validity is that of **external validity** which is the extent to which the research findings can be generalised.

Face validity is influenced by two major sets of factors:

- The quality of the design of questions used in surveys and interviews;
- The quality of responses given to the questions.

In the first respect, that of the quality of design, the face validity of the present study is enhanced by the careful construction of a set of questionnaire items from a study of the combined literature on distance education and academic development. These questions were used in a pilot study, improved further, and then submitted to a professionally trained educational researcher for comment. Further improvement and some fundamental reformulation was undertaken before the questionnaires were distributed to respondents.

The face validity of the study is also enhanced by an attempt to maintain consistency across the different instruments which were used. For example, the e-mail questionnaire to students was based strongly on the design of the postal questionnaire. In addition, the questionnaire sent to lecturers dealt with the same areas as the one sent to students. Lastly, the interview schedule, while including more in-depth questions, dealt with the same broad range of questions as the other instruments. There is therefore a high degree of consistency in the questions used in all instruments and since the original conceptualisation of the questions was based on careful consideration of the literature

and refined in consultation with a professional researcher, a claim of enhanced face validity in this respect is not without solid foundation.

The quality of design, while satisfactorily enhancing the face validity of the research would have been further improved by the use of standardized instruments. However, it was not within the scope of the resources for this research to consider the use of such instruments. This is arguably a weakness of the research although the custom designed research instruments which were used have the advantage of being tailored to the issues which were of most direct significance to this study. This is important in a study of this nature which is context sensitive and interdisciplinary.

In respect of the quality of responses to the various instruments, there were very few responses which were judged to be suspect for reasons of a lack of care in answering or a failure on the part of respondents to answer correctly or fully (see Cohen et al., 2000:129). Instances such as these are documented in section 7.2.2.2. A strength of the research is in the use of triangulation and the consistency of findings which resulted. For example, in addition to their answers to objective items of the postal questionnaire, about 60% of respondents voluntarily wrote about their experience of distance learning. This improved confidence in the authenticity of the responses as a whole because it indicates a degree of commitment to the task.

Assessing the external validity, or the degree to which the findings of this study can be generalised to other contexts, rests on a combination of the effectiveness of sampling and the level of generality of the questions used and the issues probed. The good fit between the convenience samples and the parent population (see Sections 4.8.6 and 5.2.1) gives confidence of the representivity of the findings and therefore also of the generalisability. However, external validity could have been further enhanced by larger sample sizes and as stronger concentration on lecturer perceptions as a cross check of student perceptions. External validity is further enhanced by the favourable fit between responses to different instruments, termed convergent validity (Cohen *et al.*, 2000:121). The degree of triangulation employed in the research is considered to be a strength.

## 7.2.4 Research quality in constructivist perspective

In section 4.4, Guba and Lincoln's (1998:213-4) criteria for research quality were introduced. These constructivist criteria are suitable for a study of this nature since it is designed to make use of a range of quantitative and qualitative methods to illuminate the experience of distance learning. A more positivistic orientation to evaluating research quality in terms of statistical measures of significance and hypothesis testing would not be appropriate for the predominantly qualitative, illuminative methods used in this study. Guba and Lincoln's criteria are grouped into trustworthiness criteria and authenticity criteria. This division is used below to critique the quality of this research.

### 7.2.4.1 *Trustworthiness criteria*

The research is considered to be **credible** in the following terms:

- The instruments used well known and tested methods for gathering data: the structured questionnaire, semi-structured questionnaires (by e-mail) and interviews conducted with an interviewing schedule;
- Pilot studies were conducted with selected students and the instruments used were refined where necessary;
- Research data has been carefully recorded and processed by standard methods including descriptive statistics, transcription of interview responses and content analyses of free responses.

Transferability is that quality of research which transcends particular incidences and makes the research findings more generally applicable and useful. The degree of transferability depends to a large extent on how well the samples chosen represent the parent population. In this study, due to convenience sampling, no strong claim can be made for transferability. However, the analysis of the samples for the postal questionnaires in terms of demographic features (see section 5.2.1) reveals strong

similarities in between the sample and the parent population. Inferences drawn from the data from this survey are therefore likely to be moderately transferable. Transferability, or generalisability has not been considered a high priority in the qualitative research tradition (Schofield in Hammersley, 1993:91) since the primary goal of qualitative research is illumination and interpretation rather than prediction. However, a moderate claim for generalisability based on suitable sample choice is a positive outcome for research of this kind.

Dependability is the characteristic of research which ensures that the findings are reliable. This criterion has been discussed above in relation to face validity. The research is considered dependable in this respect.

The findings of this research are confirmable, or replicable, in that all the instruments and methods used have been documented. The sampling method could be replicated and a similar sample size achieved. Under these conditions similar findings could be expected. Conversely, if radically divergent findings were achieved it is likely that a change in the environment would have occurred in the interim.

In summary, this research is considered to be of acceptable quality when judged by the trustworthiness criteria of Guba and Lincoln (1998). The research has strengths in the area of credibility and dependability. The research project would have needed to have been on larger scale with bigger, more widely distributed samples in order to motivate stronger claims for transferability and generality.

#### *7.2.4.2 Authenticity criteria*

Guba and Lincoln (1998:213-4) list the following criteria for judging the authenticity of research: fairness, ontological authenticity; educative authenticity; catalytic authenticity; and tactical authenticity. To a large extent the researcher is not in a good position to judge his own research according to these criteria because he is naturally biased to thinking that the research is authentic. An impartial reader is in a better position to



judge the research in these terms. All the researcher can do is to document elements of the research design and implementation which were intended to engender authenticity.

The research is intended to be fair to all parties involved. The researcher is not directly involved in distance studies as a student, lecturer or administrator so the research is motivated purely by an interest in the field and a consciousness that independent, lifelong learning is an important facet of the future of all education. The lack of direct personal involvement at the time of the research made it easier to adopt an impartial attitude.

