

**THE UNIVERSITY OF LIMPOPO MATHEMATICS AND SCIENCE
FOUNDATION YEAR COURSE IN ENGLISH AND STUDY SKILLS:
AN EVALUATION**

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**THESIS SUBMITTED FOR THE DEGREE DOCTOR OF PHILOSOPHY IN
ENGLISH AT THE NORTH-WEST UNIVERSITY**

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2007

POTCHEFSTROOM CAMPUS

DEDICATION

This study is dedicated to my mother, Bertha Malebogo Makapan (*nee* Moroke) and the memory of my late father, Andrew Mabanyana Makapan.

ACKNOWLEDGEMENTS

I am greatly indebted to the following people and institutions:

- My promoter, Professor J. L. Van der Walt, for his invaluable guidance.
 - The Ferdinand Postma Library staff for their assistance.
 - Persons and institutions that participated in the survey of foundation/bridging English courses.
 - Staff and students who were interviewed.
 - Mr Noel Manganye and Mrs Rita Olwagen for assisting with data analysis.
 - My husband, Phuti and children, Noko and Malebogo for being there for me when I needed their support most.
 - My extended family for their unfailing support.
 - Colleagues who assisted in various ways during the execution of the study.
 - The National Research Foundation, the University of Limpopo and the University of Limpopo Research Development and Administration unit for financial assistance.
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SUMMARY

The aim of this study was to evaluate the University of Limpopo course in English and Study Skills (ESS), which forms a component of the university's Foundation Year in Mathematics and Science curriculum.

A literature study reviewed the background of previously disadvantaged science students at the threshold of tertiary studies, discussed study skills in English, described course design in English for Specific Purposes and stated how course evaluation can be conducted.

Interviews were conducted with current students and lecturers, data were collected from former students, lectures were observed, teaching materials were analysed and courses at other tertiary institutions were surveyed to evaluate the ESS course.

Although the findings indicated that the students felt they benefited from the course in various ways and that they were equipped to follow a science course, it was found that there was room for improving the course. Improvements that were made included compiling a detailed outline of the course, which included a number of new aspects, such as the detailed specification of teaching-learning activities, and incorporating aspects such as the speaking and listening skills, the integration of grammar and functions, instruction in reading strategies, the inclusion of pair and group work, and tutorial and practical sessions. Suggestions for assessment were also made. The ESS course was revised comprehensively in terms of the course outcomes and a task-based teaching approach.

OPSOMMING

Die doel van hierdie studie was om die Universiteit van Limpopo se kursus in Engels en Studievaardighede (ESS) te evalueer. Die kursus vorm deel van die universiteit se kurrikulum vir 'n brugjaarkursus in wiskunde en wetenskap.

'n Studie van die literatuur bespreek die agtergrond van die voorheen-benadeelde studente op die vooraand van tersiêre studie, studievaardighede in Engels, en beskryf kursusontwerp vir Engels vir Spesifieke Doeleindes sowel as hoe kursusevaluering gedoen kan word.

Onderhoude is gevoer met huidige studente en dosente, data is ingesamel van voormalige studente, lesings is waargeneem, onderrigmateriaal is ontleed en kursusse by ander tersiêre instelling is ondersoek om die ESS kursus te kan evalueer.

Hoewel die resultate aangedui het dat studente voel hul baat by die kursus op verskeie maniere en dat hulle toegerus word om 'n wetenskapskursus te volg, is bevind dat daar ruimte was vir die verbetering van die kursus. Verbeteringe wat aangebring is sluit in 'n gedetailleerde werkskema vir die kursus, wat 'n aantal nuwe aspekte insluit, soos die gedetailleerde spesifikasie van onderrig-leeraktiwiteite, die inkorporasie van die praat- en luistervaardighede, die integrering van grammatika en taalfunksies, instruksie in leesstrategieë, die insluiting van groep- en paarwerk, en tutorial- en praktiese sessies. Voorstelle vir assessering is ook gemaak. Die ESS kursus is komprehensief hersien in terme van kursusuitskomste en 'n taak-gebaseerde benadering.

ABBREVIATIONS AND ACRONYMS

ASDP	–	Accelerated Staff Development Programme
AVMS	–	Average of Mathematics and Science
CSCD	–	Centre for Students Counselling Development
DoE	–	Department of Education
EAP	–	English for Academic Purposes
EGP	–	English for General Purposes
ELP	–	English Language Proficiency
ELU	–	English Language Unit
ESP	–	English for Specific Purposes
ESS	–	English and Study Skills
EU	–	European Union
FTP	–	Finnish Training Partners
HBI	–	Historically Black Institution
HBU	–	Historically Black University
IELTS	–	International English Language Testing Service
ISS	–	Incoming Student Specification
KT	–	Kagiso Trust
L1	–	First Language
L2	–	Second Language
LSP	–	Language for Specific Purposes
M. A	–	Master of Arts
M Ed	–	Master of Education
PhD	–	Doctor of Philosophy
PSA	–	Present Situation Analysis
PSC	–	Policy Shaping Community
PTF	–	Preliminary Thematic Framework
SADC	–	Southern African Developing Countries
TAA	–	Technical Assistance Agency
TSA	–	Target Situation Analysis
TEEP	–	Test in English for Educational Purposes

UAST	–	UNIFY Arithmetic Selection Test
UCLE	–	University of Cambridge Local Examinations Syndicates
UEST	–	UNIFY English Selection Test
UL	–	University of Limpopo
UK	–	United Kingdom
UMST	–	UNIFY Mathematics Selection Test
UNIFY	–	University of the North Foundation Year
UNIN	–	University of the North
USM	–	UNIFY Selection Mechanism
USRP	–	UNIFY Selection Research Project
USST	–	UNIFY Science Selection Test
VUA	–	Vrije University Amsterdam

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Note: The generic form *he* is used in this study for the sake of convenience. It should be understood to refer to both male and female.

CHAPTER 1

INTRODUCTION

1.1 PROBLEM STATEMENT

Students who are disadvantaged in terms of their schooling are often under-prepared for university study. In an attempt to address this problem, universities are transforming and restructuring their course offerings to cater for the needs of such students.

The Department of Education places priority on growth in career-oriented programmes in science, engineering and technology at tertiary level. Its aim is to increase access for previously disadvantaged black students with potential for mathematics and science study (cf. Department of Education, 1996; Zaaiman, 1998).

As a consequence, universities have started to introduce measures to increase the number of black students from secondary schools following courses in mathematics and science through access programmes which include bridging programmes and foundation years (Netshisaulu, 1996). Projects in the field of science education at the Universities of Cape Town and Kwazulu-Natal are examples of such endeavours (cf. Brink & Bowie, 1994; 46). The University of the North (UNIN) (now the University of Limpopo) introduced the University of the North Foundation Year (UNIFY) in Mathematics and the sciences in 1993, which was aimed at giving disadvantaged South African students a chance to enter and succeed at the university. The science faculties at UNIN realized that, because of the inadequacies in high school instruction and social factors, valuable talent was being lost and considerable money was being wasted by students taking five or six years to complete three year degree courses. UNIFY was specifically

established to address this problem (Newsletter from the Faculties of Agriculture, Health Sciences, Mathematics and Natural Sciences, 1992: 1).

The foundation year course consists of five sections, namely Biology, Chemistry, Mathematics, Physics and English and Study Skills (ESS). The ESS course focuses on techniques and skills needed by students to become efficient and affective learners. These skills include reading and interpretation as well as writing and expression skills. The ESS course covers aspects of grammar which are of particular relevance to scientists or which have been identified as areas of weakness in students' writing. Emphasis is also placed on the writing of clear, straightforward and grammatically correct sentences, and putting them together to make a cohesive whole (UNIFY Student Handbook, 1999: 12). ESS also endeavours to encourage both writing and verbalisation of concepts taught in other sections. At the end of the academic year, students who pass are allowed to start their science degree studies (Newsletter from the Faculties of Agriculture, Health Sciences, Mathematics and Natural Sciences, 1992: 2).

The ESS course can be classified as an English for Specific Purposes (ESP) course. These courses are aimed at a specific group of students, with specific needs (cf. Robinson, 1981).

An important element of any course is that it should achieve its aims. It is generally accepted that courses should regularly be evaluated and improved in order to make teaching and learning more effective (cf. Lynch, 2003). The ESS course has not been evaluated, and the researcher wishes to argue that such an evaluation should now be done. In 1994, an external evaluation of the foundation year course was undertaken (Kahn & Volmink, 1994; Cantrell, 1995), but the role of ESS in relation to the other sections was not satisfactorily explored, and little evaluation of the teaching materials was done. The ESS course should be evaluated in terms of the extent to which the product or the service fits its purpose (Verkleij, 1999:2). Such an evaluation is essential, as it can contribute to

the improvement and revision of the course (its syllabus and implementation) (cf. UNIFY's Response to the External Evaluation by Kahn & Volmink for the European Union, 1995: 5). The purpose of evaluation is to collect information systematically in order to indicate the worth or merit of a programme and to inform decision making, in order to improve the programme (Weir & Roberts, 1994: 4). As Bax (1997: 239) points out, language programme evaluation, when used sensitively and fairly, and is accessible to all the parties involved, can be a useful mechanism for productive change. In addition, an evaluation will deepen and develop lecturers' perceptions of classroom events and practice (cf. Weir & Roberts, 1994; Lynch, 2003).

The central problem addressed in this study is thus an evaluation and revision of the ESS course.

1.2 AIMS OF THE STUDY

The aims of the study are to:

- evaluate the UNIFY course in English and Study Skills (ESS).
- revise the ESS course.

1.3 METHOD OF RESEARCH

The relevant literature on the following aspects were surveyed: Language for specific purposes, teaching and learning at tertiary level, teaching and learning of English, study skills and course evaluation.

The research methodology was based on the responsive model proposed by Stake (1975). Underlying this approach is an essentially naturalistic and methodological approach toward evaluation. The following methods were therefore used: interviews, questionnaires, class observation, materials evaluation and a survey of other courses.

All students enrolled for the course were interviewed in groups of about six towards the end of the course. In addition, the two UNIFY staff members in the ESS section were interviewed on their approach to teaching the course and its implementation, as well as on their experiences and impressions of their success and that of the students. Former ESS students at different levels in the mainstream filled in a questionnaire on their views on the course. The researcher designed an observation framework and used it to observe the classes, and the course outline, course materials (study notes and textbooks) were scrutinised on the basis of criteria developed from the survey of the literature. Foundation English language courses at other tertiary institutions were also investigated by means of a questionnaire. The data collected were analysed and a revised ESS course was proposed.

1.4 PROGRAMME OF STUDY

Chapter 2 discusses the background of the foundation year course in terms of its aims as well as student background, the selection mechanism, the teaching staff and the teaching approach.

Chapter 3 focuses on the teaching of study skills in an English for Specific Purposes (ESP) course, focussing mainly on the core study skills of reading and writing. Components of study skills are also discussed.

Chapter 4 focuses on course design. Parameters for designing an ESP course are discussed.

In Chapter 5, methods of evaluating a course are discussed.

Chapter 6 discusses the method of research used in the study in more detail. The data collection and procedures that were followed are described and explained.

In Chapter 7, the data and results of the investigation are discussed.

Chapter 8 is a synthesis of all the information gathered from the theoretical survey and data analysis. It lays the foundation for the revision of the ESS course, as suggested in Chapter 9.

Chapter 10 provides a brief conclusion to the study and makes recommendations for further research.

CHAPTER 2

THE UNIVERSITY OF LIMPOPO FOUNDATION YEAR PROGRAMME IN MATHEMATICS AND SCIENCE: BACKGROUND

2.1 INTRODUCTION

The University of Limpopo Foundation Year (known as UNIFY) in Mathematics and Science is an access programme for previously disadvantaged black students who have shown potential to succeed in the sciences. The overarching aim of UNIFY is to increase the quantity and quality of students from disadvantaged groups entering science-based faculties at the University of Limpopo.

The discussion in this chapter gives an overview of the UNIFY programme and its key aspects in terms of the programme goal, student background, the UNIFY selection mechanism, teaching staff and the teaching approach that drives teaching and learning activities.

2.2 THE UNIFY BACKGROUND – AN OVERVIEW

According to Vale (2004: 10), regular narrative has it that there were three waves of university making in South Africa: 'Liberal/English', 'Afrikaner/Nationalist' and 'Black/Homeland'. These three categories of universities reinforced racial separation, which used to be a common fact about South African universities. The former University of the North (UNIN) falls into the 'Black/Homeland' category. It became the University of Limpopo (UL) in 2005.

UNIN was established in 1959 and was intended to cater for the Sotho-Venda-Tsonga (Sovenga) language group at inception. It is located at

Turfloop about 25km east of Pietersburg in the former Lebowa. This was one of the poorest of the self-governing territories, with a predominantly subsistence economy. The then Northern Transvaal was overwhelmingly African in composition, with English and Afrikaans speakers making up 3% of the population (Kahn & Volmink, 1994: 5). UL, Turfloop campus is a large rural, historically black institution (HBI) and not many high-quality students are available to register for mathematics- and science-based study courses at it due to the educationally challenging situation in the Limpopo province (Zaaiman, 1998: 74).

In countries where English is the language of education, the scholastic performance of students is inevitably influenced by their competence in the language of learning and teaching (Van der Walt et al., 2001: 170). South Africa is a country of many languages that learners bring to the classroom. This places a premium on language proficiency. This view is supported by educational policy documents that recognise the crucial role of language, advocate that all educators should regard themselves as language educators (cf. Adler, 1994: 1). Tertiary education in South Africa without the English language, is unthinkable. It is thus the highest priority that the secondary education system produces future tertiary students competent in English. The proposition applies to undergraduate teaching as well as to research (Titlestad, 2004: 27).

In South Africa, English remains the preferred language of teaching and learning (Van der Walt et al., 2001: 170). Most learners are taught in English, which is a second language to them. This inhibits full-blown unfolding of educational potential in most disadvantaged learners who are unprepared for a higher education environment (cf. Ngoepe & Segooa, 2000: 22; Weideman & Van Rensburg, 2002: 155). For example, according to Van Rooyen (2005: 7), research into the language of Mathematics found that learners struggled to understand when taught in their second or even third languages. Gules (2005: 15) maintains that even though English is a gateway subject, it is difficult to isolate this language problem from a host of other tribulations besetting the education system in South Africa.

Another crucial problem for disadvantaged matriculants is their lack of career knowledge (cf. Zaiman, 1998: 14; 2.3.1.1). It sometimes happens that students whose study orientation is not clear gain access to university (Makinen et. al., 2004: 173). This could be attributed to weak career counselling at school and an absence of suitable professional role models (Zaiman, 1998: 14). For example, most students only know that they want to study engineering or medicine by the time they leave school and apply for the courses without the required matriculation results. Such disadvantaged matriculants often do not apply for university places in time (cf. Zaiman, 1998: 14; Mkhize, 2004: 22). According to Moeketsi (2005: 18), the dismal failure of black townships and rural areas to produce more scholars with good Mathematics and Science results may be attributed to the quality of educators, the lack of career guidance and proper study facilities. So this dearth of career guidance and proper study facilities makes it even more difficult for such students to gain access to universities.

Most black students, including UNIFY students, come to universities from a disadvantaged schooling background, where English is used as the language of learning and teaching mainly by teachers and students who use English as a second or additional language (cf. Van der Walt et al., 2001: 175; Kgosana & Molefe, 2006: 2; Macfarlane, 2006: 6), teaching and learning may have been affected by protests, a lack of appropriately qualified science educators and facilities such as laboratories (cf. Netshisaulu, 1996: 1; Mkhize, 2004: 22). As a consequence, students arrive at universities under-prepared (cf. Netshisaulu, 1996: 1; Weideman & Van Rensburg, 2002: 161; Mkhabela, 2004: 6). As a result, the South African taxpayer wastes R1 billion paying for university students who fail in their first year of study.

Science and Mathematics teachers who do not recognise the important role of language in science education may be contributing to South African learners not performing well educationally. They also do not realise that subject content is mediated through language and that concept formation and logical thought are important in language learning (cf. Van der Walt et. al, 2001: 176;

2.3.1.1). In a survey among Biology teachers, sixty per cent of the teachers indicated that the learners experienced a problem with English as a medium of instruction. This illustrates that language is one of the factors in the science classroom that contributes 'to educational noise'. This term refers to all factors inhibiting meaningful learning in the classroom (De Beer, 1993: 148).

In support of this argument, Kahn and Volmink (1994: 4) point out that, since the schooling system has failed to produce sufficient numbers of adequately qualified entrants to higher education, higher education institutions have introduced measures to address problems of access. These access programmes range from bridging programmes to foundation years and other initiatives. The goal in access programmes is that students should learn and learn well, and this can only be achieved through a curriculum of the highest quality and lecturers with the skills and convictions to teach effectively (Kahn & Volmink, 1994, 4; Richie., 2001: 2).

In an attempt to address this inadequacy, the UNIFY programme includes a language course called English and Study Skills (ESS) in its curriculum. The course is taught together with four other courses: Biology, Chemistry, Mathematics, and Physics. The programme caters for previously disadvantaged science matriculants who do not qualify to be admitted to the Faculty of Sciences, Health and Agriculture at UNIN. Such students write a selection test and those who show potential to study the sciences are selected and put through an intensive UNIFY programme for a year (cf. Richie, 2001: 19; Ngoepe & Segooa, 2000: 22; 4.3.5).

UNIFY in Mathematics and Science, which is aimed at giving some previously disadvantaged South African students who have shown potential to study the sciences an opportunity to enter and succeed at UL, Turfloop campus, is an access programme at an historically disadvantaged institution (HDI). Jansen et al. (2005: 2) point out that the initial UNIFY project proposal (Phase 1) was conceived as a pilot programme that was implemented in the years 1992-1994. Vrije Universiteit Amsterdam (VUA) was selected as the Technical Assistance Agency (TAA) that would deliver the competence and the capacity

to set-up the initiative at UNIN. The year 1995 was conceived as a 'bridging year' during which the first phase of UNIFY would be evaluated and the second phase, depending on the recommendations from the evaluation, would be planned and designed for inception in 1996. The VUA continued to provide technical assistance in 1995-1996, and continued functioning in this role from January 1997 to October 1998. In October 1998, a consortium consisting of the Finnish Training Partners (FTP) and the Institute of Education (London), took over the reigns from VUA and completed phase two of the Project in October 2000.

The actual teaching in the project started in 1993. The project was funded externally by the European Union (EU) through its local intermediary, the Kagiso Trust (KT), from 1993 to 2000, and internally by direct contributions from UNIN. UNIFY is the first large-scale access initiative in science and mathematics education at an historically black university (HBU). UNIFY also represents the largest single investment in an education project by the European Union in South Africa (Kahn & Volmink, 1994: i; Breirer, 2001: vi).

UNIFY is non-repeat in nature. Due to limited space available on the programme, it was decided that students failing to take advantage of the foundation year should not be allowed to repeat it. The rationale is that places for 'repeaters' should rather be taken by promising 'new' students (cf. Cantrell, 1993: 4; 4.3.8).

The entrance requirements to the Faculty of Sciences, Health and Agriculture at UL, Turfloop campus are matric exemption plus a minimum score on a point scale based on the six best matric subjects. Matric exemption is achieved when a student did well enough in matric in specified combinations of subjects to be allowed to register for university study in South Africa. An additional requirement for entry to the faculty is at least an E on Standard Grade or F on Higher Grade for matric Mathematics (Zaaiman, 1998: 114).

According to Cantrell (1993: 3), there was a need to develop new criteria for admission to the institution. Hence, the aim of the UNIFY Selection Research

Project (USRP) to develop a selection mechanism for UNIFY which can, by extension, also serve as a model to be applied elsewhere through suitable modification to the specific needs of other institutions. This selection exercise would be based on the premise that the need for more South African Scientists, Engineers and Technologists can only be fulfilled if disadvantaged students with potential for science-based studies are identified and given adequate academic support. Moreover, an evaluation and modification of the existing admission practices and study programmes of South African institutions for higher education, where necessary, (cf. Zaaiman, 1998: 7; Osborne et al., 2004: 292), could lead to the development of an admission policy suitable to the needs of such students.

Essentially, UNIFY is a foundation programme and the construction of the curriculum framework is fundamentally determined by this perspective. The chosen themes and teaching approaches are therefore driven by this view (cf. Kahn & Volmink, 1994: 17; 2.3.5).

It should also be pointed out that any foundation programme is based on the view that students lack underlying cognitive, motivational, psychomotor and personal skills (cf. Grayson, 1994; Mphahlele, 1994).