Ontological authenticity is understood as a quality of the research which respects the position of the individual as a participant in the research and treats the research findings with a sensitivity to the meaning that it holds for individual participants. The inclusion of a number of opportunities for in-depth personal comment by participants, culminating in the personal interviews enhances the potential authenticity of the research at an ontological level. In the narratives which have been constructed from the research data, care has been taken to do comprehensive content analyses and use these as conceptual frameworks for the narrative.

From an educative point of view the research is authentic and worthwhile in the sense that it deals with a fundamentally important aspect of learning in higher education, that of independent learning in an environment which is rapidly demanding this competency.

The catalytic authenticity of the study is understood to be the extent to which it will lead to change in the theory and practice of distance education. Bearing in mind that this is an academic study conducted through surveys, it is unlikely that its catalytic potential is as significant as other forms of research might have been. For example, action research projects in the areas of learner support and curriculum development would be more effective catalysts for improving practice.

In summary then, the research is considered to be authentic in some important ways but it suffers somewhat in its distance from the actual practice of distance education because the researcher was not in a position to get involved in real projects.

### 7.3 RESEARCH CONCLUSIONS

Since this study is illuminative in intent and eclectic in its use of methods, the research conclusions are broad statements describing the researcher's best judgement of what has emerged from the cyclical process of research.

On reflection at the conclusion of this study, it can be seen clearly that the research question was a qualitative framework within which to study the development of academic literacy rather than a question which would be answered in a quantitative manner.

The results of this research have shown that most students in the sample considered their academic literacy to be sufficiently well developed to cope with the demands of distance learning (see section 4.6.1 for a statement of the research question). This conclusion is supported by the high percentages of respondents who believed that they would be successful in their studies and who believed that their academic skills, such as academic reading and writing presented no great problems.

However, this affirmative answer to the main research question must be qualified by noting the limitations of students' perceptions of their skills and competencies in this area. In important ways the quality of the responses betrays a shallowness and uniformity in many students' approach to learning. It may be that this is appropriate to the nature of the challenge set by the courses being taken by the respondents as there are indications of a strong emphasis on factual content and the assessment thereof. In these terms it makes sense that a strong need emerging from the research was for increased direct teaching at learning centres. Students clearly felt that the more they can be taught the content the better they will be able to answer examination questions. Where more

detailed discussion was possible in interviews, a picture emerged of a lack of engagement with lecturers, a lack of compulsory assignments precluding the chance of detailed development of academic skills, and the dominance of preparation for objective assessment as the main focus of study.

The study therefore provides qualitative support for the 'deficit' hypothesis as stated in section 4.6.1. Students who perceive their academic literacy to be inadequate to enable them to cope with their studies are likely to hold this perception for a variety of reasons including:

- The experience of shortcomings in their secondary education;
- Limited contact with lecturers and tutors;
- Limited contact with peers;
- Limited opportunity for in-depth engagement with learning materials;
- Language difficulties.

The 'competency hypothesis' (see section 4.6.1) is supported only in the respect that students who believe that their academic literacy is adequate or well developed in relation to the challenges of distance learning are likely to hold this view because of an adequate secondary education and because of relatively well developed academic skills or language competence. Sufficient and productive contact with lecturers and tutors; effective contact with peers; and sufficient opportunity for in-depth engagement with learning materials, do not seem to be necessary conditions for students who consider their academic literacy to be adequately developed. On the contrary, these students are likely to be seeking greater academic stimulation and more substantial intellectual challenges than what is offered by their courses.

In terms of the 'environment hypotheses' (section 4.6.1) there is little evidence that study materials used by students have incorporated effective approaches to developing the academic literacy of students. Similarly assessment methods seem to emphasise lower order cognitive skills such as the recall of factual knowledge. There is evidence that

learner support structures are not uniformly provided in distance education to effectively support the learning of students.

In more general terms the strongest findings of the study are as follows:

- Transmission models of teaching and learning are still very much in evidence although some innovation is taking place in the areas of support, communication and materials development;
- For many distance learners there is a critical lack of engagement with lecturers and with fellow students which precludes meaningful development of academic literacy;
- For the most disadvantaged students, access to sufficient learning support, a prerequisite for academic literacy development, is problematic.

#### **7.4 RECOMMENDATIONS FOR FURTHER RESEARCH**

Perhaps the most valuable aspect of a study as broad as this is in its overview of the state of distance education and of the influences impacting upon it at present. The study raises many important questions which remain unanswered.

##### **7.4.1 Prior literacies**

There is clearly great variability in the samples used with regard to the prior literacies of students beginning distance education and the interaction between these and literacies required in higher distance learning. However, the present study lacks detailed knowledge of what literacies students come with into distance education. There is a need for qualitative and quantitative research in this area. Qualitative research is needed to illuminate the experience of students adapting existing literacies to new demands. Quantitative research would attempt to provide a more objective measure of the competency levels of entering students with regard to a range of literacies. Clearly

the latter type of research would need to take into account the situated nature of academic and other literacies.

#### **7.4.2 Study process inventories**

Since the ability of students to study independently is so important in distance education it is important to consider further research into study process inventories which are adapted to South African conditions. Because of the resources and range of expertise required, such inventories could only be undertaken as part of a large scale research project by distance education institutions and could perhaps be integrated into initial courses as part of developing academic literacy. In spite of the arguments in this study for qualitative methods the search for reliable and valid standardised instruments for monitoring study processes should continue. The successful development and use of such inventories would provide institutions with a means of keeping track of the study capabilities of its students and may provide the basis for support, development or even remediation.