At UNIN, a number of discussions were held within the project to ensure co-ordination of activities and cross-subject links, in establishing the UNIFY curriculum. Draft syllabi were circulated and this led to a number of changes so that different subjects could address topics together. For example, a decision was made to try, where possible, to teach 'mathematics for science and to synchronise the teaching of report writing between ESS and Biology sections. The different subject practitioners are thus aware of what is being taught across the curriculum and every attempt is made to provide an integrated approach. The curriculum was tabled and approved at faculty level and subsequently by Senate (cf. Cantrell, 1993: 4; Department of Education and Employability, 1998: 3).

Moreover, staff members were able to draw on Biology, Chemistry, Mathematics, Physics and ESS materials they themselves had developed elsewhere in Southern African Developing Countries (SADC). The staff had sufficient experience to adapt materials produced in other countries. Due to time constraints, it was not possible to carry out a local situation analysis or pre-testing of materials. Each section had a set of printed tuition materials. Working groups were established in each subject with the relevant subject head representative as chair. The final curriculum was then submitted to the Faculty Board and Senate (Cantrell, 1994: 19). In keeping with this, many modifications to teaching materials from other projects were made and much less material was covered than initially anticipated at UNIFY's inception (Cantrell, 1993: 8).

Evaluation was built into the UNIFY project from the outset to ensure that quality is attained and sustained; internal evaluation is done annually, whereas an external one is done whenever the situation warrants it. An external evaluation report by the Commission of the European Communities in 1994 stated that UNIFY was doing valuable work in both institutional as well the national context (cf. Kahn & Volmink, 1994; Cantrell 1995; Jansen et al., 2005) and as a consequence, the UNIFY programme has continued to date.

During its project phase, UNIFY was mandated to enrol a maximum of 150 students per annum. For example, in 1996, like in the previous years, a target number of students were enrolled in a one-year foundation course in Mathematics, Physics, Chemistry, Biology and ESS in preparation for their further studies at the Faculty of Sciences, Health and Agriculture at UNIN (cf. Newsletter of the Basic Science Education and Computer Applications Units, 1997: 17). Since its inception, UNIFY has provided access to tertiary education to over a 1000 students from disadvantaged backgrounds; about 1500 students registered for UNIFY and 1153 passed the UNIFY examination (Jansen et al., 2005: 23).

2.3 KEY ASPECTS OF THE UNIFY PROGRAMME

Key aspects of the UNIFY programme are the programme goal, student background, selection mechanism, teaching staff and teaching approach.

2.3.1 Programme Goal

The long-term goal of UNIFY is to enable more black students to enter a science-based programme and to make a good start with degree-level work. In the long run, this will lead to more graduates in the fields of Natural Sciences, Pharmacy, Optometry, Medical Sciences and Agriculture (Project Proposal on a Science and Maths Education Foundation Year at the University of the North, 1991: 15).

Zaaiman (1998: 74) asserts that, to achieve its goal, UNIFY follows a student-centred approach to teaching; staff act as facilitators and emphasis is placed on the development of problem-solving skills, on the basis of insight into Mathematics and Science problems.

2.3.1.1 Programme Aims

According to the Inception Report of the UNIFY Project (1993), while the overarching aim of the programme is to increase the number of students entering and succeeding in the sciences, UNIFY aims to assist the students in:

- acquisition of knowledge and practical skills in basic Mathematics and Science through the provision of a balanced and integrated programme
- transition between school and university education by a phased introduction of appropriate teaching strategies
- remediation of weaknesses in school background particularly in concept development through practical work

- preparation for tertiary studies in science through the development of appropriate
 - attitudes, including critical thinking, active learning, objectivity and inventiveness
 - practical skills, including equipment manipulation, experimental design, laboratory report writing, laboratory practice and safety
 - cognitive skills, including logical thinking, reasoning, problem solving, appreciation of models in science
 - study skills, including student-centred learning, learning for transfer across the sciences, note-taking and reference skills
- language skills, including fluency and competence in use of the language of science and various modes of communication of information
- preparation for responsible citizenship by
 - matching learning with everyday examples and experiences
 - raising awareness and stimulating interest in environmental issues
 - informing students about the applications of Mathematics and Science in society
- provision of career guidance counselling, leading to rational course and career decisions
- provision of academic and personal guidance counselling systems

2.3.1.2 Extra-curricular Aims

Extra-curricular aims were factored into the UNIFY programme in order to increase the attrition rate of unprepared science learners, particularly learners

who have passed matric but are unprepared for a higher education environment. The aims which focus on both students and staff, are to:

- promote students' interest in science at both secondary school and tertiary levels, and
- focus on science educational research by staff for the improvement of the Foundation Year and related undergraduate programmes. For example, research conducted in UNIFY by the staff on some of the UNIFY activities include an M.Ed study entitled 'Misconceptions and Interpretations of Heat and Temperature amongst UNIFY Students' and a PhD study on 'Selecting Students for Mathematics and Science' (cf. Netshisualu, 1996; Zaaïman, 1998).

The outline of aims above is supported by Kahn and Volmink, who were appointed to evaluate the UNIFY programme in 1994. They assert that UNIFY aims at enabling students to overcome deficiencies in their schooling, change their learning attitudes, improve their knowledge and mastery of subject material, enhance their study skills and competence in English and upgrade students so that they can make a good start in year one (Kahn & Volmink, 1994: 14).

2.3.2 Student Background

In order to assess the needs of UNIFY students, Zaaïman, the UNIFY research officer, also investigated students' home and school background. This was UNIFY's initial research on its intake and was conducted from 1994 to 1996. This research provides an historical perspective on the UNIFY programme (cf. Zaaïman, 1998: 105; 4.3.2).

2.3.2.1 Home Background

Zaaïman (1998) analysed student home background in terms of parental occupation and education, family size and whether a student had a sibling

with a completed post-secondary qualification. Most parents had had either no or only primary education. Where a parent had a post-secondary qualification, it was mostly at diploma level. The majority of UNIFY students are thus first-generation higher education students because their parents had no post-secondary education (cf. Zaaïman, 1998: 106; 4.3.1).

The language of tuition at UNIN, namely English, was a second language for all UNIFY students then (see 2.2). For instance, in 1996, the home language of most of the UNIFY students was Northern Sotho (52%), which is the main language spoken in the region in which UNIN is situated. The other home languages in descending order of frequency were Tsonga (12%), Tswana (12%), Zulu (7%), Southern Sotho (7%), Venda (3%), Xhosa (3%), Swazi (2%) and Ndebele (2%) (cf. Zaaïman, 1998: 110; Van der Walt et al., 2001: 170).

It was evident from the parental occupation question that there were not many parents with high-level occupations among the UNIFY students. For example, most parents of the 1994 to 1996 UNIFY students had no occupation, or were on pension or did unschooled manual work (Zaaïman, 1998: 108). The study also reflected the South African situation where many black parents have not had a chance at achieving formal qualifications and did not have high-level jobs. Thus, for a high proportion of UNIFY students, UNIFY was the first chance a family member had of succeeding in higher education. The parental data, therefore, show that the home backgrounds of the majority of UNIFY students have not prepared them to succeed at university (Zaaïman, 1998: 106 & 110).

2.3.2.2 School Background

Educationally disadvantaged schools are usually situated in poverty stricken township or rural areas. Zaaïman (1998) classified each student's Matric school as situated in either a rural or an urban area. On average, 72% of UNIFY students had attended school in a rural area (Zaaïman, 1998: 110).

The school background questions gave some indication of the educational facilities that were available at such schools, as well as the quality of education. The UNIFY students reported on the facilities available at their schools. For example, almost all schools (95%) had blackboards and chalk; these were the type of equipment most widely available. The availability of a television and video recorder was reported by 45% of the students, while 30% reported the existence of an overhead projector; this equipment was often described as not used or non-functioning. The existence of a Physical Science or Biology laboratory was reported by about 55% of students, with one laboratory sometimes being used for both subjects. These laboratories were often reported to lack the necessary equipment. The students also indicated whether they had been able to either observe or do experiments in Physical Science and/or Biology in secondary school. Over a period of three years, an average of 33% of students reported no exposure to practical work at all. Only 22% of the students reported that they had an opportunity to actively participate in experimental work. The rest of the students reported getting opportunities to observe their teachers doing practical work. In general, the facilities available at the schools of the selected UNIFY students seem to reflect the general situation reported by the 1997 Department of Education (DOE) School Register of Needs Survey (Zaaiman, 1998: 111).

The students were asked to rate the quality of their own education across their school career in the subjects Mathematics, Physical Science, Biology and English. The majority of students rated their education as between 'adequate and good'. The mean rating was 32 with a standard deviation of 7. More students rated their education in the 'good to very good' category than those rating their education in the 'poor' category. This was surprising when one considers the disadvantaged nature of the schools they attended. A reason for the students' positive view of their school education could be that they were influenced by a privileged UNIFY environment when the research was conducted compared to that of their own peer group who might not have been selected to study in UNIFY (Zaaiman, 1998: 112). This implies that students did not differentiate between the school and the UNIFY environments when responding to the questionnaire.

The student perception of their education correlated significantly with the available school facilities and the opportunity to observe and do practicals. It also correlates positively with the school being in an urban rather than a rural area, and negatively with the duration of school disruptions. These correlations strengthened confidence in the use of this variable as a measure of relative educational opportunity among the selected UNIFY students (Zaaiman, 1998: 113).

The main conclusion in the research conducted from 1994 to 1996 is that the selected UNIFY students can be regarded as having been educationally disadvantaged in the sense that they had inadequate access to educational services and opportunities to develop their full potential as students in Mathematics and the Natural Sciences (Zaaiman, 1998: 114).

2.3.3 UNIFY Selection Mechanism

Even though universities and technikons have had widely differing entry requirements for decades, these institutions are under pressure to increase the number of graduates in Science, Mathematics and Technology (Macfarlane, 2004: 5). The USRP was established at UNIN to focus on selection at the entry point to higher education (Zaaiman, 1998: 71 & 79). Its main objective was to establish a proven effective and fair UNIFY selection mechanism (USM). To achieve this, the USM has to be evaluated against the UNIFY aims (cf. Zaaiman, 1998: 71 & 75; 2.2; 2.3.1.1). UNIFY runs selection tests to identify students with potential to study science. It is therefore assumed that students who are selected will succeed in a specific academic science programme (Zaaiman, 1998: 75).

The UNIFY selection tests are used annually to identify potentially successful students. The tests, which were developed by Zaaiman (1998), are based on tests developed in other projects in which the Vrije Universiteit co-operated with universities such as the University of Botswana, Lesotho and Swaziland in Southern Africa. The tests are intended to assess insight, understanding

and problem-solving skills in Science and Mathematics with as little content knowledge required as possible (cf. Zaaiman, 1998: 78; Jansen et al., 2005: 14).

The assumption is that, in the long term, this will decrease the attrition rate; the selection of black students with potential for Mathematics and Science study will thus play an important role in achieving UNIFY's aim and by extension the government's, which is to increase access for previously disadvantaged groups and achieve growth in science, engineering and technology study programmes (Zaaiman, 1998: 7; Jansen et al., 2005: 17).

Generally, a matriculation C (60%-69%) aggregate is regarded as necessary for a student to have an adequate chance to succeed at university. Low scoring matriculants are usually defined as those who scored below a C aggregate. Most learners who came from a previously disadvantaged background scored below a C aggregate (Rutherford & Watson, 1990; Zaaiman, 1998).

However, at UNIN, a student needs at least an F on HG or an E on SG for matric Mathematics to enrol in the Faculty of Sciences, Health and Agriculture. An additional requirement is that the total of a student's six Matric subjects rated on the Faculty point scale must be at least 30 points. This corresponds to an E aggregate for the six subjects (Zaaiman, 1998: 78).

The point system is indicated in Table 1.

HG	SG	Points
A		9
B	A	8
C	B	7
D	C	6
E	D	5
F	E	4
G	F	3
H	G	2
	H	1

Table 1: The UNIN Faculty of Sciences, Health and Agriculture Point System

As a first attempt to select the right group of students, UNIFY decided to consider only applicants from a previously disadvantaged background with a view to targeting the most disadvantaged South African matriculants (Zaaiman, 1998: 104). The response was overwhelming because towards the end of 1997, almost 2000 matric students had applied to write the 1998 entrance tests (Cantrell, 1993: 2; Newsletter from the Basic Science Education and Computer Applications Units, 1997:14).

Initially, four subject-related UNIFY selection tests were developed and evaluated by Zaaiman during the USRP on the basis of the developed Incoming Student Specification (ISS) and test specifications. She evaluated the 1994 UNIFY Mathematics Selection Test (UMST) and UNIFY Science Selection Test (USST) in order to find out whether the tests were fit for the applicant pool and continued to be modified each year for use in selection from 1995 and beyond. The UMST, USST and the UNIFY Arithmetic Selection Test (UAST) are multiple-choice type of tests whereas the UNIFY English Selection Test (UEST) consists mainly of open-ended questions (Zaaiman, 1998: 88). She later excluded the UAST from the UNIFY battery of tests.

UEST was open-ended and was given to the UNIFY students in 1994. It was used to decide whether English language skills should be included in the test battery or not and it made up 20 % of the final selection score. Not all the scripts of students who took the UEST were marked. For example, scripts of applicants who scored above a selection cut-off score set at a UMST and USST average score of 47.5% were marked (cf. Kurtan, 2006: 77; Newsletter of the Basic Science Education and Computer Applications Units, 1997: 19; Zaiman, 1998: 89).

The correlation coefficients showed that the UNIFY Science, Mathematics and Arithmetic Selection Test results correlated highly with each other. The UEST showed moderately significant correlations with the science selection test. It could then be recommended that the UEST needed to be included in the battery of tests used for selecting UNIFY students (Zaiman, 1998: 89).

Jansen et al. (2005: 22) state that students who wish to be admitted into UNIFY write the selection test on the same day. For example, in 1993 and 1994 students wrote a UMST and a USST. Test items were constructed based on the aptitude-styled test and, through a multiple-choice answering procedure, tested problem solving skills and insight. The average score for the two tests were then used to select students. These tests were modified each year so as to improve their reliability and validity. In addition, a tracer study conducted for the 1996 cohort concluded that these tests had an acceptable reliability co-efficient of 0.7. Jansen et al., (2005: 22) goes on to point out that this study also found that the majority of applicants scored in the lower scoring regions; this implies that the tests were challenging for the majority of the applicants. The unusually low drop rate of 10% during 1994 to 2000, which is 14 out of 1540 students, attests to the effectiveness and validity of the selection tests in selecting and identifying students.

According to Zaiman (1998: 94), the selection tests all consistently showed moderate to high significant predictive validity for the UNIFY final results. The high predictive validity can probably be explained by the close connection between the selection tests and the UNIFY programme. The high validity of

the average of Mathematics and Science (AVMS) for the UNIFY final performance supports the original decision to use AVMS for UNIFY selection.

2.3.4 Teaching staff

At inception, UNIFY staff was constituted by expatriates employed by VUA and local staff employed by UNIN. The expatriates had experience in a bridging environment (Kahn & Volmink, 1994: 17). However, during the UNIFY Project Phase II extension period (1999-2000), the local staff was joined by expatriate Finnish Training Partners (FTP).

Because it proved to be difficult to find relevant local staff who were experienced science educators (cf. Cantrell, 1993: 3; Kahn & Volmink, 1994: 16), UNIFY Accelerated Staff Development Programme (ASDP) was strategically factored in.

UNIFY staff are members of their mainstream subject departments and working groups were established in all subject disciplines to carry out the process of curriculum development. That is why project staff members are expected to attend discipline meetings and contribute to such departmental discussions. For example, in ESS, the project staff member liaised with staff of the English Language Unit (ELU) on curricula matters. Senior members of mainstream staff act as external examiners for the UNIFY examination and examination results are submitted to the Dean's Office. This illustrates the close involvement of mainstream academics in the science access programme (Cantrell, 1993; Kahn & Volmink, 1994).

2.3.5 Teaching Approach

According to the UNIFY Student Handbook (1999: 8), the UNIFY programme follows a student-centred approach to teaching and learning, in that the teaching staff:

- start by finding out 'where the learner is'

- select important topics to develop the learner's understanding of key concepts and skills
- focus on practical work for discovery learning and the development of laboratory skills
- make sure that the learner has a real understanding rather than rush through the syllabus
- help improve the learner's English and communication skills
- help the learner assess his/her own awareness of what he/she understands
- stimulate co-operative learning with peers
- help the learner with time management and self-discipline
- provide career advice linked to UNIFY subjects

Jansen et al. (2005: 20) assert that there is without question important trade-offs in the design of the UNIFY programme with respect to its teaching approach. For instance, UNIFY sticks to teaching the 150 students on average, in five groups of 30 students in each of the five core subjects. Not only are the classes small, but they are also labour-intensive as UNIFY lecturers in one subject would, on average, spend 7 contact sessions per week with each of the 6 student groups. By contrast, a typical first-year university mainstream course involves teaching a class of 300 students seen three to five times a week.

Jansen et al. (2005: 20) point out that in the period 1994-2000, only 190 students who wrote the end-of-year UNIFY examination actually failed. In the year 2000, 41 students failed. This is the highest number that was reached in the period under review.

2.4 CONCLUSION

The number of previously disadvantaged Mathematics and Science students who study and succeed at tertiary level can be increased if tertiary institutions make a concerted effort to redress the situation.

Tertiary institutions can give students who have shown potential to study and succeed in the sciences a second chance, by placing them in a special programme such as the UNIFY one which is designed to meet the learners' assessed needs.

When institutions intervene, they should also integrate a language course relevant to the specific language needs of the students in their curricula with the intention of boosting learners' scholastic performance in Mathematics and Science.

Staff teaching in such programmes should be prepared to share experiences and where necessary, undergo training such that they will be able to grapple with challenges pertinent to teaching and learning in a Mathematics and Science environment.

The intervention ensures skills transfer among lecturers and the successful implementation of a relevant programme can increase the number of graduates in scarce skills areas of Mathematics and Science, and in turn boost the economy of South Africa.

The next chapter discusses teaching study skills in an English for Specific Purposes (ESP) course.

CHAPTER 3

TEACHING AND LEARNING STUDY SKILLS IN AN ESP COURSE

3.1 INTRODUCTION

Previously disadvantaged students who do not qualify to be admitted into the study of the sciences and use English as a medium of instruction, need to be taught study skills. The teaching and learning of the relevant study skills incorporated into an ESP course can enhance the students' opportunity to study and succeed at university.

The aim in this chapter is to give an overview of study skills, discuss sub-skills that constitute study skills and core study skills such as reading, writing, note-taking, reference materials, information presentation and interpretation.

3.2 STUDY SKILLS: AN OVERVIEW

Study skills imply that a student can use time efficiently in his studies (Wong, 2000, 6). Study skills do not hatch fully formed; they evolve and mature through practice, trial and error, feedback from others and reflection as a student moves through the different stages of a course. Study skills needed for Higher Education are ultimately gained only through studying at that level. Thinking and language skills develop simply through continued study (Cottrell, 2003: 13).

Study skills can be developed by trying out new ways of doing things, reflecting on how well they work, being aware of one's strengths and weaknesses, and thinking strategically. Moreover, a learner's study skills should continue to develop throughout his life (cf. Northedge et al., 1997: 15; 3.3).

Cottrell (2003: 5) asserts that many students enter university without adequate preparation. This can undermine confidence and make study more stressful and difficult than it needs to be. A student has to be ready for the stage of study that he is entering. But, rushing into study for which a student is not ready can be counterproductive. Most students find themselves in a state of panic and unpreparedness at some time or other, or even of deep despair of ever being successful in their studies. Further education may offer a 'foundation year' and other courses leading to access to university (cf. Wallace, 1980b: 3; Cottrell, 2003: 7; 2.2). The majority of underprepared students have had their confidence undermined in the past but looking at underlying realities about learning can enable some students to re-evaluate their learning and go on to perform extremely well (cf. Cottrell, 2003: 44; 3.3.1).

Marshall and Rowland (1998: 35) state that in the wake of discussions in higher education on the quality of teaching and learning, universities have begun anew to clarify their purposes and the strategies by which they achieve these. An important aspect of this has been to describe the disciplinary knowledge and skills, job related skills in vocational courses and the generic skills, attributes and attitude students are expected to acquire during their studies. Many universities in their handbooks or on their home page on the internet, publish lists of the desired qualities they wish their graduates to have acquired (see 2.3.1).

The generic skills may include some or all of the following: learning independently, thinking critically, planning, and organising, problem solving, communicating effectively in writing and orally, working with others and in teams, computer literacy, numeracy, and collecting, analysing and organising ideas and information. Some of the skills are higher order intellectual skills, while others are more technical skills. These skills are considered 'generic' because they should be developed in all students in all disciplines, and that they can be transferred to a wide range of contexts in students' current or future work and learning. The intention is that a student should develop these

skills throughout his formal study and continue to develop and use them throughout his life (Marshall & Rowland, 1998: 35).