#### **7.4.3 Learning development courses**

The stereotyped approach to studying which emerged for many of the respondents in this study indicates that on-going research is needed on appropriate methods of inducting students into academic cultures and how these methods can be integrated into the study of a particular discipline. It would be important to monitor the effects of such courses.

#### **7.4.4 Design of learning materials**

The reconceptualisation of distance courses according to OBE principles has begun to take place in distance education courses. There is a need to monitor a range of factors in

this area with respect to effectiveness in developing academic literacy. These factors include:

- The extent of redesign of materials;
- The processes being followed in design;
- Responses of students to new designs;
- Impact of re-designing courses on the resources of distance education institutions;
- Changes in assessment policy and practice as a result of new course design;
- Changes in patterns of contact between students and lectures and among students as a result of redesign of materials.

#### **7.4.5 Staff development**

Staff development is important for the effective participation of teaching staff in new approaches to teaching and learning at a distance. The role of lecturers and tutors in facilitating the academic development of their students is crucial and should be the subject of on-going research.

#### **7.4.6 Monitor the progress of on-line learning**

Since on-line learning is an important new resource for the delivery of courses and for supporting students there is a need to research the literacies required by on-line learning in a South African distance education context. The impact on learning styles and motivation of students should be monitored. It will also be important to continue research into the extent to which information and communication technologies will influence the amount and nature of the interaction between the students and lecturers and between students themselves.

A number of technical factors potentially have an impact in this area. These include affordability of the technology required, access to the technology and the resources

required by institutions for the realistic and successful implementation of on-line learning.

#### **7.4.7 Role of regional learning centres**

Since regional learning centres provide an important support service to distance learners and are seen as a key element of UNISA's strategy for improving learner support, their role in providing an effective learning environment for distance learners should be studied. Of interest in this regard is whether learning centres can provide the opportunities for in-depth engagement in learning processes and in the development of academic literacy which seems to have been abrogated by teaching staff by virtue of making assignments voluntary.

#### **7.4.8 Institutional collaboration**

As learning becomes progressively distributed and de-coupled from particular institutions, with learners seeking the most appropriate learning opportunities as required, institutions could benefit from developing cooperative approaches to providing learning support.

The following quotation from Rockwell, Furgason and Marx (2000) provides an appropriate conclusion to this section:

'In summary, distance educators feel that very important research and evaluation needs for distance education should focus on (a) cooperation and collaboration among institutions, (b) designing the educational experience for the distance learner, (c) teacher preparation, and (d) educational outcomes.'

## 7.5 RECOMMENDATIONS FOR DISTANCE EDUCATION PRACTICE

Distance education clearly faces major challenges internationally and in South Africa and a study of this nature should provide useful recommendations for the improvement of distance education practice. The following recommendations stem from the results of this study and the interpretation of those results.

### 7.5.1 Re-introduction of compulsory assignments

One of the strongest findings of the study is that there is a general lack of interaction between distance learners and lecturers which impedes the development of academic literacy because the learner does not have the opportunity to work on academic skills under the guidance of an experienced academic. It is considered critically important for the distance education sector that a more general flow of dialogue at an academic level between students and lecturers is established. It is recommended, therefore that compulsory assignments should be reintroduced in all courses as a matter of priority.

Distance education institutions should resist the temptation to maintain or grow student numbers for financial benefit at the expense of quality of academic interaction. In the medium to longer term this could be counter-productive even in financial terms since the greater choice and flexibility offered by new learning technologies and accreditation frameworks will increasingly enable students to choose institutions which attend to their learning needs.

Since the processing of assignments adds very significantly to the workload of institutions, careful management of the mix of assignment types would be necessary if compulsory assignments were to be introduced. Objective tests could form the bulk of assignments so that institutions could take advantage of automated marking. However, assignments involving higher order cognitive skills should be included and where appropriate these assignments should require substantial academic writing based on research.



### **7.5.2 Continue improving learner support**

Considering the disadvantaged position of many learners in South African distance education, it is important for institutions in this sector to continue improving learner support. The following suggestions are offered in this regard.

Improved interaction between students, lecturers and support staff should be a major goal. Regional learning centres are an important means of achieving this goal and will need to be strongly supported if they are to expand and improve their services. Enhanced access to resources, particular libraries, through these regional learning centres should form part of this goal.

Greater use of electronic media is a strategic necessity for distance education institutions. The power of the technology to enhance access to information and to facilitate communication must be harnessed to add value to the limited opportunities afforded to distance learners for personal interaction in the context of their academic studies.

At the same time improved telephone access could go a long way to improving communication and contact, which in turn assists the student in feeling that they belong to a learning community. Establishing more toll-free numbers should be considered as a means of improving telephone access.

The on-going development of academic, support and administrative staff in distance education is a high priority. Institutions cannot afford to create the impression that staff are under-qualified or lack understanding or empathy for the needs of students. A feeling of understanding and respect from staff will build a stronger sense of identification with the institution and should have significant benefits in student retention and performance. At a more detailed level it is important for academic staff to understand the dynamics of the development of academic literacy and to be able to

apply this understanding in their distance teaching. This involves a range of activities such as course and materials design, design and management of assessment, responding to student assignments in a manner which gives them opportunities to build their academic literacy, and interpersonal skills in dealing with students in a way which improves the chances of their engaging at a deeper level with their learning.

The skills and attitudes which are necessary to support students in the ways suggested above do not come naturally to all staff. A major programme of staff development needs to be sustained in order to improve performance in this area.

Learner support improvement of the types suggested above should be combined with better advertising of available support resources. The lack of resourcefulness of students shown in regard to their learning styles in this study is likely also to extend to their ability to identify support opportunities proactively. Effective advertising of support services is therefore vital.