Study skills, literacy, numeracy, information-seeking, learning from experience, using whole-brain approaches and computer literacy constitute skills of learning (cf. Hopson & Scally, 1986: 15; 4.3.1). There are many avenues to successful study; a student can experiment, explore, and be creative. Students are encouraged to look for their own learning patterns (Cottrell, 2003: 3). Although students often recognise the value of study skills they tend to be slow to adopt them. This hesitancy to change old ways is a common human trait. The recommended procedure is to try either one study technique or an entire system for a few weeks, to experience at first hand how these skills work (Wong, 2000: 7).

Cottrell (2003: 13) points out that in higher education a student is expected to have sufficient skills to work on his own for long periods, without a tutor to give guidance. A student is made responsible for his own success, and has the freedom to study in ways that suit him. To take advantage of this, a deeper understanding of one's learning is needed so that one can study effectively (see 3.3). To successful students, study skills are even more important than their interest in a subject. However, it takes a flexible mind to begin the process of using study skills (Wong, 2000, 6).

Since students who have no academic skills can be anxious, it is important to draw the parallels between skills used in academic study and those used elsewhere. Every student brings to tertiary study experiences and skills which contain sub-skills that are transferable to academic study. However, skills cannot usually be transferred from one situation to another unless the person concerned can see similarities in the two situations (Cottrell, 2003: 44).

Cottrell (2003: 44) points out that progress in study-skills occurs when skills development is treated as part of a wider, general process of learning. At its best, this is a process in which one learns about oneself and how one performs to one's potential under any circumstances. It involves developing

an understanding about how personal opinions, attitudes and states of mind influence one's success. Fundamental to that process is self-awareness, based on reflection and self-evaluation with the result that one knows what one does well and why, and what needs to be improved and how.

According to Wong (2000: xvi), learning to use study skills consistently enables a student to accomplish other goals and achieve success. For instance, each time a student is faced with a new learning situation, whether at university, at home, or at work, he can apply the skills he learnt such as goal setting, time-management, concentration, processing information, strengthening memory and acquiring new knowledge to any new task at hand. This would lead to rewards of success again and again and again. Lefton and Buzzotta (2004: 2) maintain that developing the skills takes both understanding and the willingness to practise them.

It takes time and practice to plan to study and to learn how to concentrate fully so that a student can enjoy formal learning and accomplish what he set out to do. It also takes time and practice to become aware of and create one's study patterns and to discover the concentration techniques that one finds most helpful (cf. Marshall & Rowland, 1998: 27; 3.3.5).

3.3 THE COMPONENTS OF STUDY SKILLS

Universities generally expect students to be ready to study on their own with minimum assistance. The students are especially expected to have basic skills in spelling and grammar. They are expected to be largely responsible for their own learning (Cottrell, 2003: 5).

In line with what is expected of students, Cottrell (2003: 30) distinguishes among five components that constitute study-skills: self-awareness and self-evaluation, awareness of what is required, methods, organisation and strategies, confidence and familiarity (practice and habit).

3.3.1 Self-awareness and Self-evaluation

Cottrell (2003: 30) and Marshall and Rowland (1998: 254) point out that to develop a skill, and by extension a study skill, a student needs to know where his starting point is; current strengths and weaknesses, what is to be achieved, what is to be improved, how to improve, the resources available and what can obstruct the goals (see 2.3.5). In addition, self-awareness can be complemented by self-evaluation questionnaires, reflective journals, group discussion and using tutor feedback (cf. Cottrell, 2003: 30; Burns & Sinfield, 2003: 229).

3.3.2 Awareness of What is Required

According to Cottrell (2003: 30), awareness of what is required has to do with a student finding out what is expected of him and what lecturers are looking for. Essential information about this is usually found in handbooks and handouts. For each subject, it is advisable for a student to find out about the curriculum, the objectives, how marks are allocated and special preferences of each lecturer (cf. 2.3.1).

3.3.3 Methods, Organisation and Strategies

Efficient and effective study is dependent on a student's study method and on whether a student is well organised. A skilled student uses strategies and with practice, these strategies become nearly automatic. Techniques include reading and re-reading, highlighting and reciting (cf. Cottrell, 2003: 30; Mathabatha, 2005: 4; 5.2).

3.3.4 Confidence

To succeed well and without undue stress, a student has to feel that he is entitled to learn and achieve; it is important for the student to believe that success is possible (cf. Cottrell, 2003: 30; 2.3.1).

3.3.5 Familiarity: practice and revision

Burns and Sinfield (2003: 233) state that from time to time a student should pause to reflect on his overall development as a learner. According to Cottrell (2003: 30) all skills improve through practice, feedback and monitoring; a student becomes more adept at finding shortcuts and is able to see patterns in what he does. This will help the student study for longer periods and be able to perform sub-skills automatically (see 5.4.3).

Study skills unlock a student's learning potential. Consistent use of skills leads to information being learnt more thoroughly and being remembered more easily (Wong, 2000, xiv).

3.4 SOME CORE STUDY SKILLS

Language lecturers conventionally differentiate among four aspects of language which are mastered by means of the "four skills" of listening, speaking, reading and writing. Listening and reading might be thought of as primarily 'passive', 'receptive' or 'input' skills, whilst speaking and writing are the 'active' 'productive' or 'output' counterparts (cf. Donald & Kneale, 2001: 14; Wright, 2001: 17). Even though in practice the lecturer works on all four skills virtually all the time, most language courses split learning activities into skills identified for a particular group of students (cf. Donald & Kneale, 2001: 14; Ngoepe, 1997: 46; Wright, 2001: 17; 4.3.2).

The discussion in the following section focuses on core study skills: reading, writing, note-taking, references and information presentation.

3.4.1 Reading

The reading process is an interaction between a reader's prior knowledge and the information encoded in the text (Chia, 2001: 22). The background knowledge a reader possesses entails text content and text structure (Peregoy & Boyle, 2000: 239).

The point of reading is to be able to understand what was read and to be able to recall the key ideas and information when they are needed again. However, holding it all in mind is by no means the only way, since the memory is too limited and too unreliable to serve as the main means of storing what was studied. A much more reliable route back to what was read can be created if a student makes notes. For most of the part, understanding is more important than remembering. If a student has understood and made notes, the memory can be left to take care of itself (Northedge et al., 1997: 43).

A frequent distinction is also made between top-down and bottom-up approaches in the analysis of reading. In top-down processing the reader gets a general view of the reading by absorbing the overall picture. This is greatly enhanced if the reader's schemata allow him to have appropriate expectations of what he is going to come across in his reading. In bottom-up reading the learner focuses on individual words and phrases and achieves understanding by stringing these detailed elements together to build up a whole (Harmer, 2004: 201).

English language proficiency (ELP) impacts on reading. Since ELP in context refers to an individual's general knowledge of English, including vocabulary, grammar, and discourse conventions, this may be called upon during any instance of oral or written language use (see 4.3.9.2.1; 4.3.9.2.2). To the extent that a reader is limited in ELP, the ability to make sense of text written in English is likewise hindered (Peregoy & Boyle, 2000: 239). Thus, Palmer (2004: 116) stresses that any serious reading should be done twice.

The lecturer should regard reading as interactions between top-down and bottom-up processing; sometimes the individual details help students understand the whole and there are times when their overview allows them to process the details read. The interactions enable the student to get a clear general picture of what the text is about (Harmer, 2004: 201).

3.4.1.1 Reasons for Reading

According to Harmer (2004: 200), reasons for reading can be divided into two broad categories: instrumental and pleasurable. Instrumental reading takes place when a student reads a large amount in order to achieve some aim, whereas pleasurable reading takes place largely for pleasure.

Instrumental reading can be pleasurable reading too. There is a great deal of 'crossover' between the two categories. A consideration of the two categories allows the lecturer to consider different receptive skills and helps him to ensure that he does not ignore genres which students need to be able to handle (Harmer, 2004: 200).

To get maximum benefit from their reading, learners need to be involved in both extensive and intensive reading (Harmer, 2004: 210). Extensive reading suggests reading at length, often for pleasure and in a leisurely way. Intensive reading tends to be more concentrated, less relaxed and often dedicated not so much to pleasure but to the achievement of a study goal. Consequently, the roles of the lecturer in intensive reading are that of organiser, observer, feedback organiser and prompter (Harmer, 2004: 204 & 213).

Extensive reading frequently takes place when students are on their own, whereas intensive reading is often done with the help of the lecturer. Provided the input is comprehensible, students will gradually acquire more words and greater schematic knowledge which will in turn resolve many of the difficulties they started out with (Harmer, 2004: 204).

Ellinger et al. (2001: 23) state that lecturers have to make sure that students read with a purpose and that their reading has a meaning for them. A student's purpose for reading influences any preparation before he reads (Marshall & Rowland, 1998: 127). For example, before a student can start reading a long article or a book that is connected with his studies, it is vital to take a minute or two to ask himself why he is reading it and what he hopes to learn from it (cf. Seal, 1997: 56; Wallace, 1980a, 9). In addition, different

purposes require different kinds of reading materials. Doing some small-scale research and gathering data relating to the topic a student will read about helps provide content for the reading. When a student has finished reading, he should ask himself: Has his purpose in reading been answered? What has he learnt? (Wallace, 1980a: 9).

Marshall and Rowland (1998: 145) state that, whether or not a student thinks about what he has read when finished, reading depends largely on the impact it has on the student and whether he is required to use what he read. For example, a student might remember an argument which can change his thinking or recall particular ideas or information. Further works by the same author or on the same subject may be read and in time the student might re-read the original work. Articulating one's read ideas and responses to material helps clarify them. This could be extended to articulating one's ideas about a book or article in a written review.

Reading plays a key role in academic learning and consequently in social and economic opportunities (Peregoy & Boyle, 2000: 237). Thus, success in reading is certainly among the most important achievements for all students (Ward, 2001: 141). Graduates who have difficulty reading English text will obviously be severely disadvantaged in terms of graduate education, since they will be cut off from vast amounts of information that they need. The graduates will also be at a huge disadvantage when it comes to research and innovation (Ward, 2001: 149). Even though language practitioners have made some inadequate efforts to define guidelines for teaching English learners to read (Peregoy & Boyle, 2000: 237), there is also a need for science and technology undergraduate students to read academic textbooks (Ward, 2001: 142). Porto (2000: 38) asserts that students are expected to do the compulsory reading of lecturer-selected books; there is no reading for pleasure except that arising from the learner's self-direction.

Ur (1991: 150) argues that the aim in university reading goes beyond mere understanding. Students may read for different purposes such as when they wish to understand something in order to learn from it, in order to find out how

to act or in order to express an opinion about something. In advanced reading activities, understanding of a text could be regarded as a preliminary step on the way to further learning.

3.4.1.2 Skills for Reading

Skills for reading include identifying the topic, predicting and guessing, phonemic awareness and phonics, using experience in the primary language, differentiating between writing systems, reading for general understanding, reading for specific information, reading for detailed information, analysing text structure, constructing text meaning and interpreting text.

- **Identifying the topic**

Good readers are able to pick up the topic of a written text very quickly with the help of their own schemata. This ability allows them to process the text more effectively as it progresses (Harmer, 2004: 201). Peregoy and Boyle (2000: 238) state that good readers generally approach a text with a particular purpose in mind. They have enough experience with written language to know its various uses, and put that understanding into practice when selecting a text to achieve their purpose.

Good readers may also bring at least some prior knowledge of the text topic. The more familiar the topic, the easier it will be for the reader to understand the text; comprehension is affected by the extent to which the reader is familiar with the topics, objects and events described in a text. They activate prior knowledge of the text topic by imagining what they know and do not know about the topic, predicting what the text will be about and generating questions the text might answer. Processing the print involves decoding the words on the page, which means producing a mental or verbal equivalent to access meaning (Peregoy & Boyle, 2000: 238).

- **Predicting and Guessing**

According to Harmer (2004: 201), readers sometimes guess in order to try and understand what is written especially if they have identified the topic. Sometimes they predict what is coming, make assumptions or guess the content from their initial glance as they apply their schemata to what is in front of them.

As a student previews, he might write down any ideas, questions or statements which seem relevant to the purpose and which might help him understand and critique what he has read. In the process, the student should try to determine the author's position on the topic. This previewing helps the student read actively because he has a framework into which the information fits; as the student reads, he consciously looks for answers to the questions and for information that supports or disagrees with original written ideas (Marshall & Rowland, 1998: 129).

- **Phonemic Awareness and Phonics**

Peregoy and Boyle (2000: 240) point out that language awareness and background knowledge are important aspects of the reading process, which can only be brought into play if the reader has adequate knowledge of the writing system to access the language encoded in the text. In English and other languages that use the alphabetic writing systems, speech sounds are represented by letters and letter sequences, reflecting the nature of the alphabetic principle. Insufficient knowledge of these sound/symbol correspondences deprives readers of a useful tool for recognising unfamiliar words.

Both phonemic awareness and phonics are language-based processes, and because language learners vary in their ELP, learners must be taken into consideration in deciding how and when to emphasise phonemic awareness and phonics instruction (Peregoy & Boyle, 2000: 241).

- **Experience in the Primary Language**

English learners bring to their reading the quantity and kind of literacy knowledge and experience they have in their primary language. This variable ties in closely with the age of the student, prior educational experiences in the primary language, and the socio-economic status and educational level of the parents. If a student begins reading English when he is solidly literate in the primary language, he possesses funds of knowledge that go well beyond simply being able to read (cf. Peregoy & Boyle, 2000: 241; 2.3.2; 4.3.1).

Peregoy and Boyle (2000: 241) maintain that students who are literate in their home language have some knowledge of the functions of print. Such students have experienced the value, utility and perhaps pleasures of print. In terms of reading per se, they have exercised the process of making sense from print. Depending on their reading abilities, they tend to be more experienced in decoding text and stand a better chance of comprehending text in their primary language. Education in the primary language facilitates academic adaptation while providing a solid experiential base for literacy development in English. The power of primary language literacy as a foundation for second language can provide the cornerstone for bilingual education.

- **Differences between Writing Systems**

Specific differences among writing systems must be explicitly addressed when teaching English reading to students who are literate in their primary language (Peregoy & Boyle, 2000: 242). English is an example of an alphabetic writing system that represents speech sounds or phonemes with letters or letter sequences. Various aspects of reading and writing can be transferred across languages, including attitudes and expectations about print as well as the general process of decoding. At a more specific level, transfer of literacy ability from one language to another depends on the similarities and

differences between their writing systems, including the unit of speech symbolised by each character (Peregoy & Boyle, 2000: 241).

Furthermore, Peregoy and Boyle (2000: 242) state that certain features of English such as the idea that speech sounds are represented by letters and letter sequences and the notion that print is read left to right and top to bottom transfer readily. As daunting as the diversity among second language readers may be, one unifying factor is the process of reading in English that is essentially similar for all readers (cf. 4.3.1). This process involves decoding written symbols into the language they represent to arrive at meaning (Peregoy & Boyle, 2000: 238).

Peregoy and Boyle (2000: 238) point out that, as words are decoded, they must also be interpreted; initially in the context of the phrases and sentences of which they are a part, and subsequently across sentences and paragraphs, as the larger meaning of the text is constructed. Thus, the comprehension process depends upon the reader's knowledge of the particular vocabulary and grammatical structures that comprise the sentences of the text, and upon the reader's familiarity with the way the text, as a whole, is structured.

- **Reading for General Understanding**

Good readers are able to follow discourse and understand the gist of it without worrying too much about the details. Reading for such general comprehension means not stopping for every word and not analysing everything that the writer includes in the text. A term commonly used for this type of skill is skimming. In gist reading the reader uses his processing powers to get a top-down view of what is going on (Harmer, 2004: 202).

Palmer (2004: 116) states that, since any serious reading will have to be done at least twice, it makes sense for a student to make his first look at the material a brief and general one. If the volume/chapter/article has an introduction and/or interim summaries, a student should read those first, as well as casting his eye over the rest of the material. This will help him

establish from the start a sense of what the text is about. In turn that will make his eventual 'full' reading more knowledgeable and thus more confident and alert.

- **Reading for Specific Information**

In contrast to reading for gist, text may be read for specific details. Almost all the other information is ignored until the reader comes to the specific item he is looking for. This skill is referred to as scanning (Harmer, 2004: 202).

Wallace (1980a: 11) maintains that having a definite purpose in mind means that some parts of what a student reads will probably not be relevant; these parts can be missed out or skimmed over very quickly. Other parts will be highly relevant and would have to be studied in detail. It is quite possible that the information a student is looking for may not be in the text after all. In that case, the sooner a student finds this out the less time he will waste. 'Skip-reading' covers everything from a ten-minute flick through a 300-page volume to the more measured practice of ignoring the odd chapter, for example. According to Palmer (2004: 116), 'skip-reading' allows a student to acquaint himself quickly with aspects of a book and or its essential territory. But this should not be taken as a substitute for 'full' reading. As an accompaniment to it, it can prove very valuable as a consolidatory exercise or a launching one. For example, Meyer (2000: 229) points out that, in Biology, reading about the characteristics of birds can contain key concepts about the uniqueness of birds, and specific details about bird anatomy and behaviour, scientific vocabulary and technical definitions. A student's experience with birds could be quite holistic and still serve him well to make guesses about the meaning of the English text and the lecturer's instruction. The student would also need very specific knowledge of birds in order to generate hypotheses about the meanings of numerous details that are embedded in the lecturer's Biology instruction delivered through English.

- **Reading for Detailed Information**

Sometimes students read in order to understand everything they read in detail. This is usually the case with written instructions, directions or with description of scientific procedures (Harmer, 2004: 202).

The good reader moves across sentences and paragraphs to construct the larger meaning of a text; familiarity with the genre and its text structure comes into play in the comprehension process. This helps the reader anticipate and predict the direction and flow of ideas (Peregoy & Boyle, 2000: 238). Since good readers are sufficiently familiar with a variety of genres and text structures, they use this knowledge for predicting and confirming meaning across sentences, paragraphs and passages that comprise a text (Peregoy & Boyle, 2000: 239).

- **Analysing Text Structure**

Since text structure conventions can vary from one language to another, explicit instruction on English text structures is beneficial for English learners, especially those who are literate in their primary language. For example, knowing how a cause and effect argument is structured can facilitate reading comprehension in that genre (Peregoy & Boyle, 2000: 240).

According to Peregoy and Boyle (2000: 240) and Badger and White (2000: 154), text structure knowledge boosts comprehension by helping readers anticipate and predict the direction of an argument, thereby facilitating attention to the larger meaning of the text. For example, familiarity with problem/solution text structure can assist the reader in anticipating, seeking and finding the author's proposed solution to the problem posed. Calling students' attention to headings and subheadings used in content area texts provides them with a strategy for previewing text content and creating potential questions to answer when reading.

Familiarity with English text structures results from extensive experience, reading a variety of texts in English, especially when explicit discussion of text structure is provided to help students perceive these patterns and use them to understand text. All English learners can benefit from text structure instruction, especially those who are literate in the primary language, given that the text structure conventions may vary across languages and cultures. By showing students the elements, organisation and sequencing that make up a 'good essay' or a 'good argument' in English, lecturers can immediately boost the quality of their students' reading and writing (Peregoy & Boyle, 2000: 240).

Assisting English learners with expository text structures is especially critical because content area texts become longer, more complex and more conceptually dense as the learners go up the ladder of learning. Text structure knowledge can help students grapple with challenging texts, promote reading comprehension and learning in science and other content areas (Peregoy & Boyle, 2000: 240).

- **Construction of Text Content Meaning**

The construction of text content meaning is shaped by the student's world view, knowledge, experience and interests (Marshall & Rowland, 1998: 144). The comprehension challenges imposed by limited English proficiency are alleviated when the reader is familiar with the text content. Familiarity with text content alleviates limitations associated with second language proficiency in text comprehension. Background knowledge is thus a powerful variable for both native and non-native English readers (Peregoy & Boyle, 2000: 239).

Background knowledge becomes doubly important in second language reading because it interacts with the student's English proficiency during reading, alleviating the comprehension difficulties stemming from his proficiency limitations. Therefore, building background knowledge on a text topic through first hand experiences such as science experiments can facilitate success in the reading of English (Peregoy & Boyle, 2000: 239).

- **Interpreting Text**

Normally, in a course of study, a learner reads a text within a context. It is linked to the other work the learner is doing, to other texts, tutorial discussions or an assignment. This context usually gives clues to the text's meaning and its underlying questions (Northedge et al., 1998: 29).

Harmer (2004:199) states that a student employs his previous knowledge to comprehend what he reads and deploys a range of receptive skills. In order to make sense of any text, the student needs to have 'pre-existent knowledge of the world'. Each student carries in his head mental representations of typical situations that he comes across. When the student is stimulated by particular words or contexts, such schematic knowledge is activated and he is able to recognise what he sees because it fits into patterns that he already knows.