### **7.5.3 Build academic literacy development into materials and processes**

A major initiative is needed to include exercises for explicit academic literacy development into the learning materials of all initial courses in distance education. This should be done in conjunction with the re-writing of materials along OBE lines. The academic literacy exercises should be integrated into the learning of the academic discipline but made explicit enough in the earlier stages of courses to enable students to identify the new skills and attitudes which are required and to give them practice in building these.

Time on task in academic reading and writing should be encouraged and required by assignments. In conjunction with this, effective ways of responding to student writing which will encourage them to engage with the disciplines they are studying must be found. As a result of their intensive engagement with a writing to learn approach Coetzee and Boughey (1994) wonder how much support students need in developing

writing practices which are conducive to meaningful learning. This is a salutary reminder to distance education practitioners who have little contact on this level with their students.

In addition to explicitly involving students in developing their academic literacy, more ways should be found of acculturating students, of making them feel like insiders. This can only happen through the creation of opportunities for discourse, with lecturers and with peers, in a community of people who are interested in the discipline that they are studying. Perhaps virtual methods of involving students could be devised to substitute for residential schools if these are not feasible. A combination of face-to-face sessions and on-line communication can provide the necessary environment for making students feel that they belong to an academic community.

#### **7.5.4 Extend on-line learning and communication facilities**

The influence of the new knowledge media on the future of distance education cannot be overstated. The future of distance education is inextricably bound to a web of information and communications technologies which will increasingly be the primary means of communication between students, lecturers and institutions. It is therefore critical for all distance education institutions who wish to remain competitive, to extend their provision of on-line learning and communication facilities.

Since UNISA is likely to continue to attract many students without the resources to link to computing networks privately, it is important to maintain a network infrastructure at regional learning centres to facilitate on-line access for these students.

#### **7.5.5 Institutional research on learning patterns and support needs**

Without coordinated institutional research it will be difficult to determine priorities for innovation and for the use of limited resources. It is essential that distance education

institutions develop well-coordinated research programmes in the areas of student learning and support. The recommendations for further research, which were made in section 7.4, should be considered in this regard.

## 7.6 CONCLUSION

Distance education has a crucial role to play in the future provision of higher education for South Africa. As the society continues to transform into the information age the demand for all types of learning will increase even further. Coupled with the backlog of education and training from the past this transformation will present great challenges to distance education institutions to provide flexible, high quality courses which are both academically credible and relevant in the marketplace. Distance education as a system has the inherent flexibility to respond positively to these challenges both in respect of maintaining quality and in opening up access to increasing numbers.

However, with new information technologies rapidly making on-line learning approaches feasible for all higher education institutions, the established distance education providers are facing strong competition. Students are no longer captive receptacles of static knowledge. They will vote with their fingers through their keyboards, to learn with course providers who offer what they are looking for. A key to competitiveness may be the value added to basic course structures in terms of creating a learning community and supporting the learner. For academic courses this would entail opportunities for building academic literacy through meaningful discourse with lecturers who are interested in the students' intellectual development.

This study has probed, from many angles, the question of how academic literacy is developed in undergraduate distance education in South Africa. It has come up with disappointingly few examples of intensive engagement with the process of developing the basic academic skills which are the cornerstones academic literacy. All too often the default mode of learning has seemed to be the learning of content, driven by summative assessment. The highly motivated student who comes out of secondary education with

well developed skills may take this in their stride by adopting a strategic approach to obtaining a qualification. However, for the student with underdeveloped skills, little prior exposure to independent learning, poor self-management skills and the lack of personal and financial resources to get assistance, this approach can be disastrous. Such students seem to seek remediation through direct teaching, which undermines the potential for self-directed learning which should be the hall-mark of distance education.

Distance education providers like UNISA have the organisational capacity to meet the challenge of providing meaningful learning opportunities on a large scale. Improved approaches to learning support and the reworking of courses according to outcomes based principles hold promise as ways of transforming practice so that meaningful learning opportunities are created, particularly for those students with a poor secondary school background. However, the present study uncovered only isolated references to the renewal of practice along these lines. It is clear that substantially more momentum is required if the challenge is to be taken up.

It must be conceded that a study of this scale and method is unlikely to uncover exciting innovatory work in the area of academic literacy development and no doubt work of this kind is taking place. However, to the eye and ear of the researcher, the distance education landscape experience of students has seemed somewhat barren and lacking in the sort of depth and intensity which is required for students to develop their academic literacy to the point that they become effective independent learners.

It is hoped that the modest insights gained through the various methods of surveying the experience of distance learners, and of trying to make sense of that experience by reflecting on relevant theory, along with the suggestions which have been made for further research, will have been sufficient to convince the interested reader of the sense in the recommendations which have been made.

It would seem that all the effort which has gone into the rationalisation of distance education in South Africa in the name of equipping the sector to meet national

educational priorities will come to nothing if the courses and support offered to ordinary students do not give them the opportunity to engage authentically with their higher education.

“There is little to be gained by trying to ‘prove’ that one educational method is superior to another. We should turn our attention to more worthwhile activities such as exploring the characteristics and use of oral and written communication as well as synchronous and asynchronous methods in realising educational outcomes. We must also better understand the unity of reflection and discourse in acquiring meaningful and worthwhile knowledge. Assimilating information without meaning or value is too common an outcome of both the lecture and correspondence approaches to learning. Optimising deep and meaningful learning necessitates an appropriate balance of reflection and confirmatory dialogue. This is true for traditional higher and distance education.” (Garrison, 1999:2)

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Where world wide web resources have been referenced pages have been omitted because page sizes vary on web documents. Only in cases where the document retrieved is in PDF format is it possible to state pages. Web resources are also referenced by the date retrieved which is stated after the URL. Only the month and the year during which documents were last retrieved are given since many of these sites were accessed a number of times, making a specific retrieval date hard to specify.

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APPENDICES,

*OPSOMMING*

&

KEY TERMS



## APPENDIX A - POSTAL QUESTIONNAIRE

Research  
Use Only

## Student Questionnaire on Academic Literacy in Distance Education

### INSTRUCTIONS

Please respond to all questions by writing down your response or by placing a tick in the appropriate box according to the following examples:

Questions which need a written response:

Year completed matric (or other secondary school qualification):	1999	<input type="checkbox"/>
------------------------------------------------------------------	------	--------------------------

Questions for which you must choose from a list:

Year of Registration	First	<input type="checkbox"/>
	Second	<input checked="" type="checkbox"/>
	Third or more	<input type="checkbox"/>

Questions for which you must rate your response to a statement. Place a tick in the box which applies to you as shown in the example below:

3 To what extent do the statements below apply to you?

		Not at all			Fully		<input type="checkbox"/>
.1	<i>I believe that I will be successful in my distance studies.</i>	1	2	3	4	5	

Do not use the block in the right hand margin. These are for research use only.

**When you have completed the questionnaire put it in the envelope provided and post it back to the researcher. The envelope has been addressed and stamped for your convenience.**

**If you have any questions, contact:**

**Philip Collett**

**PO Box 182**

**Grahamstown 6140**

**Phone: 0827844732**

**Section A – Personal and Academic Background****1.1 Personal Details**

Gender:	Female	Male
Age		
Population Group	White	
	Black	
	Coloured	
	Asian	
	Other (specify)	
Home Language	English	
	Afrikaans	
	Xhosa	
	Zulu	
	Sotho	
	Other (specify)	
Other Languages (specify)		

**1.2 Academic Details**

Year completed matric (or other secondary school qualification):		
Matric Aggregate Symbol		
Distance Education Institution at which you are/have registered:	UNISA	
	VISTA	
FACULTY	Humanities	
	Economic Sciences	
	Other (please specify)	
Year of Registration	First	
	Second	
	Third or more	
Number of Modules passed so far		

Research Use Only

**Section B – Academic Literacy**

To what extent do the statements below apply to you? (Place a tick in the appropriate box.)

		Not at all ←————→ Fully				
		1	2	3	4	5
.1	<i>I am studying to enter the profession/vocation of my choice.</i>					
.2	<i>I am studying because my employer requires me to.</i>					
.3	<i>I am studying for personal interest and self-development.</i>					
.4	<i>I am studying because I am unemployed.</i>					


Why did you decide to register with a Distance Education Institution? (Tick the statements which apply to you.)

.1	<i>I was not accepted by another institution</i>	
.2	<i>It is cheaper to study through distance education</i>	
.3	<i>I could not leave my work to study elsewhere</i>	
.4	<i>My family commitments demand that I study through distance education</i>	
.5	<i>The courses I needed were only available through distance education</i>	
.6	<i>(other, please specify)</i>	


To what extent do the statements below apply to you? (For each statement, tick a numbered box.)

		Not at all ←————→ Fully				
		1	2	3	4	5
.1	<i>I believe that I will be successful in my distance studies.</i>					
.2	<i>The decision to study as a distance learner was mine alone.</i>					
.3	<i>My main reason for studying is my interest in the courses I have chosen.</i>					
.4	<i>I am studying only to get a degree.</i>					
.5	<i>It is very important to my progress in life that I succeed in my studies.</i>					


Indicate the nature of information which you received from your present institution before or during registration: (Tick the box or boxes which apply to you).

.1	Information about curricula and degrees	
.2	Information about specific courses	
.3	Information about regional learning centres where you could get assistance in your studies	
.4	Information on the skills required for distance study	
.5	Other (please specify)	


4. How often do the following statements apply to you? (Tick a numbered box.)

		Hardly Ever ←————→ Very Often				
		1	2	3	4	5
.1	<i>When I learn I am often aware of my feelings towards the subject matter.</i>					
.2	<i>I tend to be an observer when it comes to learning tasks.</i>					
.3	<i>I like to think clearly about what I am doing when I am learning.</i>					
.4	<i>I prefer to be actively doing something when I am learning.</i>					
.5	<i>I like learning facts, procedures or principles.</i>					
.6	<i>I make an effort to <b>understand</b> new principles, procedures or theories.</i>					
.7	<i>I enjoy <b>applying</b> my knowledge to solve problems.</i>					
.8	<i>I like <b>analysing</b> a situation, argument or piece of creative work to identify main features.</i>					
.9	<i>I prefer to <b>develop my own ideas</b>, devise plans or programs and do my own creative work.</i>					
.10	<i>I enjoy <b>evaluating</b> a theory, a piece of writing or a design..</i>					

5.1 Indicate how often you use specific learning techniques: (Tick a numbered box.)

		Hardly Ever ←————→ Very Often				
		1	2	3	4	5
.1	Mind maps					
.2	Tree diagrams					
.3	Structure charts					
.4	Summary notes					
.5	Mnemonics					
.6	Rhymes					
.10	Other (please specify)					



6.1 Indicate to what extent the following statements below apply to you? (Tick a numbered box.)

		Hardly Ever ←————→ Very Often				
		1	2	3	4	5
.1	<i>I am involved in extramural activities.</i>					
.2	<i>I study regularly throughout the year.</i>					
.3	<i>I spend more time on completing assignments than on preparing for exams.</i>					
.4	<i>I find that I generally have enough time to do my assignments.</i>					

7.1 How often do you work with other students on your courses? (Tick one of the boxes)

.1	Seldom/Never	
.2	Sometimes	
.3	Often	
.4	Very Often	

7.2 What form does your work with other students take? (Tick the box or boxes which describe the nature of contact with other students)

.1	Studying for examinations together	
.2	Cooperating on assignments	
.3	Clarifying content and concepts	
.4	Tutorials at a learning centre	

7.3 How often are you in contact with a subject lecturer/tutor? (Tick one of the boxes)

.1	Daily	
.2	Weekly	
.3	Monthly	
.4	Seldom/Never	

7.4 Describe the nature of contact with your lecturer/tutor. (Tick the box or boxes which apply to you.)

.1	Teaching	
.2	Help with assignments	
.3	Help with how to study	
.4	Checking on completion of assignments	
.5	Motivation/encouragement	

Research Use Only

7 How do you communicate with your lecturers? (Tick the box or boxes which apply to you.)

.1	Postal	
.2	Phone	
.3	Fax	
.4	Email	
.5	Internet	
.6	Personal	


1 Think about the learning activities and skills required of you in your academic work and try to estimate how much each of the following activities is required: (Tick a numbered box.)