When a student sees a written text his schematic knowledge may tell him what kind of text genre he is dealing with. Knowing what kind of a text he is dealing with allows him to predict the form it may take at the text, paragraph and sentence level. Key words and phrases alert him to the subject of a text and allow him to predict what is coming as he reads. If there is a lack of pre-existing knowledge, comprehension becomes difficult (Harmer, 2004: 200). Thus, readers are able to see beyond the literal meaning of words in a passage, using a variety of clues to understand what the writer is implying or suggesting. Successful interpretation of this kind depends to a large extent on shared schemata. As active participants, students use their schemata together with their knowledge of the world to expand the pictures they have been given and to fill in the gaps the writer seems to have left (Harmer, 2004: 202).

According to Peregoy and Boyle (2000: 239), as a reader moves through the text decoding and constructing meaning, he needs to hold on to his ongoing

textual interpretation in order to elaborate, modify and further build upon it, thereby keeping his interpretation going and growing. Reading is thus a complex, cognitive process that engages background knowledge and taxes both short-and long-term memory. It is also a process that takes place in a social context while serving a social act of communication between the author and reader. In this interactive view, text comprehension is simultaneously driven by the reader's purpose, prior knowledge and ongoing interpretation as these interact with decoding to achieve communication.

Good readers employ fix-up strategies, such as rereading a confusing part, to assist themselves in comprehending a text and achieving their purpose for reading. In this sense, reading is an active process of constructing and confirming meaning that is both linear and sequential as well as recursive and selective, because good readers may preview a text, reread a sentence, or go back to a different section to double check their evolving interpretation. Thus, good readers are strategic readers; they monitor their understanding as they read to check whether their interpretation makes sense and to make sure they are achieving their purpose (Peregoy & Boyle, 2000: 239).

3.4.1.3 Reading Materials

Marshall and Rowland (1998: 126) point out that it is important for a student to learn to read materials actively. Reading actively means constructing one's own meaning from the text, the ideas expressed and how they are organised; it means trying to discern the author's argument and to evaluate how effectively the thesis of the argument is supported by reasons. If the material does not contain an argument, active reading means finding the overall controlling focus of the material and the information used to support an idea that is presented. Such reading involves criticising the material to uncover how the argument has been affected by the author's background, purpose, world-view or theoretical framework. The student also needs to pay attention to visual images and materials such as graphs, tables and diagrams instead of skimming over them. Active reading involves determining how what a student is reading relates to other material in the field and to his own learning

and purpose for reading. An active reader is aware of the author's writing style and method of presentation (see 3.4.5).

Before reading, a student should already have evaluated the material to find out if it is useful for the purpose, how complex it is for him and check if its subject matter is relevant. The student should begin to critically evaluate material during the preview and as the reading continues. He also needs to think about it critically when he has finished reading and can see the text as a whole (Marshall & Rowland, 1998: 138). The lecturer's rationale for choosing relevant reading material is to enhance a student's abilities to reflect upon, evaluate, revise, value and gain deeper insight into their readings while completing a wide range of reading tasks. Reading material can also serve as the primary source for writing (cf. Liu, 2000: 355).

A student should make full use of any navigation guides and maps as the basis for his exploration of the material available through hypertext links. For instance, when previewing written text online, the student should first scroll through to determine the length of the material and to find any headings and sub-headings, work out if all of the headings are at the same level or if they are at different levels and note the source of the material, when it was written and the credentials of the author, and so on (Marshall & Rowland, 1998: 129).

A reader should be on the look-out for salient features of materials such as complexity, discipline area and quantitative information.

- **Complexity**

Material can be complex because it expresses new ideas in unfamiliar language, style and format, or because it is poorly written, organised or presented. How complex material seems to a reader depends on the reader's knowledge of the subject, his interest in it and whether or not the material accords with familiar theoretical perspectives or world views that the reader holds (Marshall & Rowland, 1998: 131).

If the theoretical perspectives or key concepts on which the material is based are unfamiliar to the student, the student may need to read other material which deals with the same perspectives or concepts, even though it may take the student time to understand the material fully. If the material is in an area unfamiliar to a student or if a student has a mental block about the subject, he should preview the material first, then read the easiest sections before he attempts more advanced ones. If the student cannot get past the basics, he should ask for help ((Marshall & Rowland, 1998: 131).

Marshall and Rowland (1998: 131) argue that, if the material appears complex, a student should first preview it, then read it slowly and look for the argument or controlling focus; sometimes material which at first seems complex becomes clear after a careful reading. Making notes or drawing a diagram or pattern of the material as the student reads can help his understanding. The student may later find it both easier to understand and very stimulating.

Activities for more advanced readers are more sophisticated in that texts and tasks involve more complex thinking than mere comprehension of information; the activities often involve extended speaking, listening and writing as well as reading (Ur, 1991: 150; 3.4).

- **Discipline Area**

When confronted with reading material for a higher education level course, only some of a student's previous reading habits are usually appropriate. The way in which academic materials are presented can differ from discipline to discipline, and the way in which a student is expected to read them also varies. However, if a student enjoys reading and reads a lot, he can build on this enjoyment and transfer the appropriate reading abilities to his reading (Marshall & Rowland, 1998: 125).

According to Marshall and Rowland (1998: 123), most of the discipline material a student reads in papers, articles and books is organised in a linear

form with the information beginning in the first sentence, paragraph or chapter and concluding in the final sentence, paragraph or chapter. A linear text is based on the idea that the reader begins at the beginning and reads a coherently and consistently organised argument or exposition to the end. The text uses guides provided by the writer to lead the reader through the material. Within this structure the reader has the freedom to move backwards and forwards or to dip into the text.

How a student reads is also influenced by the discipline area of the material. The methodologies and conventions for communicating in writing vary from discipline to discipline, and within disciplines writers have different styles and ways of presenting information. For example, in Mathematics understanding what a student reads can depend on mastering information one step at a time. In Geography, the learner frequently has to refer to maps and other visual material as he reads. How much a student is expected to read varies from one discipline to another, and this in turn influences how a student reads. For instance, in disciplines in the social sciences and humanities, students are required to spend more time reading than in the physical sciences (Marshall & Rowland, 1998: 132).

As a newcomer to a discipline area a student may find the specialised language of that discipline difficult to understand; familiar everyday words may have new and distinct meanings. For example, the word 'programme' has different meanings in psychology, computing and education. Some words embody concepts that have changed over time. For instance, the words 'culture', 'power', 'subject' or 'class' can have specific meanings which change with time in different disciplines. A student needs a subject dictionary to understand the meanings of some words and to be clear how the words are used in the context of his reading. The student might also need to become visually literate (to read images and other representations) or numerate, that is, to learn how to read tables and different kinds of graphs (cf. Marshall & Rowland, 1998: 132; 3.4.4.1).

- **Quantitative Information**

There are varying amounts of quantitative information in the materials a student reads. This information may be mathematical in forms such as images, graphs, tables, formulae or symbols, or it may be embedded in prose so that the mathematical meaning is within words such as 'rate', 'decreasing inflation', 'exponential growth' and 'inversely proportional'. The degree to which a student deals with this quantitative information depends to a large extent on his purpose in reading, the nature of the material itself and the student's attitude towards those mathematical representations (cf. Marshall & Rowland, 1998: 133; 3.4.5).

Although it is common for readers to skim over graphs, tables, numbers and symbols, it is only by paying due attention to them that one can decide whether to accept the inferences and conclusions of the author that are based upon the data. An ability to make inferences, consider comparisons, see the 'big picture' and to pick up inconsistencies is a valuable skill. In some cases it is helpful to make transformations between the kinds of representations from a table to graph, from formulae to words, or from words to a graph, for example (cf. Marshall & Rowland, 1998: 132; 3.4.5). Seal (1997: 184) maintains that graphic materials should be examined before a student reads a text. This implies looking at the photographs and illustrations in a text. Students should be given an opportunity to understand and interpret examples of the commonest types of statistical and process diagrams. They should also be given an opportunity to produce similar diagrams of their own (Wallace, 1980b: 7).

As learners become more advanced, it would seem more sensible to start basing their reading practice on a wide variety of authentic or near authentic texts and on tasks that represent the kinds of things readers would do with text in real life rather than conventional comprehension exercises. The aim in using authentic texts and tasks is that, ultimately, learners should be able to cope with the same kinds of reading that are encountered by native speakers of the target language (Ur, 1991: 150).

3.4.2 Writing

Writing is a difficult skill for native speakers and non-native speakers alike (cf. Rass, 2001: 30; Tennant, 2001: 26) even though students may be of high ability and strong motivation. This is because writers must balance multiple issues such as content, purpose and audience (Rass, 2001: 30).

Writing helps students learn (cf. Jacobs, 2006: 150); it reinforces the grammatical structures, idioms, and vocabulary that they are taught. Compared to speaking, writers use more complex sentences with connecting words like 'however', 'who' and 'in addition'. Writing is more formal and compact. It progresses logically with fewer digressions and explanations (Raimes, 1983: 3-5).

In tertiary institutions, written expression is emphasised and learning is assessed primarily through essays, reports and examinations (see 4.3.11). Even though a student may have opportunities to take an oral exam, to deliver a paper orally, to present an assignment in film, on tape, as a collection of photographs or drawings, etc., the reality is that to pass courses in tertiary institutions a student must be able to write prose. In particular, a student is expected to become familiar with the languages and methodologies of their discipline (cf. Bacha, 2002: 15; Marshall & Rowland, 1998: 182).

In academic writing, writers frequently present their data by means of diagrams, charts, and so on. Students should be given a chance to produce some graphs and charts as the use of graphs in writing can do much to make their work more attractive, interesting and informative (cf. Wallace, 1980a: 38; 3.4.5).

Moreover, Herbert (2003: 26) maintains that lecturers of English can offer a variety of ways to guide students through the writing process ranging from mind maps to peer critiques with numerous pre-writing, writing and post-writing activities in between.

Marshall and Rowland (1998: 183) point out that 'academic style', which is appropriate for tertiary level writing, is largely dependent on the disciplinary convention; it does not necessarily include long technical terms and convoluted sentences. Sometimes a student does need to make use of particular terminology to convey a precise meaning, but such terminology can easily degenerate into jargon if used carelessly or to impress. The main aim of academic writing is to communicate what the writer wants to say to the reader and the basic need to be lucid and direct applies as much to scholarly writing as to any other.

Bacha (2002: 15) argues that writing in the academic community is paramount; a student cannot be successful without a certain level of academic writing proficiency. According to Marshall and Rowland (1998: 244), a student is expected to present his work clearly and to use correct grammar, spelling and punctuation in writing assignments and reports. A sound knowledge of grammar helps a student write more fluently and is an important part of the writer's craft. The student's ideas have less impact if his grammar, spelling and punctuation are poor; the reader will frequently have to re-read what the student has written to clarify what he meant to say.

Marshall and Rowland (1998: 187) state that sometimes a student needs to write according to a plan because he is required to write in a specific genre or format. Using a plan is the writing method frequently taught and expected in formal education and this is likely to be used when writing a report, an essay, an article for a paper or a business letter. Even if a student is working closely to an overall plan, as he is expressing ideas and information in words, he should try defer editing his work as he writes. Once the ideas are sorted out on paper, the student can always go back and find the precise phrase he wants.

A writer has only one chance to convey information. The information should be interesting and accurate enough to hold the reader's attention (Raimes, 1983: 3). Unless a student is writing to articulate his thoughts purely to

himself, writing is communicating. This involves thinking about the genre in which one writes and about one's audience, the person or people who will read one's writing. The writer tries to express his thoughts fluently and accurately in a style and way that the reader will understand. To attain this, he must be clear about what he wants to say and why, and will draw on any language, experiences and beliefs that he and his readers share (Marshall & Rowland, 1998: 183).

A lecturer can devise writing tasks which lead students to paying attention to organisation while they also work on how to operate a calculator, for example. The lecturer will need simple forms of verbs, an organisational plan based on chronology, sequence words like 'first', 'then', 'finally' and perhaps even sentence structures like 'when..., then...'. The purpose of a piece of writing can be linked to the forms that are needed to convey the message. For instance, linking words such as 'first', 'then', 'next' and 'lastly' can be used by students to sequence stages and steps in a process (Raimes, 1983: 6).

3.4.2.1 Stylistic Conventions for Academic Writing

According to Cottrell (2003: 177), stylistic conventions for academic writing entail using formal English, avoiding abbreviations and contractions, being impersonal, being cautious, avoiding conjunctions and numbers, being objective, avoiding apologies, addressing the reader, being concise and using continuous prose.

When using conventions in written assignments it is useful to understand their purposes rather than simply following rules. For instance, the standard conventions used by most Western publishers serve as shorthand to make writing and reading easier. Much of the shorthand has its origins in the reporting of scientific research where the reader needs to be able to follow up references to understand or evaluate a report fully (Marshall & Rowland, 1998: 231). For example, if the writer wishes to draw the reader's attention to an error or indiscretion in the writing of another author, the word *sic* (Latin for thus) should be used within brackets to indicate that those were the exact

words of the author and that the mistake is not the writer's (Marshall & Rowland, 1998: 234).

Marshall and Rowland (1998: 232) point out that individual academic disciplines, publications and individual lecturers frequently adopt their own variations of the standard conventions. Even though the essential elements may be the same, the formatting details may vary considerably. Whichever format the student uses, he should be consistent and accurate. The student will be exposed to the conventions he is expected to follow in his discipline, programme, course or assignment and find out what his lecturer's personal preferences in these matters are. The academic style of writing demands that each student assimilate and present ideas in an individual way even though the forms and conventions are followed and used for own writing purposes by the very student ((Marshall & Rowland, 1998: 183).

To improve these skills, the student may have to learn by heart the correct forms and usages. But if he can discover underlying reasons for a particular form and usage, he will remember the correct version more easily. The student should also check the grammar and punctuation of any sections which do not flow smoothly. A student can also use the spellchecker facility of the word processing programme, and if possible should develop his own dictionary for the computer (Marshall & Rowland, 1998: 244).

An awareness of discourse functions enhances the students' understanding of the structure, rhetoric and the specific written genre. Writing courses too often do not prepare students to tackle scientific writing because they are focused on acquainting them with basic academic rhetorical modes and generic academic essays (Liu, 2000: 308). Since, in practice, the process of writing can help a student clarify his thoughts and stimulate new ideas, the student should write at all stages of his laboratory and field work and not leave this activity to the end (Marshall & Rowland, 1998: 215). For example, as the student carries out and records research, his results are usually in the form of numbers. In the early stages of analysing data, ordering the numbers in tables

or figures can help the student see patterns emerging in the results (cf. Marshall & Rowland, 1998: 216; 3.4.5).

According to Liu (2000: 327), one of the major skills required for success in scientific discourse is the ability to write scientific ideas with reasonable accuracy and precision. Chimbganda (2000: 310) states that some second language (L2) learners lack essay writing skills, logicity, brevity in answering questions and do not summarise points. They also have problems with selection and organisation of points and merely lift points without recasting them. These are some of the non-integrative factors which conspire to perpetuate a cycle of deficiency in the students' writing skills. Their shortcomings become acutely felt at university level where they are expected to cope with the higher demands of the scientific discourse community.

Writing is primarily about the application of linguistic knowledge. The lecturer can focus on the appropriate use of vocabulary, syntax, and cohesive devices (cf. Pincas, 1982) and let students practise how to apply a product approach to writing based on timed production of grammatically and lexically accurate texts (Porto, 2000: 38). The practice will enhance the writing proficiency of the L2 learners (Chimbganda, 2000: 305).

3.4.2.2 Aspects of Writing

According to Porto (2001: 39), different aspects of writing are audience, purpose, time pressure and feedback.

- **Audience**

Learners need to know who they have to interact with and why, since writing is an interactive activity (cf. Widdowson, 1984; Coulthard, 1994; Pagano, 1994). Taking the reader into consideration is important. The writer should create a picture of the reader, who becomes an 'ideal reader', and attribute to this reader certain experience, knowledge, opinions and beliefs on the basis

of which the writer builds his message (cf. Coulthard, 1994; Pagano, 1994; Porto, 2001).

- **Purpose**

Writing is not an end in itself. Rather, it is a purposeful and provoked activity which is located in ongoing social life (Widdowson, 1984: 64). Thus, Marshall and Rowland (1998: 182) state that students write for different purposes and in different genres. For example, each individual research project and its report has a different purpose. Some of the purposes can be very specific. For instance, the purpose can be to test a particular hypothesis or to observe a certain phenomenon. However, a student needs to think about why he is doing the research in the first place, and, as one of the purposes is to communicate the findings, a student should think about who will read the report. This gives a student a basic framework for clear report writing (Marshall & Rowland, 1998: 214).

If a student is expected to design all or part of an experiment, the design should be written down. The written design can then be built on as he carries out the experiment, providing a detailed and organised basis for the final report. For instance, the student should clearly state the purposes of the report, the problem the student wants to solve and his hypothesis or predictions. The student should also write down the nature, frequency and duration of the necessary measurements and observations (Marshall & Rowland, 1998: 215).

Traditionally, the lecturer alone has been the audience for student writing but students should ideally write for a real reader. Hence lecturers should extend the readership to other students in the class, who could read and respond, rewrite in another form, summarise or make comments about the written work (cf. Raimes, 1983: 6).

- **Time Pressure**

Writing under time pressure is not congruent with a conception of writing as a recursive, interactive, communicative and social activity (Silva et al.: 1994). When students write clean copies of their first-draft compositions under time pressure, for example, they tend to transcribe inaccuracies at the level of form which may not be in the original drafts. These inaccuracies can be caused by the students' lack of time to revise the final copy of their work before handing it in for correction (Porto, 2001: 40).

Timed writing per se is not congruent with the need to regard product and process approaches to writing as complementary (Porto, 2001: 40).

- **Feedback**

Relevant feedback can play a crucial role in advancing language learning because it helps learners to become aware of a linguistic problem. This can lead them to generating alternatives and assessing them (Swain & Lapkin, 1995: 384). Frequent writing practice with little or no lecturer feedback can lead to a limited improvement of writing (Tsang, 1996).

The way a lecturer gives feedback on writing will depend on the kind of writing task the students have undertaken and the effect the lecturer wishes to create. One way of considering feedback is to think of it as 'responding' to students' work rather than assessing or evaluating what they have done. When a lecturer responds, he says how the text appears to him and how successful he thinks it has been, and sometimes how it could be improved. Such responses are vital at various stages of the writing process. Another way of responding to students' written work is to show alternative ways of writing through reformulation (Harmer, 2004: 109 & 110).

Before a student can start any sustained writing, he could clarify what he wants to put on paper by explaining his ideas to someone else. This is useful

when he is beginning to formulate ideas on a topic or when thinking how he intends to present his work. Although it is not necessary for him to talk to someone who is familiar with his area, the feedback will be more valuable if he can find another student from his course or discipline. A working relationship such as this is invaluable as he can both learn and improve his written work (cf. Marshall & Rowland, 1998: 192; Porto, 2001: 40; 3.4.1.1).

Some lecturers use marking codes which they put either in the body of the writing itself or in the corresponding margin. Frequently used symbols of this kind refer to issues such word order, spelling or verb tense. Feedback is designed not only to assess the students' work, but also to help and teach. When a lecturer responds to first and second written drafts of a written assignment he expects a new version which will show how the students have responded to his comments. In this way feedback is part of a learning process. A reason for using codes and symbols is that if students can identify their own mistakes, they will be in a position to correct them (Harmer, 2004: 111& 112).

- **Evaluation**

Evaluation, which is conceived of as the act of finding value in a piece of writing, leads to self-evaluation. As a consequence, it promotes growth in writing skills (cf. Hansen, 1996: 188; Porto, 2001: 42).

On the basis of what the student wants to learn, learning can be appraised by the lecturer so that the learner's goals, strengths and weaknesses emerge more clearly. These discoveries provide the student with further criteria for reflecting on and evaluating what he learns and in this way, the learning process continues. Like students, lecturers often reflect on defined course objectives as the course progresses (cf. Marshall & Rowland, 1998: 250 & 252; Ngoepe, 1997: 39; 4.3.4). Reflection and evaluation are fundamental to learning (Marshall & Rowland, 1998: 249). Developing a student's writing, including academic writing, is a continuing process (Marshall & Rowland, 1998: 185).

3.4.2.3 Approaches to Writing

Badger and White (2000, 153) distinguish among three approaches to writing: product, process and genre approaches.

- **Product Approach**

According to Dudley-Evans and St John (1998: 116), the term 'product approach' has generally been used to refer to writing that focuses on the integration of the aspects of a specific text; the end product that writers have to produce. This approach to writing usually involves the presentation of a model text which is analysed. The text then forms the basis of a task that leads to the writing of a similar or parallel text.

There are four stages in the product approach: familiarisation, controlled writing, guided writing and free writing (Badger & White, 2000: 153).

Familiarisation in the writing context aims to make learners aware of certain features in a particular text. In controlled and guided writing, the learners practise writing skills with increasing freedom until they are ready for free writing. The practice involves using the writing skill as part of a genuine activity such as essay writing (Pincas, 1982: 22). For example, Badger and White (2000: 153) point out that a typical product class might involve learners familiarising themselves with a set of descriptions of houses. The familiarisation can entail the identification of prepositions and names of rooms used in the description. Learners might produce some simple sentences about houses from a substitution table, at the controlled stage. The learners might then produce a piece of guided writing based on a picture of a house and, finally a description of their own home, at the stage of free-writing.

Raines (1983: 6) states that the controlled-to-free approach to writing is sequential. For instance, students are first given sentence exercises, then

paragraphs to copy or manipulate grammatically by changing questions to statements, simple present to future or plural to singular. They work on given material and perform strictly prescribed operations on it. The approach stresses three features: grammar, syntax and mechanics.

According to the product approach, learning is regarded as assisted imitation which adopts many techniques and learners respond to a stimulus provided by the lecturer in the process. Product-based approaches are mainly concerned with knowledge about the structure of language, and writing development as mainly the result of the imitation of input, in the form of texts provided by the lecturer (cf. Pincas, 1982: 24; Badger & White, 2000: 153).

- **Process Approach**

The process approach emphasises the idea of writing as problem-solving; it focuses on thinking and process (Dudley-Evans & St John, 1998: 117). In this approach, the teaching of writing does not only focus on questions about purpose and audience, but writers also ask themselves: 'How do I write this?' and 'How do I get started?' (Raimes, 1983: 6).

Students should not expect that the words they put on paper will be perfect right away. A student should create time for the writing process to work, along with the appropriate feedback from readers such as the lecturers or students. The student might discover new ideas, new sentences and new words as he plans, writes a first draft and revises what he has written for a second draft. Students explore a topic through writing, showing the lecturers and each other their drafts and using what they write to read over, think about and move them on to new ideas (Raimes, 1983: 6).

According to Badger and White (2000: 154), writing in process approaches predominantly has to do with learners' language skills such as planning and drafting, which are facilitated by the lecturer. Tribble (1996: 39) identifies four stages that writers go through in producing a piece of writing: prewriting; composing/drafting; revising and editing. Badger and White (2000: 154)

maintain that the process is cyclical because writers may return to pre-writing activities after doing some editing or revising.

The teaching of writing is approached by assigning students vast amounts of free writing on given topics, with minimal correction of error. Students are encouraged not to worry about form; quantity rather than quality of writing is stressed. Concern for 'audience' and 'content' are seen as important in this approach. Lecturers who use the process approach give their students support in two crucial forms: time for the students to try out ideas and feedback on the content of what they write in their drafts. The writing process becomes a process of discovering new ideas and new language forms (Raimes, 1983: 6).

Marshall and Rowland (1998: 184) point out that writing may at times involve writing to a plan or using a required genre. But essentially the writing process can also be a way of actively constructing knowledge. The process can stimulate new thoughts and directions to which a student responds in writing as he writes. As the student writes, areas of seemingly forgotten knowledge can be uncovered or unanswered questions about the content of his work can be clarified. Thus, writing can in itself be a learning process.

In the process approach learners can brainstorm on the topic of 'planning a house' as a typical prewriting activity, for example. At the composing/drafting stage learners would select and structure the result of the brainstorming session to provide a plan of a description of a house. This would then guide the first draft of a plan for a particular house. After discussion, they might revise the first draft in groups or working individually. Finally, the learners would edit or proof-read the text (Badger & White, 2000: 154).

According to Liu (2000:325), EAP as well as content lecturers exploit the 'process' and 'interactional' approaches for teaching writing. In the process approach, students should be encouraged to pay attention to the revision of their work before presentation and made aware of the 'purpose' and the 'audience' for their writing. To activate students' discourse skills, writing

activities should be preceded by oral presentations. They should first be encouraged to freely write their ideas as they come and later on to edit them individually or with the help of peers. These chain activities could inspire self-confidence in the students.

The interactional approach can also inspire a meaningful writing context in which there can be greater rapport between the lecturer and the students. The opportunities given to students could be in the form of tasks and other problem-solving activities that are interactive as well as supportive and mediational are executed in an atmosphere which is intrinsically motivating. In using this approach, all written work is followed by appropriate feedback which uses the students' work as the basis for class discussion, error correction and a plan for future improvement (Liu, 2000: 326). Computer-mediated communications have added an interactional dimension to the sharing of written work. If a student has Internet access, it is possible to share ideas on an assignment electronically with other students before he begins writing and as he writes, and share rough drafts and a final version of an assignment (Marshall & Rowland, 1998: 192).

3.4.2.4 Genre

In some ways, genre approaches can be regarded as an extension of product approaches; writing is regarded as predominantly linguistic and varies with the social context in which it is produced. There is a range of kinds of writing such as sales letters, research articles and reports linked to different situations. Different kinds of genres are used to carry out different purposes. Genres are also influenced by other features such as the subject matter, the relationships between the writer and the audience and the pattern of organisation (Badger & White, 2000: 155). The student needs to learn to vary elements of his style according to the genre in which he is writing. One way the student can do this is to experiment with different ways of writing (Marshall & Rowland, 1998: 185).

According to Cope and Kalantzis (1993: 11), learners can be exposed to examples of genres before they can be expected to work independently. Regarding report writing, for example, Marshall and Rowland (1998: 217) argue that each section of a report should by itself convey intelligible information to the reader. It is also important to realise that there is more than one report genre.

Dudley-Evans (1997: 154) identifies three stages in the genre approach to writing. A model of a particular genre can first be introduced and analysed. Then, learners can carry out exercises which manipulate relevant language forms and, finally, they can produce a short text. For example, science students are often expected to write reports about experiments they have performed. Unless his report is clearly thought out and written, his practical work is of limited value; communicating findings and observations in a report is an integral part of science, and communicating clearly is interwoven with thinking clearly. The knowledge of a subject, the underlying theory and specific detail affect the quality of a written report. This can be improved with preliminary reading. A student's care in observation, his practical skills and expertise in experimental design and using research techniques also affect the standard of the scientific work and writing (Marshall & Rowland, 1998: 214).

The student should also reflect on how the style of the material compares with his own writing. The material might be in a genre that can provide an example on which he can model his writing, especially in relation to how he might want to structure what he writes or how to use the language of a discipline (Marshall & Rowland, 1998: 144).

Genre-based approaches see language as essentially concerned with knowledge of language, and as being tied closely to a social purpose. The development of writing is largely seen as the analysis and imitation of input in the form of texts provided by the lecturer (Badger & White, 2000: 156).

Marshall and Rowland (1998: 195) argue that frequent writing and experimenting with different genres can help a student develop his writing and give him pleasure as a writer. Just as a great writer refines his skills and thrives on the response of both fellow writers and readers, the student can polish and enjoy his writing if it is shared with others.

The product, process and genre approaches are complementary (Badger & White, 2000: 153) because writing involves knowledge about language (product and genre approaches), knowledge of the context in which writing happens and especially the purpose for the writing (genre approaches) and skills in using the language (process approach). Writing develops by drawing out the learners' potential (process approaches) and by providing input to which the learners respond (product and process approaches) (Badger & White, 2000: 157). Writing is embedded in a social situation through which a piece of writing is meant to achieve a particular purpose that comes out of a particular situation. In the writing classroom, lecturers need to replicate the situation as closely as possible and then provide sufficient support for learners to identify the purpose and other aspects of the social context (Badger & White, 2000: 158).

The development of writing will vary among different groups of learners because they are at different stages of their writing development per se. For example, learners who know a lot about the production of a particular genre and are skilled in it, may need little or no input at all. Some groups may lack knowledge of what language is appropriate to a particular audience (cf. Badger & White, 2000: 158; 4.3.1; 4.3.2).

3.4.3 Note-taking

Note-taking is a constant, fluid process (Palmer, 2004: 138) which is an adjunct to the receptive skills of listening or reading, but also is a lead-in to or link with the productive skills of speaking or writing (cf. Jordan, 1997: 7; Mathabatha, 2005: 5). A student should aim to have a set of notes as visual familiarity will make it easier to find information later and to recall information

during examinations (Cottrell, 2003: 130). Thus, Palmer (2004: 139) states that note-taking is a hugely valuable skill for any student because it combines recording of useful information with alert thinking

Lectures have for a long time been the most common form of tertiary teaching. Lectures are essentially a one-way communication process; the lecturer lectures and students listen. A lecturer may follow the customary format of university lectures and talk for almost the entire time with little or no student participation, or he may set aside part of the lecture for students to respond to and discuss what is said (Marshall & Rowland, 1998:150).

Strong note-taking skills are essential for university study, yet many students find good note-taking difficult. The goal of note-taking is to take notes in an accurate and detailed way so that a student would not need to go back to the text-book (Wong, 2000: 163). Note-taking helps a student to study and to decide which paragraphs are relevant to his immediate needs. A student's notes should be similar to the author's topic outline. For example, the title and numbered headings can serve to emphasise the purpose of the whole and its parts, supporting details marked by letters, capitals used for important words, arrows used to indicate connections and tables, and diagrams can be used to summarise information and ideas (Barrass, 1982: 99).

Even though educators argue that lectures are widely used because they are the cheapest way of teaching large numbers of students, lectures remain valuable in achieving a student's purpose for learning. For example, in online courses, the text of any lectures which have been transferred to this medium without change will be no better than the original (Marshall & Rowland, 1998: 151). Online courses at times present information in the form of electronic lectures (e-lectures). These may have the same purposes as face-to-face lectures. Straight text e-lectures may need to be downloaded for easier reading and underlining (Marshall & Rowland, 1998: 155).

Marshall and Rowland (1998: 154) point out that, since a student can make notes from his lectures, reading or discussions, he is expected to take an

active role in creating notes. The notes are more than a passive record of a reading or lecture. As a learner, the student should be making his individual notes, processing and selecting information so that the notes are useful. The notes should show the relative importance of information at a glance; a student should use methods of note making that clearly separate the main points from the minor points.

In real life, when it comes to note-taking, it is not always possible to write down every word; in the classroom, on the telephone, or in everyday conversation, a summary of what the speaker says is written down by the students who are expected to pick out important information (cf. Raimes, 1983: 78; Palmer, 2004: 130). For example, when students take notes, they can be given a skeleton outline to work with and expand so that their note-taking is more directed. As students gain more experience, they can take notes from long passages. Students need to be alerted to the signals the speakers use: pauses, raising the head and voice to make an important point or using words such as 'first', 'finally', most important to signal separation and priority of the points made (Raimes, 1983: 78). Thus, Palmer (2004: 131) points out that key-word noting is an intensive activity which aims to isolate the skeleton and major organs of an argument or episode by focusing on those words or phrases that are central. For example, a student should register the main drift of a piece of writing and choose words and concepts that are vital, but this should be very fast because key-word noting is a form of mental sprinting. The brain is asked to do a lot of work very fast, and like a physical sprinter, it will perform best if 'warmed up' and aware that it will be able to stop soon (Palmer, 2004: 136).

A student will have to record, organise and make sense of the information gathered. This refers to recording points that the student has read or seen, in some form or other. The student will go back to the notes at some point in order to use the information he has recorded (Burns & Sinfield, 2003: 10). The student's notes are a consciously selected version of the material offered (Marshall & Rowland, 1998: 153). Thus, notes are for an individual; they are triggers and aids for a student's private use and have no status whatever as

public documents. So, taking of notes is as individual as any other working method. Students should take their notes in any way they like; the more a student can make taking notes a pleasurable exercise, the more vigorously this will assist his study (Palmer, 2004: 130).

3.4.3.1 Effective Note-taking

Usually, a student will hear a face to face lecture only once. So, preparation for the lecture will help him understand it more fully (Marshall & Rowland, 1998: 152). If lectures are a student's main source of information, then he probably has to write down a lot to be sure of benefiting from it. But, if lectures are backed up by handouts and textbooks, then the student may need very few notes. Equally, if a lecture is poorly delivered and packed with detailed information, the student may have to write a lot just to keep track. For example, if the lecturer is lively and seizes students' imagination with striking examples, the students may learn more by concentrating on listening and writing occasional key points and topic headings (cf. Northedge et al. 1997: 169; 4.3.12).

Regardless of the intellectual level of the activity undertaken, the brain performs best for about 20 to 35 minutes at a time. When the activity is as intensive as key word noting, it has to be expected that the brain will want to settle for the lower end of that span rather than the upper. Therefore, a student need not to try to do too much in one session but should instead try to be in a relaxed and comfortable frame of mind when tackling this practice (Palmer, 2004: 137). Thus, it is important to reduce information to keywords; for one thing the student does not need to overburden the memory by trying to remember too much data (Burns & Sinfield, 2003: 125).

Notes should be an attempt to pick out the 'bones' of the text. This refers particularly to those points in the text that are relevant to one's studies (Northedge et al., 1997: 47). A student's notes should be his consciously selected version of the material offered (Marshall & Rowland, 1998: 153). There is no best way; some people scribble busily throughout the lecture and

produce several pages. Others take down a few key points set out diagrammatically. Both approaches can be effective. It all depends on why a student is attending the lecture, the kind of lecture it is and the way the student works and learns (cf. Northedge et al. 1997: 169; 4.3.1).

In an introduction the lecturer often outlines the lecture, relates the topic to reference material, to a theoretical framework or to the rest of the course, states a problem the lecture will address, or tells a joke to lead into the topic (Marshall & Rowland, 1998: 153). In addition, since notes are for an individual, it is both sensible and stimulating for a student to adopt any method of abbreviation that suits him. Although there are several established shorthand systems, a student is at liberty to construct his own with a little basic ingenuity (Palmer, 2004: 137).

A student should be able to differentiate between lectures which are meant to stimulate his imagination and a lecture which is densely packed with information and ideas. In lectures which are meant to stimulate imagination, a student should spend most of his time sitting back and listening. In lectures which are densely packed with information and ideas a student will take more notes but select from and condense what is said so that he can listen closely enough to understand (Marshall & Rowland, 1998: 155). For example, the lecturer may present either an argumentative or expository lecture on the basis of the learning objectives of a course (cf. Marshall & Rowland, 1998: 151; 4.3.4).

As students typically hear a lecture only once, reviewing notes as soon as possible, preferably immediately after a lecture or the same day, helps the student to remember what he heard (Marshall & Rowland, 1998: 158). To sustain concentration so that he understands more fully what he hears, he should try to question what is being said, anticipate what will be said and frequently review what has been said. He should also make notes and try to deal with situations which make concentration difficult (Marshall & Rowland, 1998: 153).

Burns and Sinfield (2003: 77) point out that the activity of reviewing notes makes a student appraise his own notes and judge whether or not the notes are useful, useable and suited to his purpose. Marshall and Rowland (1998: 159) argue that since most lectures are a one-way communication, using and discussing the lecture material is essential if the student is to understand the material fully. Burns and Sinfield (2003: 77) maintain that the goal is for the student to become an active learner in control of his own learning.

To sum up, Wong (2000: 163) points out that effective note-taking is important for the following reasons:

- A student becomes an active learner when he seeks out important information and writes it down.
- A student focuses on organising the information logically.
- A student selects the important information and reduces it to a form that is easy to study and review.
- A student reduces notes to use for continual review throughout the term.

3.4.3.2 Types of Notes

Marshall and Rowland (1998: 154) differentiate between linear and patterned notes.

- **Linear Notes**

Marshall and Rowland (1998: 154) state that a student can make notes from reading and lectures by starting at the top left hand corner of a page and writing from left to right until he reaches the bottom right hand corner. In keeping with linear note making, the student can try some or all of the following suggestions: use headings and subheadings which break up the text, note key words, use numbering and use different coloured pens to differentiate the relative importance of information.

The student can divide a page into two columns by folding it lengthwise, then uses the left hand column for headings and main points, and the right hand column for minor points or details. This method ensures that before a student writes anything, he should decide on the relative importance of the information (Marshall & Rowland, 1998: 154).

As the student becomes adept at the method, a third column is added. This is a narrow left or right column in which the student records his responses to the information. These responses might include references to check, points of particular interest, questions to ask about the material he doesn't understand and aspects the student knows about (Marshall & Rowland, 1998: 154).

- **Patterned Notes**

Whereas linear notes can be reviewed and underlined to ensure that the student remembers what was read and to see how the various sections fit together, patterned notes of the whole chapter or article can either be drawn up, or summarised (Marshall & Rowland, 1998: 144). Making patterned notes is very active, interactive and requires some practice to get used to. The activity actually encourages a student to reorganise the information gathered as he makes sense of it and records it (Burns & Sinfield, 2003: 129)

Patterned notes are also called 'explosion charts'. This method involves starting in the centre of the page and branching to the edge; the theme or argument of the information is in the centre of the page while the main and sub-points radiate from it. The minor points or details radiate from the sub-points. The student can also show 'cross-sections' between main points. A pattern can be drawn to represent the structure of the material as presented. Patterns of notes are thus a visual aid to learning the material that complements the usual oral/textual format in which information is stored (Marshall & Rowland, 1998: 154; 4.3.1). For example, a student can sketch his own images or build up more complex ideas with multiple images (Donald & Kneale, 2001: 25).

3.4.4 Reference Materials

Reference materials are vital 'tools' that can support language learning and make it more successful. A student can use dictionaries and grammar books as reference materials (Donald & Kneale, 2001: 71). Knowledge of the most suitable reference materials for a particular purpose and subject is something a student will learn from the lecturer and from the basic information included in a course (cf. Palmer, 2004: 95).

3.4.4.1 Dictionaries and Thesauruses

Different types of dictionaries are essential for learning a language (cf. Donald & Kneale, 2001: 71 & 77). A good dictionary can be used to teach reference skills because students can use it to find meanings of words, get the correct spelling and pronunciation of each word, its current use in English, its derivatives and its derivation. It is essential that a lecturer recommends a dictionary that contains relevant information in order to give a student the opportunity he needs to acquire and develop the reference skill needed (cf. Barrass, 1982: Appendix 4). To derive pleasure from a good dictionary, it is essential that a student learns how to use it to find the information needed (Palmer, 2004: 93).

A thesaurus lists groups of words that have broadly similar meanings. It is a valuable aid only if the student thinks alertly about the possible differences between the words as well as their similarities (Palmer, 2004: 94).

The successful use of dictionaries and thesauruses hinges on intelligence rather than knowledge. This knowledge cannot be acquired unless the student applies intelligence. The student needs to apply his own thinking to the search for information (Palmer, 2004: 95). Thus, the usage of dictionaries and thesauruses for reference purposes should be complementary to one another.

Specialised dictionaries for relevant fields can be handy (Donald & Kneale, 2001: 72) when English is taught in a specific context of Science and

Mathematics (cf. Mathabatha, 2005: 5; 2.2). For example, Biology has a vocabulary and a language of its own which is superimposed on the language of ordinary literary English as well as that of science in general. Much of the nomenclature of Biology is based upon Latin (Orr & Schutte, 1992: 128). Latin is still the basis of the language which is needed for the description of plants and animals and every biologist should be familiar with its rudiments even though it is not necessary to study the language itself. It follows that, if one is not very familiar with Latin, a good dictionary with etymological entries for every word is indispensable (Orr & Schutte, 1992: 141).

Mathematics is expressed in a complex but very precise language which is quite different from that of normal usage or even from that which is used in other branches of science. Amongst other things, mathematic actions and operations are described by special verbs, adjectives, adverbs and verb phrases which are also very precisely defined. The reader of a mathematics text must therefore realise that the author is speaking directly to him in the very precise language (cf. Orr & Schutte, 1992: 185). So, an underprepared student studying mathematics might need a specialised mathematics dictionary.

3.4.4.2 Other References

Other references are found through library searches, which are never done in isolation. For example, a student can review his reasons for searching at intervals and also keep his 'search' focused (Donald & Kneale, 2001: 60). Some of the people who can be consulted about searches are a subject librarian who is a specialist (Burns & Sinfield, 2003: 34), lecturers and fellow students (cf. Marshall & Rowland, 1998: 92 & 105; Palmer, 2004: 96).

The ability to use references is a skill which requires an understanding of how an index works. Finding the right index for a student's needs on any given occasion depends on his experience of using indices and how broad his knowledge of indices is (Palmer, 2004: 96). For example, using the index to locate a grammar book in a library depends on the student ability to use the

index appropriately. Grammar books vary; in practice, there is, a broad distinction between grammar books intended to cover the range from beginners to intermediate learners and the very advanced reference grammars which attempt to provide a definite coverage of every topic, every rule and every exception to every rule (cf. Donald & Kneale, 2001: 81). Grammar books also use specialised terminology which a student needs to learn (cf. Donald & Kneale, 2001: 79; 3.4.1.3). In addition, many dictionaries have separate sections on grammar, including basic information on grammar, declensions and other essentials (cf. Donald & Kneale, 2001:74; 3.4.4.1).