		Hardly Ever ←————→ Very Often				
		1	2	3	4	5
.1	Learning facts or the details of procedures or principles.					
.2	Understanding new principles, procedures or theories.					
.3	Applying my knowledge to solve problems.					
.4	Analysing a situation, argument or piece of creative work to identify main features.					
.5	Developing your own ideas and arguments or doing your own creative work.					
.6	Evaluating a theory, a piece of writing or a design.					


2 To what extent do the following statements below apply to you?

		Hardly Ever ←————→ Very Often				
		1	2	3	4	5
.1	<i>The content presented in the course materials is relevant to what I should be learning in my courses</i>					
.2	<i>I have opportunities to apply the knowledge I gain (for example through practicals or through assignments or in my workplace).</i>					
.3	<i>I have been able to access study materials and library resources satisfactorily</i>					
.4	<i>I am required to use E-learning (E-mail/world wide web) for accessing my course material.</i>					
.5						


My experience as a learner studying by distance education has been positive.

Almost always	Often	Sometimes	Seldom	Hardly ever
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## APPENDIX B – E-MAIL QUESTIONNAIRE TO STUDENTS

Dear UNISA Student,

I selected your e-mail address from UNISA discussion groups hoping that you would be prepared to assist me with my PhD research into learning in Distance Education.

Please respond to a selection of the following questions by reflecting on your experience as a learner in distance education. Your perceptions and insights and feelings are of interest so please try to reflect on the quality of your experience as well as the factual details. Clearly the more detailed and considered your responses are, the more useful they will be. Any use of responses in the research write-up will be anonymous.

If you could respond by 10 February 2002 it would be much appreciated. Please reply to this message, keeping the original questions and writing your responses below the questions you choose.

Thank you very much.

Philip Collett

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1. What are your main reasons for studying?
2. Why did you decide to register with a Distance Education Institution?
3. Comment on your motivation for studying.
4. Comment on the nature and usefulness of information which you received from your present institution before or during registration.
5. How personally involved are you when you are studying?
6. At what levels are you most comfortable learning :
  - a) *learning facts, procedures or principles;*
  - b) *understanding new principles, procedures or theories;*
  - c) *applying your knowledge to solve problems;*
  - d) *analysing a situation, argument or piece of creative work;*
  - e) *developing your own ideas, devising plans or programs/ doing your own creative work;*
  - f) *evaluating a theory, a piece of writing or a design*
7. At which of the above levels do you think you are most often required to work in completing your assignments or preparing for examinations?
8. Comment on specific learning techniques which you feel work effectively for you.

9. How well do you think you manage your learning?
10. Are your academic reading and writing skills well developed enough for you to succeed in your studies? Do you experience any problems in these areas?
11. How well developed are your research and reference skills?
12. Comment on the amount and quality of interaction which you have with (a) your lecturers/ tutors and (b) other students. How important is this interaction to you?
13. Comment on the extent and usefulness of the feedback you receive on your assignments.
14. Comment on the quality of the learning materials which you have had to use in your courses. What was good about them? Which features made it easier for you to learn? Were there negative aspects to the learning materials?
15. In general, has your experience of distance education been a positive one?

## APPENDIX C - E-MAIL QUESTIONNAIRE TO LECTURERS

Dear UNISA Lecturer,

I selected your e-mail address from the UNISA website hoping that you would be prepared to assist me with my PhD research into learning in Distance Education.

Please respond to a selection of the following questions by reflecting on your experience as a lecturer in distance education. Your perceptions and insights and feelings are of interest so please try to reflect on the quality of your experience as well as the factual details. Clearly, the more detailed and considered your responses are, the more useful they will be. Any use of responses in the research write-up will be anonymous.

If you could respond by 10 February 2002 it would be much appreciated. Please reply to this message, keeping the original questions and writing your responses below the questions you choose.

Thank you very much.

Philip Collett

---

1. Comment on what you have observed about your students' skills/abilities in the following areas :
  - a) *learning facts, procedures or principles;*
  - b) *understanding new principles, procedures or theories;*
  - c) *applying knowledge to solve problems;*
  - d) *analysing a situation, argument or piece of creative work;*
  - e) *developing their own ideas, devising plans or programs/ doing your own creative work;*
  - f) *evaluating a theory, a piece of writing or a design*
2. At which of the above levels are your students most often required to work in completing their assignments or other assessments?
3. In your experience what strengths and weaknesses do your students show in managing their learning?
4. Are your students' academic reading and writing skills well developed enough for them to succeed in their studies? What problems do they experience in these areas?
5. How well developed are your students' research and reference skills? What problems do they experience in these areas?

6. Comment on the amount and quality of interaction which you have with your students. How important is this interaction to (a) your students, and (b) to you?
7. Comment on the extent and usefulness of the feedback which you are able to give students in response to their assignments.
8. Comment on the quality of the learning materials which are used in the courses you teach.
9. To what extent are learning materials designed to assist the student to learn more effectively?
10. What do you consider the single most important benefit which students derive in studying at a distance education institution?