A library is also a rich storehouse of periodicals and academic papers; material that is important to the student. Students tend to prefer periodicals and papers for some knowledge of the latest developments and thinking in a given area (Palmer, 2004: 96). Thus, a student should be efficient in sorting and evaluating what is available, relevant, timely and interesting (cf. Marshall & Rowland, 1998: 94; Donald & Kneale, 2001: 56). He is likely to want to refer to the material again (Marshall & Rowland, 1998: 95). Thus, the lecturer is responsible for exposing students to some of the available references.

3.4.5 Information Presentation and Interpretation

Visual or non-textual materials form part of language and students should be able to present and interpret visual information such as diagrams, tables, graphs, symbols and lists. However, special skills are required to utilise such information to the full (cf. Orr & Schutte, 1992: 299; 3.4.2). These skills are needed to keep up receptivity and two-way communication, and to eliminate communication barriers (Lefton & Buzzotta, 2004: 119). Moreover, it is important for students to have something to look at that is eye-catching and relevant to the task in hand (Ur, 1991: 281).

Furthermore, diagrams, tables, and so on make text attractive to the reader. They are also an aid to explanation and help one to present information quickly, clearly and concisely; they complete the writing. They also enable the writer to use fewer words than would otherwise be needed (Barrass, 1982:

32). Graphs and charts are used because they summarise numerical information in a way that provides a quick, visual overview but still give the reader access to large amounts of data in a condensed format (Northedge et al., 1997: 62).

Diagrams, tables, graphs, symbols and lists are a valuable resource in the language-learning classroom. They provide a visual framework for the use of language skills (cf. Raimes, 1983: 42; 3.4). For instance, students should be taught that diagrams used for presenting data or statistics are drawn to scale, a graph shows how one thing varies relative to changes in another and that when plotting a graph, the thing that students can control such as the time at which readings are taken, must be plotted in relation to the horizontal axis of the graph (Barrass, 1982: 32).

Tasks can also be derived from diagrams, tables, graphs, symbols and lists. Students deal with given information in writing, that could be in the form of a report or a composition; they invent their own sentences but do not have to invent the material. They therefore work within strict limits of vocabulary and content and the need for clarity, coherence and completeness when they process and present information (Raimes, 1983: 40).

As indicated in 3.4.4, when English is taught in the context of Mathematics and Science, a close relationship can be developed among English, Biology, Chemistry, Mathematics and Physics courses (cf. Mathabatha, 2005: 5; 2.2). For example, in Chemistry, either a vertical list or horizontal list can be used to display the names of the set of compounds that are classified according to the physical properties. The name of the compound with the largest numerical value is placed at the top (or to the left) and that with the lowest numerical value at the bottom (or the right), or vice versa. Thus, this type of ordered list is classified with respect to size. If a set of objects has two properties or variables, each can vary independently from object to object and this makes it slightly more difficult. Consequently, a table is needed for a proper classification in which the numerical value of the one variable is ordered vertically and the other, horizontally. Such tables can contain either a list of

names or a list of names together with some numerical information as in the periodic table of elements, for example (Orr & Schutte, 1992: 240).

Furthermore, Northedge et al. (1997: 91) point out that if a piece of mathematical writing is compared with a scientific article, the language used and the style are slightly different. Although both kinds of writing are written in sentences and can be read aloud, Mathematics language tends to be more condensed, with more notation and abbreviations. Orr and Schutte (1992: 204) point out that when the symbolic language of Mathematics in an equation, expression or definition is 'translated' into English, there are certain mathematical signs that are mapped on variations of the English verb 'to be'. In the written part of the Mathematics text which occurs between the equations various similar phrases appear; some of them are derived from the symbols. For example, the verb to be and the symbols which are derived from it have very exact meanings which play a central role in mathematics: $=$, $\sim$, $<$, $>$ and so on.

Visual information is also very important in Physics and is much part of the language of Physics as the words and the definitions. Various kinds of visual information such as drawings of apparatus are used. Any such visual information must be treated as part of the text and should be read and studied together with the text because the two form one unit and can never be separated (Orr & Schutte, 1992: 283). In addition, graphs are used extensively in Physics; they appear everywhere and in many different forms. They form an integral part of the text and every graph displayed in a text requires a careful study in which each part of the graph is carefully analysed. A student studying Physics must also make a special effort to learn how to interpret graphs. For instance, when one reads a graph, the first thing to remember is that every graph which is drawn from experimental data 'tells a story' about how a certain piece of matter behaves when a parameter which acts upon it is changed. The story should be extracted from the graph step-wise (cf. Orr & Schutte, 1992: 288; 3.4.1.3).

3.5 CONCLUSION

Reading, writing, note-taking, effective use of reference materials and, information presentation and interpretation are some of the core study skills that are essential for the successful study of previously disadvantaged science students at tertiary level. These study skills can be incorporated into an ESP course in order to give support to the students.

The four macro skills of listening speaking, reading and writing must be used as a foundation for the acquisition and development of the identified study skills. To be able to develop the study skills, students need to know their starting point through feedback from their lecturer on what is expected of them. In addition, if English is taught in the context of Biology, Chemistry, Mathematics and Physics, students should be able to present and interpret information by means of diagrams, tables, graphs, lists and symbols. Reference materials together with a good library, lecturers, librarians and fellow students can offer support and enrich the students' learning environment if used effectively. The teaching of the study skills is about the edification of previously disadvantaged students and aims to increase the quantity and quality of students who study and pass the sciences at university.

The next chapter focuses on course design in ESP.

4.1 INTRODUCTION

Course design in ESP is a process that entails making informed decisions regarding teaching-learning activities. The process calls for a co-ordination and harmonisation of planned activities which are at the heart of ESP course design. Such activities are normally planned for a specific group of students that has unique needs.

The aim in this chapter is to give an overview of course design in ESP and discuss parameters for ESP course design in general terms, namely, characteristics of learners, level-finding, needs analysis, relevant teaching materials and content, and assessment.

4.2 COURSE DESIGN IN ESP: AN OVERVIEW

ESP course design is the product of a dynamic interaction between a number of elements such as results of the needs analysis, the course designers' approach to a syllabus and methodology, and existing materials, if any. All of these are mediated by the contextual constraints (Robinson, 1991: 34). Course design is thus concerned with the 'what' of teaching (Ellis, 2003: 205).

Course design is often a substantial and important part of the workload in ESP because much of the work done by an ESP lecturer is concerned with designing appropriate courses for various groups of learners (Hutchinson & Waters, 1987: 21). ESP courses are developed through needs assessment that identifies what the students need to do in English, the contexts in which they do it and what their current level of English is (cf. Schleppegrell, 1991). This means that any well-established ESP centre has its own ideology relating to course design (Robinson, 1991: 34).

Developments in psychology that emphasised the importance of the learners and their attitude to learning partly contributed to the rise of ESP, which emphasises practical outcomes. That learners have different needs and interests has an important influence on their motivation to learn and, by extension, the effectiveness of their learning (cf. Hutchinson & Waters, 1987: 8; Dudley-Evans & St John, 1998:1). Since ESP courses are designed with particular students in mind (Robinson, 1991: 5), the ESP approach is often the most motivating and effective one in learning and teaching languages (cf. Schleppegrell, 1991:18; Johns, 1995: 18).

Johns (1995:16) points out that, throughout the considerable history of ESP, practitioners have been seeking ways to design courses that balance the demands of the target situations in which their students will be using English. According to Hutchinson and Waters (1987: 59), this entails the analysis of target situation needs, which is a matter of asking questions about the target situation and the attitudes of the various participants towards that situation in the learning process.

Courses often consist of a sequence of units that, in turn, are made up of several lessons. Units extend over several sessions and are thematically integrated or united in some way. Thematic organisation that chooses particular topics and builds on them is usually followed (Genesee & Upshur, 1996: 9).

Dudley-Evans and St. John, (1998: 3) point out that much ESP work is based on the notion of a 'common-core' of language and skills that belong to all academic disciplines or cut across the whole activity of business. Consequently, ESP teaching does not necessarily have to be related to content but it should always reflect the underlying concepts and activities of the broad discipline.

Students on an ESP course are likely to be adults rather than children (Robinson, 1991: 3). This is why an adult-oriented learning environment is created in which the lecturer sometimes becomes more like a consultant

enjoying equal status with the learners who have expertise in the subject matter (Dudley-Evans & St John, 1998: 4).

Of vital consideration in course design is the number and capabilities of the lecturers involved. For example, the allocation of students to classes may depend first and foremost on the number of lecturers available, and secondly on the grouping of students by subject specialisms. In addition, the choice of methodology and materials is likely to be influenced by what the lecturers are able to do, or by how far the budget and timing allow for the training of lecturers (cf. Robinson, 1991: 43; 4.3.12).

Graves (1996: 34) points out that time is another important consideration in designing a course. This implies that a lecturer may adjust his teaching priorities according to the length of the course. The kinds of activities he designs may be affected by the amount of time available both in class and before class. However, Robinson (1991: 43) states that, in other instances, the timing and indeed the timetable of the course may not be negotiable. This may dictate the nature of some of the teaching activities. For example, if class sessions are infrequent, each session may need to be treated as self-contained, with no carry-over expected from one week to the next.

The location of a course has to be taken into consideration in course design. According to Robinson (1991: 43), the location of a course refers to where the course will be based, its status and role, and that of its staff. In instances where an ESP project is likely to deal with a large number of students over a number of years, it is important to decide as early as possible where the project should be located and with which other institutions (if any) it should be both physically and administratively associated. However, such a decision will not be left just to the course designer. For example, the nature of the classrooms and their distance from the students' other places of work may influence decisions related to the syllabus and even methodology. Classroom activities can also be affected by student numbers and the location of facilities. Facilities refer to sufficient and functioning photocopying machines, sufficient paper and so on. Thus, most attempts to improve the standard of

language programmes require a mix of professional and administrative support (see 4.3.2).

Even though ESP course designers may be able to make fundamental policy decisions, such as the choice of medium and form of language for instruction, decisions such as these affect the wider community (Robinson, 1991: 42). Hutchinson and Waters (1987: 53), Robinson (1991, 30) and Dudley-Evans and St John (1998: 1) argue that the main concern of ESP therefore remains with needs analysis and preparing learners to communicate effectively in the tasks prescribed by their study or work. This can be attained because ESP is normally goal-directed.

Jordan (1997: 65) states that the usual approach is to prepare for a course based upon the previous course, amended in the light of feedback. There is a range of courses that have been taught and materials that have been published around the world (Dudley-Evans & St John, 1998: 162). Thus, the course should be modified again according to perceived needs and constraints (cf. Jordan, 1997: 65; 2.2; 4.3.13).

Since course design involves putting theoretical decisions about objectives and syllabus into context (Robinson, 1991: 41), there is no single model for an ESP course. An ESP course frequently requires a major input of time and resources, both financial and physical, on the part of students, lecturing staff and administrators (Robinson, 1991: 44). Thus, Schleppergrell, (1991: 19) asserts that no teacher who is not creative will cope in an ESP class. Even though developing and teaching ESP requires creativity, it can also be extremely rewarding because of the real-life, immediate application of learning that typically accompanies such a programme.

4.3 SOME PARAMETERS FOR ESP COURSE DESIGN

According to Dudley-Evans and St John (1998: 145), parameters for an integrated approach to ESP course can be subsumed under the following questions:

- Should the course be intensive or extensive?
- Should learners' performance be assessed or non-assessed?
- Should the course deal with immediate or delayed needs?
- Should the role of the lecturer be that of the provider of knowledge and activities or should it be that of a facilitator of activities arising from learners' expressed wants?
- Should the course have a broad or narrow focus?
- Should the course be pre-study or pre-experience or run parallel with the study or experience?
- Should the material be common-core or specific to learners' study or work?
- Should the group be homogeneous or should it be heterogeneous?
- Should the course be designed by a language lecturer after consultation with the learners and the institution, or should it be subject to a process of negotiation with the learners?

In line with this, Schlepegrell (1991: 19) discusses course design for ESP in terms of learners' characteristics and their needs, level finding, goals and objectives, teaching materials and assessment. In addition, Graves' (1996: 5) discussion of guidelines and principles for course design includes content, materials and activities, evaluation and, constraints and resources.

Though the guidelines and principles above suggest an ordered process, it would probably be more realistic to view them as a framework of components that overlap both conceptually and temporally. They also raise issues for the lecturer to consider. Different lecturers will start with different issues. Where a lecturer starts in the process of course design depends on constraints and resources of the situation and how he perceives them. In order to proceed, it is necessary to understand the givens of the situation, to identify the challenges that will shape his decisions, and to figure out what must and can be done. This process is called 'problematizing' the situation; this depends on the lecturer's perception of the context, out of which arise problems to be

solved. As a lecturer problematises the situation, he can begin to find workable solutions that make use of his experience and the resources available (Graves, 1996: 5).

Curriculum design specialists have developed various frameworks that break down the process of course development into components and sub-processes. A framework of components is useful for several reasons: it provides an organised way of conceiving a complex process, sets forth domains of inquiry for the lecturer and provides a set of terms currently used in talking about course development (Graves, 1996: 12).

The discussion in the next section merges the points of view outlined above. This merger amounts to a framework for ESP course design.

4.3.1 Learner Characteristics

Groups of learners vary greatly. Some come to a course needing English immediately for study or work. Others may be more reluctant but know that they are likely to need English in the future. Yet others are obliged to take the course but have to be motivated to learn English. With the first type of learners, the lecturer's challenge is to maintain and exploit the motivation they bring to the course. With the last type, the challenge is for the lecturer to work hard at making the course itself enjoyable and satisfying. As a result, the first step in formulating a specialised course of any kind is to consider the nature of the target group (cf. Mason, 1994: 18; Davies & Pearse, 2000: 12).

According to Robinson (1991: 3), more frequently the students on ESP courses are in tertiary education or are experienced members of the workforce. It is often assumed that ESP students will not be beginners but will have already studied English for General Purposes (EGP) for some years. Schleppegrell (1991: 20) argues that the common factor in all ESP programmes is that they are designed for students who have a common reason for learning English, a common context in which to use English, content knowledge of their subject area and learning strategies.

Such students will have to focus on cognitive and linguistic tasks at the same time. The students may not have the sufficient academic English language skills to be able to follow the subject areas in their curricula, but are nevertheless expected to succeed in an all-English curriculum (Carrasquillo & Rodriguez, 1995: 3). The students are also at risk of failure because they come to university unprepared and, as a result, a student learning in English is one of the most critical challenges confronting lecturers (Carrasquillo & Rodriguez, 1995, 24). As already indicated in 2.2, students need to have control of English in order to achieve academically (Carrasquillo & Rodriguez, 1994: 26).

Davies and Pearse (2000: 107) argue that the lecturer should try to offer a variety of activities in order to suit different types of learners, because success in language learning situations tends to be greater when the individual characteristics of learners are taken into account; some learners are more 'visual' and others are more 'aural'. Some are more 'communicative' and others are more 'analytical'. Davis et al. (1994: 14) differentiate among visual, auditory and tactile learners. Since visual learners learn primarily with their eyes it is important for the lecturer to use resources that must be read or seen. The lecturer should also provide many resources for hearing, for auditory learners and have manipulative and three-dimensional materials that are touchable and moveable for tactile learners (see 2.3.5 & 3.4.5).

Furthermore, Davis et al. (1994: 14) state that every healthy learner uses some combination of both left-brain and right-brain behaviours but most people show a preference for one or the other. The left-brain learner is called linear (processes information line-by-line or in a sequence) or analytical (looks logically at details and facts). The right-brain preference individual is called a global learner because he sees the big picture (the overall view) and processes information as a whole or globally. The left-brain language learner is usually more logical, organised and disciplined. This learner wants a plan, likes to look at details and makes decisions by facts. The right-brain language

learner likes things to be informal and spontaneous, and is usually creative and tends to make decisions based on intuition and feelings.

For those students with a right-brain preference the lecturer should clearly state all concepts, principles and procedures early in the lesson. The role of the lecturer is that of a guide; problem-solving should be modelled with verbalisation of the steps he takes during the lesson. The class atmosphere should be relaxed and friendly without tension or pressure. If students have a left-brain preference lecturers should emphasise the discovery approach, and student can be encouraged to find ways of solving problems. New concepts and procedures can be taught by logical explanation and analytical exploration. Graphs, charts and tables can be distributed in advance on handouts or transparencies (Davis et al., 1994: 15).

Dudley-Evans and St John (1998: 152) point out that another factor to consider is whether the ESP class is made up of a homogeneous group from one discipline or profession or a heterogeneous group of learners from different disciplines, professions or levels of management. Even a group from one faculty is unlikely to be homogeneous if it contains first entering students from different schools; each sub-group will have different needs.

ESP recognises the different needs of different groups of learners (Davies & Pearse, 2000: 194). If a group is heterogeneous, it is difficult to introduce much specific work as it is more appropriate to look for topics and activities that are common to the various interests in the group. But if a group is homogeneous, it is possible to undertake more specific work. Most learners will be enthusiastic about ESP work that relates directly to their needs and helps them with writing assignments or reports that they actually have to write at the time of the ESP course (cf. Dudley-Evans & St John, 1998: 152; Mercer, 2001: 243).

4.3.2 Needs Analysis

Needs analysis is generally regarded as critical to ESP (Robinson, 1991: 7) because the term ESP is seen to imply that every learning situation is unique (Robinson, 1991: 56). Thus, Robinson (1991: 3) accepts the primacy of needs analysis.

Chan (2001: 16) points out that learners are often seen as the best judges of their own needs and wants as they know what they can and cannot do with the target language and what language skills are most essential. Robinson (1991: 3) argues that an ESP course is based on a needs analysis which aims to specify as closely as possible what exactly is it that students have to do through the medium of English. In keeping with this argument Graves (1996: 12) maintains that, at its most basic, needs analysis involves finding out what the learners know and can do, and what they need to learn or do so that the course can bridge the gap. One way of conceptualising needs is to distinguish between 'objective' and 'subjective' needs.

It is worth pointing out that, according to Hutchinson and Waters (1987: 12), target situation analysis (TSA) marked a certain 'coming of age' of ESP. Given that the purpose of an ESP course is to enable learners to function adequately in a target situation, ESP course design ought to proceed by first identifying the target situation and then carrying out a rigorous analysis of the linguistic features of that situation.

Robinson (1991: 8) distinguishes between TSA and present situation analysis (PSA). TSA is a needs analysis which focuses on students' needs at the end of a language course, whereas PSA seeks to establish what the students are like at the start of their language course. (Robinson, 1991: 42) points out that some features of the PSA are more appropriately considered as management issues. These include the timing and location of the proposed course, the lecturers and facilities available, and the time available for planning. The nature of these features will affect the course content. This view is also espoused by Graves (1996: 16), who argues that needs assessment is not a

value-free process; it is influenced by the lecturer's view of what the course is about, the institutional constraints and the students' perceptions of what is being asked of them.

Needs analysis is usually conducted in the planning stage. But depending on one's context, needs assessment can be conducted in the planning stage, the teaching stage or the re-planning stage if one determines that the assessment of needs must be modified in some way. Another important factor in deciding when to assess needs, is the lecturer's view of the purpose of needs analysis (Graves, 1996: 14). Although it has been standard practice to conduct as much of the needs analysis as possible before the start of the course (Robinson, 1991: 15), it is generally accepted that the procedure should be repeated during the course. As a result of this, needs analysis becomes an on-going process (West, 1994: 5). Needs analysis can also be a teaching tool which can help students become more aware and more purposeful in their learning if done during teaching (cf. West, 1994: 5; Graves, 1996: 14).

Different students have different needs, and the information gathered through needs analysis can help a lecturer make choices as to what to teach and how to teach. For example, students who wish to attend universities in English-speaking countries will have needs related to academic tasks and academic discourse. Objective information about their prior experience in academic settings, their level of English and their field of study can contribute to the lecturer's decisions about a course. Their subjective needs may be related concerns about adjusting to the university setting and to a new culture, their level of self-confidence or their expectations regarding what and how they will be taught (Graves, 1996: 14).

In ESP, needs are derived from needs analysis that relates to activities the students need to carry out in a target situation. Because TSA and PSA are essentially concerned with establishing language items to be taught (cf. West, 1994 & Dudley-Evans & St John, 1998), any teaching activity is presented in a context (Dudley-Evans & St John, 1998). The needs assessment is thus

carried out for the benefit of the user (van Hest & Oud-de-Glas, 1990: 8). It should never be unilateral (Smoak, 2003: 22).

Dudley-Evans and St John (1998: 148) point out that ESP differentiates between immediate and delayed needs. Immediate needs are those needs that students have at the time of the course, while delayed needs are those that will become significant later. Any pre-experience course is by definition a course that deals with delayed needs. However, many English for Academic Purposes (EAP) courses fall on the continuum between the two points. The English course may run parallel with subject courses, but the students' actual needs for English become pressing in later years of the course or once they have graduated.