## APPENDIX D - INTERVIEW SCHEDULE

### Part I : Life and Learning History

Can you tell me something about your secondary schooling? Thinking about the area of academic learning, what experiences and feelings come to mind ?

Was there anything that you found particularly significant in your learning, either positive or negative?

What areas of academic content or knowledge stand out for you? Were some easier than others to understand or learn?

Can you recall things that specific teachers did to make your learning easier or more enjoyable?

How did you go about studying? What worked for you and what didn't?

How did you respond to reading and writing assignments?

What was your experience of your out-of-school environment in terms of supporting or hindering you learning? Home, hostel, peer group .....?

### Part II : Details of learning experiences in distance education

#### 2.1 General Quality of Experience

What is you overall feeling and experience of being a distance learner? Positive, motivating, affirming or is it threatening or demotivating in any way?

## **2.2 Motivation**

Why did you choose distance learning?

How do you feel about the choice of distance learning?

How important are your studies to you?

How would you rate your level of self-motivation or drive to succeed in your studies?

What benefits will success in your studies bring you?

## **2.3 Discipline knowledge**

What subjects are you studying/ courses are you doing/ have you done?

Do you experience differences in what is required in the different disciplines?

What is the nature of these differences? (clarify and extend responses)

Do you feel that you can participate meaningfully in making sense of the disciplines you are studying?

Do you experience the academic disciplines that you are studying as being realistic and useful or are they to some extent artificial and too abstract?

## **2.4 Learning Materials**

How do you respond to the learning materials which you use in your courses?

Do they challenge you to think and ask questions?

How much content (fact and theory) do they contain?

Do your learning materials include useful exercises and activities?

If so, do you get involved in doing these?

## **2.5 Academic Skills**

Can you comment on the reading that you are doing in your courses: How are you finding it?

What do think about the language that is used in your text books/ study guides?

Can you comment on the writing that you are doing in your courses: How are you finding it?

Are you required to do research, either by reading or by practical investigations? What has been your experience in this area?

## **2.6 Learning Skills**

Could you tell me about any specific approaches you have to managing yourself and your learning materials?

How do you go about internalising or learning facts and theories?

Are there specific techniques that you use in this area?

What do you do when you don't understand something?

How closely do you check your understanding of content and concepts?



## **2.7 Learning style or orientation**

Bearing in mind the dimensions of doing, thinking, feeling and observing, how would you describe your learning style or orientation?

Are you more comfortable with a theoretical or a practical approach?

Do you like to get to the bottom of theories and concepts? Does this interest you? Is it different for different courses?

Are there times when pure learning and reciting of facts is what is required? Often, sometimes, in all courses or some?

## **2.8 Managing your Learning**

Can you tell me what you do to monitor your progress as a student.

How self-aware are you in relation to your studies?

Do you think it important to set goals for your studies? What is your experience in this area?

Do you plan your work, tasks and schedules.

## **2.9 Interaction with Staff and Students**

How much are you in touch with tutors or lecturers?

What is your experience of the interaction which you do have with staff of your institution?

Do you work with other students?

If so, do you feel that this is helpful and in what way?

### **2.10 Support for your learning**

What sources of support do you have for your learning?

Are there any ways in which you feel unsupported in your learning and in being a student?

### **Part III: Reflection on meaning**

How would you describe your image of yourself as a learner?

Do you think distance learning is the way to go? Is it taking you where you want to go?

In what ways is your institution fulfilling your needs as a student? / providing the sort of learning environment that you are looking for?

What other choices are open to you?

## APPENDIX E - PRINCIPLES FOR DEVELOPING AND ENHANCING STUDENT LEARNING

UCoSDA. 1994. A Compendium of principles for Developing and Enhancing Student Learning. Sheffield: UCoSDA, (in Thackwray, 1997:82-83).

**1. Guide the learner**

Be sure learners know about the objectives. Tell them what will be next. Provide them with organisation and structure appropriate to their developmental level.

**2. Develop a structured hierarchy of content**

Some organisation in the material should be clear, but there should be opportunities for learners to do some structuring. Content needs to include concepts, applications and problem-solving.

**3. Use images and visual learning**

Many learners prefer visual learning and have better retention when this mode is used. Encourage them to generate their own visual learning aids, eg charts, mind maps.

**4. Ensure that the student is active**

Learners must have the opportunity to grapple actively with the material. This can be done internally through simply thinking and externally through writing and speaking on a topic and through practice.

**5. Require practice**

Learning complex concepts, tasks or problem-solving requires opportunities to practise in a non-threatening environment. Some repetition is necessary to become both quick and accurate at tasks.

**6. Provide feedback**

Feedback should be prompt and, if at all possible, positive. Reward works better than punishment. Learners need a second chance to practise after feedback in order to fully benefit from it.

**7. Have positive expectations of learners.**

Positive expectations of and respect from those delivering staff training and development are highly motivating. Low expectations and disrespect are demotivating. This is a very important principle, but it cannot be learnt as a 'method'. It should permeate one's whole approach. Indeed, this impinges significantly on notions of academic level.

**8. Provide means for learners to be challenged yet successful.**

Be sure learners have the proper background. Provide sufficient time and tasks which everyone can do successfully, but be sure there is a challenge to everyone. Success is very motivating. This may, at times, feel like you are being asked to manage contradictions!

**9. Use a variety of teaching styles.**

Use a variety of teaching styles and learning tasks so that each learner can use his or her preferred style of learning and so that each learner becomes more proficient at all styles. Pace is an important factor to consider here.

**10. Make the class co-operative.**

Use co-operative group exercises. Assess group work as group work.

**11. Ask thought-provoking questions**

Not all thought-provoking questions have to have right answers but some answers may be better than others. Posing challenging questions can be particularly motivating for some learners.

**12. Be enthusiastic**

Enthusiasm is motivating. One can learn to be enthusiastic and enthusiasm is a powerful motivator of learning.