Needs analysis is carried out through a series of steps or phases, but perhaps the crucial one is selecting the information-gathering instrument. Ways to carry out needs analysis range from major scientific surveys to informal tools put together by an individual lecturer for and with his class. Any investigation may employ more than one method, although the scope and objectives of the inquiry will largely determine the nature of the investigation and hence the choice of the most appropriate investigatory instrument. Needs analysis methods can be classified into inductive (observations and case studies from which courses can be generalised) and deductive (questionnaires, surveys or other data-gathering instruments which provide various forms of information as the basis of course design) (cf. West, 1994; Jordan, 1997).

4.3.3 Level Finding

Identifying students' language strengths and weaknesses is an important factor in their academic development and is a necessary condition for their success (Carrasquillo & Rodriguez, 1995: 28). But, classes are made up of a range of individuals with different talents, styles and motivations (Skehan, 2002: 290). Even though the multilevel classroom is the norm in ESP, the skills levels of students have to be known in order to provide an effective programme (cf. Hutchinson & Waters, 1987: 13; Schleppegrell, 1991).

In ESP work it may be very difficult to ensure that the groups are homogeneous in their language level. Although it is generally advantageous in language learning to divide groups by level, in ESP, homogeneity in the learners' specific purposes is more important (cf. Dudley-Evans & St John, 1998: 153; 4.3.1).

Establishing students' levels should be based on multi-dimensional procedures that include tests, information from lecturers or lecturer referrals, information from parents, evaluation of records, appraisal of the student's academic level and appraisal of the student's language skills (Carrasquillo & Rodriquez, 1995: 32). For example, a criterion-referenced test can be used to determine the learner's proficiency. Such assessment information guides the lecturer in providing the best classroom environment and instructional services. This ramifies into providing language support such as tutoring beyond the normal classroom (Carrasquillo & Rodriquez, 1995: 28).

If a syllabus is not clear about levels of learner performance and major goals, the lecturer needs to take steps to clarify these. For example, he may consult a co-ordinator or senior lecturer, examine the prescribed book(s) in detail and look at any course tests that exist (Davies & Pearse, 2000: 118).

4.3.4 Goals and Objectives

Goal-setting for a course emanates from needs assessment and level finding (cf. Schleppegrell, 1991: 20; Reilly, 2001: 35). West (1994: 2) points out that the 'first step' in the construction of any language course is to define objectives on the basis of the needs of learners (see 4.3.2). Thus, ESP is normally goal directed (Robinson, 1991: 2).

Goals are general statements of the overall, long-term purpose of the course, and objectives express the specific ways in which goals will be achieved. Goals of a course represent the destination, whereas objectives represent the various points that chart the course towards the destination. Setting goals and

objectives therefore provides a sense of direction and a coherent framework for a lecturer in planning a course. Clear goals and objectives give the lecturer a basis for determining which content and activities are appropriate for a course (cf. Vieira, 1993: 10; Graves, 1996: 16). Goals can be either skill-oriented or task-related (cf. Schleppegrell, 1991: 20; Reilly, 2001: 35). Thus, the goals of English courses vary according to the context in which they are taught (Davies & Pearse, 2000: 3).

According to Davies and Pearse (2000: 15), a major goal of English language teaching should be to enable students to use English effectively and as far as possible accurately in communication. Which is why it is important that students be told what the goals and objectives of learning a specific language are (cf. Schleppegrell, 1991: 20; Reilly, 2001: 35).

The formulation of objectives provides a check as to whether the goals will be addressed. Objectives are a particular way of stating content and activities (Graves, 1996: 18). Since the overall long-term goal of teaching is to enable learners to communicate effectively, the short-term goals, which could be in the form of lessons, units, tests and so on, are important in giving learners and lecturers a feeling of making progress (Davies & Pearse, 2000: 3 & 117). Thus, short-term objectives should be used as building blocks that will help the lecturer attain the long-term objective. It is against this background that Davies and Pearse (2000: 4) argue that, depending on the overall objectives of the course, as much time as possible should also be given to realistic work on the language skills that the learners need to master.

One way of formulating objectives for language learners is to base them on four types of goals: proficiency goals, cognitive goals, affective goals and transfer goals. Proficiency goals entail general competency, mastery of the four skills or mastery of specific language behaviours. Cognitive goals include mastery of linguistic knowledge and mastery of cultural knowledge, whereas affective goals include achieving confidence as a user of the language and achieving confidence in oneself as a student. Transfer goals involve learning how to learn so that one can call upon learning skills gained in one situation to

meet future learning challenges (cf. Stern, 1992). Strevens offers another formulation of objectives which can be based on the following ESP goals: to meet specified needs of the learner, to relate in content (in its topics and themes) to particular disciplines, occupations and activities, to centre teaching on language appropriate to those activities in syntax, lexis, discourse, semantics and so on, and to contrast the teaching of ESP with 'General English' (cf. Strevens, 1988).

4.3.5 Should a course be intensive or extensive?

Robinson (1991: 42) and Dudley-Evans and St John (1998: 146) point out that course designers may have to decide whether the course should be intensive or extensive. Robinson (1991: 42) states that, in cases where the lecturer has a choice, he must make this choice very early.

Dudley-Evans and St John (1998: 146-147) point out that ESP courses are frequently intensive. For example, companies send their managers, secretaries or technicians on short intensive courses in the expectation that an exclusive concentration on certain skills or language for the period of the course will greatly enhance their performance in activities that require English. Similarly, intensive pre-study courses are very common in English-medium situations. For instance, students could be given language improvement and study skills sessions for between one and six months, or even a year before they begin subject courses because it is assumed that they need to reach a certain level of language proficiency before they can begin their subject course.

During an intensive ESP course the learners' time is totally committed to the course. In contrast, an extensive ESP course occupies only a small part of a student's timetable or a professional person's work schedule. The choice between intensive and extensive should generally be determined by circumstances within the institution or company for which the course is being run (Dudley-Evans & St John, 1998: 146-147).

4.3.6 Should a course have a broad or narrow focus?

Coming up with a course design is a dynamic mix of juggling with objectives, content, material and so on; the focus of a course can either be broad or narrow. A broad focus concentrates on a range of target-events such as study or professional skills or a variety of genres, whereas a narrow focus concentrates on a few target-events (Dudley-Evans & St John, 1998: 150 & 162). Thus, target-events are selected themes which are directly relevant to the needs of ESP learners. These themes can be used to help the lecturer facilitate the attainment of the overall goal of language teaching in context (see 3.4.1 & 3.4.2).

Dudley-Evans and St John (1998: 162) further point out that the starting point is at the macro-level, with the target-events in the form of tasks that ESP learners need and want to perform successfully. According to Dudley-Evans & St John (1998: xv), macro-skills refer to the major skills of reading, writing, speaking and listening, for example. A macro-skill can be broken down into a number of micro-skills. Micro-skills associated skills areas and linguistic realisations such as grammar and vocabulary requirements can then be considered. Micro-skills refer to the lower-level skills that constitute a macro-skill (see 3.4).

The focus can be broad because of the range of target-events covered. This does not imply that the skills are taught in a general and superficial manner; skills are dealt with in great detail and the teaching material may include some specific content. A broad focus allows the lecturer to deal with a number of skills even if the actual need is one skill. On the other hand, a narrow focus concentrates on one or two skills, but uses a wide range of general and specific content to teach the skills and related language. A narrow focus is deemed appropriate where the needs are limited and the learners are convinced of the importance of concentrating just on the identified needs (Dudley-Evans & St John, 1998: 151).

Although the focus in the ESP course may be specific, a broad focus may be accommodated. For example, the lecturer can rope in some general conversational work or some presentation of background information about other English-speaking countries as a change of normal routine (Dudley-Evans & St John, 1998: 150), and for enrichment purposes.

Learners have to be given an opportunity to practise a number of skills in one class. For instance, a class may have as its aim one particular macro-skill such as writing but the use of the other micro-skills will both help the learning of the target macro-skill and provide variety for the class. In the same way, a reading class that aims to help acquire reading as a macro-skill can be dominated by micro-skills such as deducing meaning from context and learning key core business vocabulary items (Dudley-Evans & St John, 1998: 177). However, the balance and mix of skills that the students need can be represented naturally in the projects undertaken in a course (Cunningworth, 1995: 134).

4.3.7 Do learners have pre-experience or parallel experience?

Pre-experience refers to a situation where learners do not have experience of the target situation at the time of the ESP course. Parallel experience, on the other hand, means that the English course runs concurrently with the study course or professional activity (Dudley-Evans & St John, 1998: 151).

Dudley- Evans and St John (1998: 151) state that the course designer does not always make the decision on this parameter. Institutions or companies often send groups for English training before they have had much professional or academic experience. There is nevertheless always an advantage in teaching ESP to learners who already have some subject or professional knowledge because the lecturer is able to draw on the learners' knowledge, to ask them to give examples from their knowledge and to make use of certain learning strategies that could be familiar from learning about their subject or profession.

4.3.8 Is the design of the course fixed or negotiated?

There are two approaches to course design: a fixed course design, which can be laid down in advance of the course and is rarely deviated from, and a flexible and negotiated course design, which allows room for change based on feedback from learners (cf. Nunan, 1988; Dudley-Evans & St John, 1998).

Courses can also be repeatable (durable) or one-off. Repeatable courses are those that are taught again after a specified period of time. The course outline and materials are prepared and remain essentially similar each time they are used. One-off courses, on the contrary, are run for a particular course or group and are not repeated. Although a course outline and materials may be prepared, it is more likely that the course uses particular sources provided by the learners or by the lecturer to meet an expressed need or want (Dudley-Evans & St John, 1998: 154).

If lecturers or the institution follow the philosophy that learners need to be involved in making decisions about their learning and in assessing their own progress, then a flexible negotiated syllabus is important. It is often the policy with such courses that a record of the decisions made by the group about what should be taught, what skills and language work is entailed and how much time was spent on each aspect of the course, is kept (Dudley-Evans & St John, 1998: 154).

A middle position on the continuum may be used with a course following a more or less fixed design that allows for some time to be spent on topics and issues that learners raise themselves (Dudley-Evans & St John, 1998: 154). However, it is characteristic of ESP courses to have a clearly specified time period for the course. It is implicit that objectives should be closely specified and their realisation related to the time available. This further implies collaboration and negotiation among all those involved with the course. These include organisers, lecturers, sponsors and students (Robinson, 1991: 3). For example, Davies and Pearse (2000: 120) argue that the lecturer can calculate

the approximate time for each activity so that he does not end up doing only half of what he has planned.

4.3.9 Content

Graves (1996: 20) asserts that much has changed over the years in the field of approaches to language teaching. The proficiency movement, the concept and various models of communicative competence, the advent of ESP, the proliferation of methods of language teaching and the diversification of English learners all contribute to provide the lecturer with the backbone of a course. The choices a lecturer makes are much more context-dependent than in the past, and as a result, involve a number of factors such as who the students are, their goals and expectations of learning English, the lecturer's own conception of what language is and what will best meet the students' needs, the nature of the course, and the institutional curriculum.

Robinson (1991: 37) states that 'specialist' content can be used as an organising device for many ESP courses. A major change in how lecturers conceptualise content has come about because of the view that one teaches learners, not just language. The emphasis on the learner has introduced other important elements into a lecturer's conception of what he will teach; the learner's affect. This includes attitudes, self-confidence, and motivation, and the learner's approach to learning which includes understanding and developing one's learning skills. For example, how to improve learners' self-confidence or helping learners become aware of their attitude towards the target culture may be explicitly included in a syllabus, as may be activities that help learners become aware of their strengths and overcome their weaknesses as learners (cf. Graves, 1996: 24; 2.3.1.1).

According to Graves (1996: 20), there are different ways of conceptualising and categorising content. The boundaries between these categories are permeable; they overlap conceptually and are not exclusive of each other. The lecturer's challenge is to figure out which ones are appropriate for his course so as to integrate them. Robinson (1991: 4) maintains that activities that students engage in may be specialist and appropriate. Since an ESP

course involves 'specialist' content, it should be guided by what the needs analysis suggests and what an institution is capable of.

Since there are different ways of conceptualising content in language teaching, the discussion in the next section focuses on the content-based approach as well as content types that can be used to best meet the needs of ESP students.

4.3.9.1 Content-based Approach

Larsen-Freeman (2000: 138) maintains that students generally need a great deal of assistance in understanding subject matter texts when they study academic subjects in a non-native language. Thus, clear language objectives as well as content learning objectives are essential in a content-based approach.

The learning of language through or in conjunction with subject matter can be the focus of a language course. Such a course is content-based because it integrates particular content with language teaching aims. Content-based courses are premised on the assumption that learners will best learn language while engaged in learning subject content. A content-based course may teach the subject matter directly or use subject matter as the basis for language learning-lectures; this is typically an ESP course. The target language can therefore both be a means for and a by-product of learning the subject matter (cf. Graves, 1996: 23; Ellis, 2003: 235). Thus, 'content-based' has come to mean the specific requirements of academic disciplines such as medicine, engineering and geology (Jordan, 1997: 61); the content is taught through the use of English (Savignon, 2002: 4). All decisions as to content and method are based on the learner's reason for learning (Hutchinson & Waters, 1987: 19). This implies that any specific course generally allows more specific work to be undertaken (Dudley-Evans & St John, 1998: 10).

Larsen-Freeman (2000: 137) and Jordan (1997: 61) concur that, for years, specialised language courses have included content relevant to a particular

profession or academic discipline. For instance, the content of a language course for pharmacists is different from the one for computer scientists. The special contribution of content-based instruction is that it integrates the learning of language with the learning of some other content, often in the form of academic subject matter.

4.3.9.2 Content that can be Incorporated in Content-based Approach

Content that can be incorporated in content-based approach include vocabulary, grammar, notional-functional, situational, topic-based, skill-based and task-based content.

4.3.9.2.1 Vocabulary Content

Shaptohvilli (2002: 34) states that vocabulary is one of the key language areas. Courtright and Wesolek (2001: 2) and Fengning (1994: 39) point out that enlarging the learner's vocabulary has been one of the objectives of English reading classes. Thus, vocabulary learning is usually incorporated into reading classes. Courtright and Wesolek (2001: 9) maintain that even though students know that vocabulary development is essential for them to learn English, they often do not have a clear understanding of how to go about learning vocabulary.

Since vocabulary is connected with grammar, familiarity with grammatical patterns helps the reader guess the meanings of words. The connection between vocabulary and grammar can be seen by the interdependence of grammatical and lexical cohesion; in a typical text, grammatical and lexical cohesion support each other (Ying, 2001: 18).

Vocabulary in ESP can be divided into semi-technical- and core business vocabulary (Dudley-Evans & St John, 1998: 81).

Any ESP exercise which exploits a particular context can use vocabulary in context. It is important that both the lecturer and the students appreciate that

this vocabulary is acting as carrier content for a context; it is not the real content of the exercise. However, students need to be able to understand the technical vocabulary to do the exercise. Depending on certain specific contexts, an ESP lecturer may need to teach technical vocabulary and to check whether students have understood technical vocabulary appearing as carrier content for an exercise. This implies that it may also be necessary to ensure that learners have understood technical language presented by a subject specialist or assumed to be known by a subject specialist (Dudley-Evans & St John, 1998: 81).

In situations where the subject specialist is not available, the lecturer may need to pose pertinent questions about technical vocabulary. Examples of the questions are: Has the student fully understood the term? If not, how can he check the meaning? This then involves the use of technical dictionaries or other such sources. In some situations learners starting a new academic course or professional training programme will need help with technical vocabulary that is completely new for them. For example, the ESP lecture and the subject expert can prepare a glossary of new terms with straightforward explanations of the terms (cf. Dudley-Evans & St John, 1998: 81).

Most ESP literature agrees on the need for teaching core business vocabulary. In terms of ESP teaching, this refers to general vocabulary that has a higher frequency in a specific field (Dudley-Evans & St John, 1998: 82).

The teaching of vocabulary in ESP follows similar general principles to those in English for General Purposes (EGP). It is important to distinguish between vocabulary needed for comprehension and that needed for production. In comprehension, deducing the meaning of vocabulary from the context and from the structure of the actual word is the most important way of learning new vocabulary. Vocabulary can be drawn from the context of the reading passages and discussions about them. Word frequency and recentness of use are the two most important factors that affect the storage and retrieval of words in the learners' mental lexicons (Palmberg, 1993: 35). It is also

important to store and retrieve words (vocabulary) for production purposes (cf. Courtright & Wesolek, 2001: 3; Dudley-Evans & St John, 1998: 83).

In addition, it is important that lecturers encourage students to find out what works best for them because different students prefer different techniques (cf. Dudley-Evans & St John, 1998: 84; 4.3.1). For example, some students enjoy games. The games can provide practice in vocabulary because they facilitate initial practice and periodical revision of vocabulary in an enjoyable context (Shaptoshvilli, 2002: 34).

❖ **Ways in Which Vocabulary may be Mastered by Learners**

According to Dudley-Evans and St John (1998: 84), there are three ways in which vocabulary may be mastered by learners to facilitate cognitive processing: situational, semantic and metaphor sets, collocation and the use of corpora and lexical phrase.

• **Situational, Semantic and Metaphor Sets**

The retrieval of vocabulary items from memory is aided by the groupings of words according to their meaning. This may be according to topic (situational sets) so that the words associated with a particular word can be taught together, or according to chains of association (semantic sets) so that synonyms, antonyms, superordinates and subordinates terms are taught. Alternatively, retrieval may be aided by the use of metaphor, for example. Materials that the lecturer selects should encourage learners to build their own situational or semantic sets. This would justify the syllabuses that are built on notions such as cause and effect, measurement, quantity and structure; each one brings together vocabulary items that naturally belong in sets (cf. Dudley-Evans & St John, 1998: 84; 4.3.9.2.4; 4.3.9.2.5). Understanding the meaning in context allows the learner to give the meaning of a word being used in a particular instance (Harmer, 2004: 18).

- **Collocation and the Use of Corpora**

Collocation describes the company that a word keeps; it is the way in which words co-occur. These are combinations which, through custom and practice, have come to be seen as normal and acceptable (cf. Dudley-Evans & St John, 1998: 85; Harmer, 2004: 20). Collocation takes vocabulary teaching away from looking just at the word to looking at the word in context. The development of corpora of specific texts has provided an invaluable teaching tool for vocabulary. The corpora provide the opportunity to draw up lists of key lexical items in ESP courses such as EAP or in specific disciplines. The way in which words combine collocationally and in larger chunks leads to the construction of lexical phrases (cf. Dudley-Evans & St John, 1998: 85; Harmer, 2004: 21).

- **Lexical Phrases**

According to Harmer (2004: 21), lexical phrases or language chunks are like prefabricated building units. The chunking of language in this way suggests that talking about vocabulary exclusively in terms of words is not sufficient to account for the different kinds of meaning units which language users have at their disposal. According to Dudley-Evans and St John (1998: 86), learners do not store vocabulary as individual words but chunks of language. These short set phrases that are frequently used in certain situations are referred to as lexical phrases. In ESP examples of such phrases are 'the table suggests that...', '...as shown in the diagram.', 'sales fell sharply' and so on. These expressions are useful in the description of data in a discussion section of an academic article or thesis. Learners can be provided with a number of options for expressing moves when teaching speaking or writing. When learners have a limited need for English in certain predictable situations, the learning of key lexical phrases may provide a quick road to the proficiency required in that situation. For example, students can be asked to arrange words into various kinds of mind-maps, with words that belong together grouped together

(Palmberg, 1993: 35). Thus, words are used either in prefabricated chunks or are inserted into the templates provided by grammar (Harmer, 2004: 21).

Lecturers can largely increase learners' receptive and productive word power by making them aware of the available associational links that exist or that can be created between individual words. The chances for incidental vocabulary learning will be increased with activities that appeal to learners' personal interests. The lecturer can enhance learning by giving students various types of activities with the words (cf. Courtright & Wesolek, 2001: 3; Palmberg, 1993: 35).

4.3.9.2.2 Grammar Content

Grammar structures, sentence patterns and vocabulary comprise the traditional way of conceptualising content; these aspects of language are relatively systematic and rule-governed. They are often the basis of content found in textbooks. These include rules of word formation, rules of pronunciation and relationships among words at the sentence level. In essence, the focus is on aspects of grammar such as verb tenses, sentence patterns, articles, nouns, and so on. The aspects are graded for teaching, supposedly from the simple to the complex, and according to frequency and usefulness (cf. Graves, 1996: 20; Jordan, 1997: 60). A key middle ground where words and phrases on the one hand and grammar on the other meet is through the operation of word classes or parts of speech such as nouns or adjectives (Harmer, 2004: 21). Thus, languages are seen as systems of rules that students should use for the construction of correct sentences (Davies & Pearse, 2000: 188).