**13. Encourage learners to teach other learners**

Learners who tutor others learn more themselves. In addition, learners who tutor develop confidence and a sense of achievement.

**14. Care about what you are doing**

If you put teaching on 'automatic', then you cannot do an outstanding job.

**15. Use different forms of assessment**

Use a variety of assessment methods. Use criterion-referenced marking. Provide feedback during learning, encourage learners to peer assess their learning.

## APPENDIX F: GOOD PRACTICE IN UNDERGRADUATE EDUCATION

Principles of good practice in undergraduate education (Chickering & Gamson, 1991, in Cross & Steadman, 1996, 19-26)

- Good practice encourages student-faculty contact
- Good practice encourages cooperation among students - and colleagues
- Good practice encourages active learning
- Good practice gives prompt feedback
- Good practice emphasises time on task
- Good practice communicates high expectations

## OPSOMMING

Hierdie navorsing is gedoen in 'n tyd van belangrike transformasie in hoëronderrys - beide in Suid-Afrika en op internasionale vlak; 'n transformasie wat die heropbou van opvoedkundige prosesse soos die oordrag van inhoud, assessering en ondersteuning vir studente, met die doel om behoeftes van lewenslange leer in 'n inligtingsgemeenskap aan te spreek, behels. Weens die sameloop van tradisionele hoëronderryspatrone en ope leer, meer plooibare benaderings, is 'n belangrike komponent van die hoëronderrysstelsel in Suid-Afrika, naamlik afstandsonderrig, 'n sleutel tot transformasie. Dit is noodsaaklik dat transformasie aan veelvuldige uitdagings gehoor moet gee: verbeterde toegang van groeiende getalle nie-tradisionele studente in hoëronderrys; vernuwing van maniere waarop kennis oorgedra en ontvang word; die inwerkingstelling van nuwe inligtings- en kommunikasietegnologieë; aansluiting by nuwe raamwerke vir kwalifikasies en gehalteversekering, en die rasionalisering en optimale benutting van beskikbare institusionele hulpbronne.

'n Oorsig van die vakgebiede in afstandsonderrig en akademiese geletterdheid onthul dat vroeë tipes "sender"- paradigmas, gekenmerk deur inhoudsgebaseerde korrespondensiekursusse waardeur die afstandstudent in isolasie teoretiese kennis opdoen, strydig is met die ontwikkeling van akademiese geletterdheid. Dit word algemeen aanvaar dat akademiese geletterdheid 'n samestelling is van kennis, houdings en waardes wat die student in staat stel om sinvol en produktief by die akademiese kultuur aan te sluit én algemene persoonlike en professionele bevoegdheids te ontwikkel wat vrugbare maatskaplike betrokkenheid op gevorderde vlak in die hand werk. Dit word algemeen aanvaar dat konstruktivistiese benaderings tot die leerproses die sinvolle ontwikkeling van akademiese geletterdheid tot gevolg het.

Hierdie studie se mikpunte was die:

- **Beligting van die ontwikkeling van akademiese geletterdheid** onder studente wat voorgraadse kursusse deur afstandsonderrig in die Suid-Afrikaanse hoëronderrysstelsel volg;

- Identifisering en **beskrywing van effektiewe praktyke** by instellings wat afstandsonderrig aanbied en die doeltreffende leergewoontes van leerders met die doel om akademiese geletterdheid te fasiliteer;
- Identifisering en **beskrywing van probleemareas** in die ontwikkeling van akademiese geletterdheid onder voorgraadse studente wat afstandsonderrig ontvang;
- Maak van aanbevelings ter verbetering van praktyke en die voorstel van verdere navorsing wat die ontwikkeling van akademiese geletterdheid in afstandsonderrig kan fasiliteer.

'n Verweefdheid van empiriese en teoretiese metodes in 'n siklus van deduktiewe en induktiewe navorsing is aangewend in 'n poging om die mikpunte van hierdie studie te bereik.

Die studie se belangrikste bevindings is soos volg:

- Transmissie-modelle van onderwys word nog dikwels gebruik ofskoon 'n mate van vernuwing ten opsigte van ondersteuning, kommunikasie en die ontwikkeling van leerstof wel plaasvind;
- Baie afstandleerders ervaar 'n kritieke gebrek aan verbintenis met dosente en medestudente wat die betekenisvolle ontwikkeling van akademiese geletterdheid uitskakel;
- Die meeste minderbevoorregte studente kry moeilik toegang tot voldoende ondersteuningstelsels wat uiteraard 'n voorvereiste is vir die ontwikkeling van akademiese geletterdheid.

Die belangrikste gevolgtrekkings wat uit hierdie studie na vore kom is:

- Vernuwing in ondersteuningstelsels, kommunikasie en die ontwikkeling van leerstof sal vinniger moet geskied indien 'n beduidende getal studente voordeel daaruit moet trek;
- 'n Kritieke drempel van betrokkenheid by die ontwikkeling van akademiese geletterdheid deur middel van konstruktiewe leerprosesse in 'n

verskeidenheid van kontekste is noodsaaklik vir aanvaarbare leeruitkomstes in Suid-Afrikaanse afstandsonderrig;

- Ondersteuningstrukture moet aan die meerderheid studente beskikbaar gestel word om billikheid, die behoud van studente-getalle en missievervulling te verseker;
- Volgehoue formele navorsing oor studente se ondersteuningsbehoefes, die dinamiese aard van kennisopname en ervarings van dienslewering is van kardinale belang vir die geslaagde aanpassing van die hoëronderwyssektor.



## KEY TERMS

Academic literacies  
Distance education  
Open learning  
Independent learning  
Higher Education  
Undergraduate education  
Illuminative evaluation  
Cognitive skills  
Learner support  
On-line learning