Davies and Pearse (2000: 21) caution that, in order to teach a grammatical item effectively, a lecturer must first understand that item himself. The lecturer should know its meaning, how it is used in communication, how it is structured, its pronunciation and spelling, and the grammatical relationships and rules which affect it.

Moreover, Davies and Pearse (2000: 29) argue that some items are more typical in the written language than in the spoken language. For example, oral presentation steps may be preceded or substituted by written examples. Some items are grammatically very simple but their meaning and use is complex and/or subtle. In this case, more emphasis may be on the context and concept formation from the beginning and less attention given to a structure such as 'should' which may be contrasted with 'must' or 'have to'. It is against this background that Ngoepe (1997: 46) concludes that grammar structures always run through situations, functions, skills and tasks content.

4.3.9.2.3 Notional-Functional Content

According to both Graves (1996: 21) and Jordan (1997: 60), notional-functional content is based on ideas about language on the one hand, and about the purposes of language learning on the other. This type of content lists conceptual meanings (time, space and quantity) expressed through language (notions) and they communicate purposes for which language is used (for greetings, requests, apologies), description, comparisons, cause and effect, and so on (functions) (cf. Harmer, 2004: 24).

Larsen-Freeman (2000: 128) states that students need knowledge of the linguistic forms, meanings and functions to be able to communicate in the target language. For example, they need to know that many different forms can be used to perform a function and that a single form can often serve a variety of functions.

Language teaching is usually approached from a communicative angle, emphasising what learners may need to actually do and say in English. Obviously, learners still need grammar and vocabulary to communicate. But the language in most courses would be selected and organised in response to these practical communicative functions rather than with the idea of presenting 'all the grammar' of the language (Davies & Pearse, 2000, 20).

4.3.9.2.4 Situations

Situational content focuses on the situations or contexts in which the language will be used, and analyses the language needed for those situations (Jordan, 1997: 61). Ideally, situations should be realistic. Sentences learners construct in context are judged on 'truth' in relation to the situation, as well as on linguistic correctness (Davies & Pearse, 2000, 190). For example, in ESP, the situations in which students might find themselves may include at the laboratory, at a Chemistry tutorial, at a Biology practical lesson and at the University's experimental farm. Thus, situations give the lecturer an opportunity of presenting language in context.

4.3.9.2.5 Topic-based Content

Topic-based content may have a similar approach to that based on a situation in that topics can be selected from the students' specialist studies and the language analysed; appropriate syntax and lexis are then practised (Jordan, 1997: 61). Examples of topics from the sciences might include: the Noble Gases, Global Warming, Pasteurisation and the Greenhouse Effect (see 7.2.4). Topics addressed affect lexical and grammatical choices (Harmer, 2004: 25).

4.3.9.2.6 Skill-based Content

The principal idea behind skills-centred content is that there are common reasoning and interpreting processes underlying all language use. This makes it possible to extract meaning from discourse (cf. Hutchinson & Waters, 1987: 13; Schleppegrell, 1991).

The competency-based approach was developed in the United States in response to the influx of immigrants in the 1970s and 1980s; it is a combination of the communicative and task-based approaches (see 4.3.9.6) and has been used in courses for teaching immigrants who have immediate

needs with respect to functioning in English, in the community and in the workplace (Graves, 1996: 22).

Davies and Pearse (2000: 74) point out that communication is usually divided into the four main skills in language teaching: listening, speaking, reading and writing. Effective listening and reading require as much attention and mental activity as speaking and writing (see 3.4).

In the same vein, proficiency guidelines have emphasised a four-skills-based approach. For some lecturers, these skills are a given, as students use a combination of speaking, listening, reading and writing skills in class. However, because becoming proficient in each of these skills entails mastery of a set of sub-skills and processes, many lecturers choose to emphasise certain skills or find ways to integrate them (cf. Graves, 1996: 21; Ngoepe, 1997: 46).

Davies and Pearse (2000: 74) point out that, rather than the lecturer emphasising the productive skills at the expense of the receptive skills, it would be better to exploit the natural relationships between these skills, such as listening and speaking, which are combined in conversation. Outside the classroom, students continually integrate the skills or switch from one skill to another. It is thus important to replicate this natural integration of skills in the classroom as much as possible. Besides reflecting the natural use of language, the activity offers different opportunities for different types of learners. For example, the extroverts who like to speak a lot, the introverts who prefer to listen or read, and the analytically or visually oriented learners who like to see how words are written and sentences constructed will all be accommodated in the activity.

The integration of skills can be the basis for whole lesson plans and this is usually done by 'building' the plan around a theme. Most teaching of a specific skill involves the use of other skills. Group projects also involve the use of all the skills (cf. Ngoepe, 1997: 59; Davies & Pearse, 2000: 99).

4.3.9.2.7 Task-based content

Ellis (2003: 208) states that proposals for a task-based approach arose out of the recognition that it was not possible to specify what a learner would learn in linguistic terms. It is, however, possible to teach 'through communication' rather than 'for communication'. According to Littlewood (2004: 324), task-based learning can be seen as a development within the communicative approach, in this respect. In line with this, Jordan (1997: 62) argues that, since the basis of this approach is a problem or task, the aim is to complete the task and to focus on meaning. Ngoepe (1997: 45) concurs that tasks activate an immediate need to understand and express meaning.

The emphasis on communicative competence is derived from a view of language as not just something one learns but something one does. Tasks can also be regarded as projects in which learners work together to produce something. Thus, Nunan (1989) proposes a task continuum, with real-world tasks at one end and pedagogic tasks at the other. Real-world tasks require students to use language in ways that they might outside the classroom, such as reading a weather map. Pedagogic tasks are ones that would not occur outside of the classroom but help students develop the skills necessary to function in that world such as plotting a graph of deaths from tuberculosis of male South Africans from 1994 to 2004. However one defines tasks, they can be geared to one's specific group of learners (Graves, 1996: 22). Therefore, a task-based curriculum still involves making decisions about content (Ellis, 2003: 205).

Long (1985) advances a proposal for using tasks in courses for specific purposes. He distinguishes between target tasks and pedagogic tasks, and argues that the starting point should be a needs analysis to establish the target tasks that a specific group of learners need to be able to perform. According to Ellis (2003: 208), 'task' is the ideal unit for specifying content of specific purpose courses because it reflects what learners need to do with the language.

A task-based approach aims to provide learners with a natural context for language use. As learners work to complete a task, they have abundant opportunity to interact. Such interaction is thought to facilitate language acquisition because learners have to work to understand one another and to express their own meaning (Larsen-Freeman, 2000: 144). Skehan (2002: 290) suggests that learners in task-based situations do not follow the sequences that are typically expected in classrooms and in language teaching materials, and that learners can obtain feedback according to where they are rather than where the coursebook happens to be. Thus, Ellis (2003: 206) states that it is essential that the construction of a task-based syllabus deals with the specification of the tasks to be included in the syllabus.

Ellis (2003: 218) maintains that, in addition to deciding what to include in content, the course designer also needs to make decisions about what the students will be asked to communicate about. Consequently, a key element in the design of tasks must be the choice of thematic content. For example, the choice of theme will depend, to some extent, on whether the pedagogic purpose of the task-based course is general proficiency or some specific use of language. The themes or topics chosen for a particular group of learners will depend on both the students' level of proficiency and on local cultural values and interests.

An important consideration is whether the course material allows for constant reactivation and integration of previously introduced items and skills. To achieve this, the lecturer should constantly try to reactivate previously introduced language and skills, and to integrate new items into a growing repertoire of English (Davies & Pearse, 2000: 118).

4.3.10 Materials

Robinson (1991: 81) argues that, having designed the course, the ESP lecturer is likely to be involved in materials preparation frequently under time pressure. According to Graves (1996: 26), for many lecturers course development starts not with determining objectives or conceptualising content

but with ideas about the course in action. These include materials they will use, activities their students will do and techniques they will employ. They think about the way they want their students to learn and their own role in the classroom. Experienced lecturers often develop a set of core materials and activities that they adapt each time they teach a course. The materials themselves are flexible and can be used in a number of ways, depending on the target skills or competencies. Thus, materials form the backbone of the course and provide a focus for the class.

Dudley-Evans and St John (1998: 152) differentiate between common-core material and specific material. Common-core material uses carrier content that is either of a general academic nature or of a general professional nature. Specific material uses carrier content that is drawn directly from the learners' academic or professional area, such as topics students are following in their subject course.

As materials developers, ESP lecturers or researchers should continually be concerned with asking themselves whether their materials are producing the results they intend to achieve and if not, how they can improve or replace them (cf. Alderson, 1995; Robinson, 1991).

Davies and Pearse (2000: 136) differentiate among language presentation, language practice, skills development and additional materials. Language presentation material may include visuals, printed models of language and recorded models on audio-cassette or even video-cassette. Language practice material usually includes both oral and written activities; emphasis is put on fluency as well as accuracy work. Skills development material addresses the major aim of English teaching, which is enabling the learners to use English language for real communication outside the classroom. Additional material could include pronunciation material, grammar summaries, lecturer's notes, supplementary material and tests.

Lecturers often design courses with activities and materials that allow the students to take a more active role in reflecting on their learning, determining

the content of the course and pursuing projects of interest to them. Such an approach may facilitate the search for materials in that the emphasis is on what the students do with materials (Graves, 1996: 27).

Even though materials development and lesson planning are preceded by aspects of course design, it is advisable that lecturers collect as much potential teaching material as possible before the course starts (cf. Schlepegrell, 1991: 21; Mason, 1994: 19). Lecturers usually consider a variety of factors in developing, choosing or adapting materials (Graves, 1996: 26).

ESP materials may be characterised by appropriacy, authenticity and the fact that they can be prepared in-house.

4.3.10.1 Appropriacy

The key feature for materials is appropriacy to some learning or teaching need. Appropriacy can be attained by taking into consideration materials that are available and those that are required for a course (Robinson, 1991: 63). Davies and Pearse (2000: 120) point out that when deciding on appropriate activities and materials, the lecturer must also take into account the learner's age, interests and abilities (see 4.3.1). Appropriateness includes language level, interest and relevance as well as student comfort and familiarity with the material (cf. Graves, 1996: 26; Harmer, 2004: 24). Thus, locally produced materials which incorporate local themes would be of more interest to students than imported ones (Robinson, 1991: 57).

If a student uses materials that are not appropriate, a problem of coping with a text that either does not meet his needs or does not promote the lecturer's view of the role of learners and lecturers may be created. Other aspects of course development such as needs assessment and objective setting may help the lecturer to ensure that unsuitable materials are adapted. All materials can be adapted and modified in some way (Graves, 1996: 28). An important consideration is whether the course materials allow for constant reactivation

and integration of previously introduced items and skills (Davies & Pearse, 2000: 118).

Choosing appropriate materials may mean collecting a variety of materials or adapting available materials when teaching a course for which there are no suitable materials (Graves, 1996: 26).

4.3.10.2 Authenticity

According to Robinson (1991: 54), authenticity is a concept particularly relevant for ESP. Authentic materials are materials normally used in the students' own specialist workplace or study situation. The lecturer must also consider whether the goals that he sets are authentic with regard to students' real-world roles, and whether the tasks or activities that take place in the learning situation are authentic.

ESP emphasises proficiency and language learning in context. This has led many lecturers to use as much authentic material as possible in their lectures. Thus, authentic material is the foundation for content-based courses (cf. Graves, 1996: 26; 4.3.10.1).

Some authentic materials may be collected as part of the needs analysis phase of course design. Alternatively, authentic text selection may follow the needs analysis stage. However, authentic materials will not work well in the classroom unless the parameters for ESP course design are taken into considered (cf. Robinson, 1991: 56; 4.3).

4.3.10.3 In-house Materials

It is generally assumed that in ESP the truly professional practitioner uses locally produced or in-house materials instead of published textbooks for teaching. This assumption affects the status of both the ESP practitioner and the institution (Robinson, 1991: 56). Moreover, no course book writer knows

learners' specific needs and interests and a lecturer's own teaching style as well as the lecturer does (Davies & Pearse, 2000: 30).

Furthermore, Robinson (1991: 58) points out that in-house materials are likely to be more specific and appropriate than published materials, and to have a greater face validity in terms of the language dealt with and the contexts the materials are presented in. In addition, in-house materials may be more flexible and the lecturer can make sure that the methodology is suitable for the intended learners. However, the production of in-house materials is relatively expensive.

Since materials are potential tools for learning and are supposed to be generators of lively intellectually engaging activities (Pinto da Silva, 1993: 40), the ultimate objective is that the materials used as well as the tasks performed should replicate what usually takes place beyond the classroom boundaries (Ahellal, 1990: 38).

ESP materials assume a foundation of proficiency in general English and from the start focuses on aspects of English specific to the subject area being covered (Cunningworth, 1995: 134). To some extent, lecturers on ESP courses can produce their own materials based on specialised texts (Cunningworth, 1995: 132). For example, Robinson (1991: 62) points out that since a supply of authentic visual and mechanical aids as well as print material for teaching ESP is not readily available, the lecturer could use pictures and diagrams to practise oral and aural skills with technical students, and also make diagrams of the hardware available to give engineering students practice in diagram interpretation (see 3.4.5).

4.3.11 Assessment

Assessment lies at the heart of educational endeavour because what is assessed determines what is taught. This centrality of assessment is universally acknowledged (Verhoeven & Verloop, 2002: 91). Barnes et al. (2000: 623) assert that attempts at curriculum reform are likely to be futile

unless accompanied by matching curriculum assessment. Assessment refers to the process of observing learning, describing, collecting, recording, scoring and interpreting information about a student's learning (cf. Pahad, 1997: 5; Wilkens, 1998: 83; Salvia & Ysseldyke, 1995: 5). Robinson (1991: 71) points out that, traditionally, assessment includes tests and examinations, evaluation of students' projects, written work and so on, carried out by lecturers or evaluators. For most lecturers, assessment means evaluation within the course, such as assessing students' proficiency, progress or achievement (Graves, 1996: 30). The shareholders of assessment can be students and parents, the lecturers, administrators, universities and even potential employers (Ghaith, 2002, 26).

What lecturers assess and how they assess reflect both what is taught and the way it is taught (Barth & Mitchell, 1992: 14; Puhl, 1997: 1; Republic of South Africa, 1998: 3). The goal should be to have students who can create, reflect, solve problems, collect and use information, and formulate interesting and worthwhile questions (cf. Pahad, 1997; Puhl, 1997; Department of Education, 1997). Thus, assessment should measure the extent to which students have mastered types of knowledge and skills. By requiring students to complete these high quality performance tasks there is potential to bring about significant and positive changes in teaching and learning (Dreyer, 2000: 268). An assessment practice should match educational goals (cf. Department of Education, 1996; 2.3.1; 4.3.4).

Moreover, there is more to assessment than grading students and deciding whether they should pass or fail. In the majority of cases, assessment is concerned with making decisions about instruction or plans for instructions. For example, the opportunity to learn can begin with an examination of the assessment tasks or test items. Such decisions are based on sound judgement and require careful collection of relevant information and a thoughtful interpretation of that information (cf. Anderson, 2002: 56; Genesee & Upshur, 1996: 3).

The success of any assessment depends on the effective selection and use of appropriate tools and procedures, as well as on the proper interpretation of students' performance. Assessment tools and procedures, in addition to being essential for evaluating students' progress and achievement, also help in evaluating the suitability and effectiveness of the curriculum, the teaching methodology and the instructional materials (Shabaan 2001: 17). Assessment is also done informally on a daily basis either by reviewing the task students have done or by asking for feedback that will help the lecturer determine whether they have achieved the set objective or not. Tests are also reflective of what students have learned (Schleppergrell, 1991: 22).

4.3.11.1 Types of Tests

Robinson (1991: 73) and Graham and Neu (2004: 296) point out that language tests can be either norm-referenced or criterion-referenced. A norm-referenced test score provides information about an individual's relative rank with reference to other individuals who have taken the test and is used to identify those special needs. Norm-referenced testing is used to rank each student with respect to the achievement of others in broad areas of knowledge (Dreyer, 2000: 270).

Criterion-referenced testing is used to determine whether each student has achieved specific skills or concepts (Dreyer, 2000: 270). For criterion-referenced tests, test scores are reported and interpreted with reference to specific context used to assess a student's mastery of the curriculum. Robinson (1991: 73 - 74) maintains that ESP tests are typically criterion-referenced. Examples of performance-based EAP tests are the British Council's IELTS (International English Language Testing Service) and the Associated Examining Board's TEEP (Test in English for Educational Purposes) tests, both designed to assess the amount of preliminary English language tuition needed by students planning to pursue tertiary-level or further education courses. Graham and Neu (2004: 296) assert that the purpose of such tests fosters accountability.

A key question in relation to ESP tests is how close the subject of a test should be to the students' specialist discipline. It is implicit that a student's background knowledge can have an effect on text and comprehension test performance (Robinson, 1991: 75). For example, achievement is tested by designing tasks that reflect the tasks and the skills that students have developed (cf. Schleppergrell, 1991: 22; 4.3.9.2.6; 4.3.9.2.7). The challenge within ESP testing derives from the fact that the ESP student has a definite target, which is adequate performance in a study or work situation. Both at the start and at the end of an ESP course the lecturer needs to know how near a student is to achieving adequate performance (Robinson, 1991: 73).

The washback effect of tests on teaching is deplored by many lecturers because lecturers tend to focus on the test instead of doing what they feel to be the best for their learners, regardless of the test. Since the test will always have an effect on the teaching, the simplest way to innovate in language teaching is to improve the test. For example, when evaluation or feedback is given, the washback effect is engineered so that the test results can help lecturers, syllabus constructors, and the writers of course materials to change and develop both themselves and their materials (cf. Dreyer, 2000: 267; Robinson, 1991: 77, 4.3.12).

4.3.11.2 Uses of Assessment

Uses of assessment can be formative and summative, diagnostic, continuous and performance-based.

The aim of summative assessment is to summarise the level of achievement of a learner at a given time. It focuses on the finished product or student achievement of learning outcomes (Genesee & Upshur, 1996: 153). For example, assessment in the formal education system in South Africa has traditionally focused on summative assessment (cf. Department of Education, 1997; Jacobs, 2006: 141; Chapter 4).

Formative assessment is designed primarily to support the teaching and learning process. This refers to observations that allow one to determine the degree to which learners know or are able to determine the degree to which learners know or are able to do a given learning task and which identifies the part that the learner does not know or is unable to do. Formative assessment helps to inform the lecturer about a student's strengths and weaknesses and feeds back into his planning of lectures (cf. Genesee & Upshur, 1996: 153; Department of Education, 1997: 29).

Diagnostic assessment is usually done at the beginning of the year, term or new topic of study to ascertain the starting point for teaching. It examines the students' existing knowledge, skills, interests and attitudes as well as strengths and weaknesses such as misconceptions (cf. Hughes, 1989: 13). Diagnostic assessment can affect the selection of content for learning, the methods of teaching and the ways of grouping learners (cf. Dreyer, 2000: 269; 4.3.10).

Continuous assessment implies that all the work the student does needs to be given the status and value which were traditionally reserved for examinations and written tests; the whole range of lectures attended and assignments written by learners should be acknowledged (cf. Puhl, 1997).

Performance-based assessment is the direct, systematic observation and rating of learner performance of an educational outcome, often an on-going observation over a period of time and typically involving the creation of products. The assessment may be a continuing interaction between lecturer and student and, should ideally be part of the learning process. The assessment should be a real-world (authentic) performance with relevance to the student needs and those of the learning community. Thus, performance-based assessment is a test of the student's ability to apply knowledge in a real-life setting (cf. Brualdi, 1998: 1).

Meyer (1992: 40) states that assessment is authentic when it enables students to communicate successfully their strengths and educational needs,

and when the results can be used to improve instruction based on accurate knowledge of student progress. An authentic assessment is one in which students are allowed adequate time to plan, to complete the work, to self-assess, to revise and to consult with others. Such assessment gives students ongoing feedback that enables them to reflect on their accomplishments, identify future learning needs and develop goals and strategies for attaining them (see 3.4.2.2; 4.3.2; 4.3.4).

An overview of the main features of assessment indicates that the focus in assessment has shifted from notions of 'passing' and 'failing' to the concept of ongoing growth. The emphasis is also on learners' developing skills, knowledge and understandings (cf. Masters & Forster, 1996: 8; Dreyer, 2000: 270).

4.3.11.3 Assessment Methods

The purpose of assessment will dictate the most appropriate assessment method to be used (Sanders & Horn, 1995: 1). In the real world, most people have more than one opportunity to demonstrate that they can complete tasks successfully, be it at work or in a social setting. Therefore, it makes sense to provide similar opportunities for students in instruction (Pahad, 1997: 6). No single method can do justice to the diversity of learners who must be accommodated (Sanders & Horn, 1995: 1). Dreyer (2000: 272) states that a variety of methods can be used to estimate learning progress. These include: paper and pen assessment (test), portfolio-, self-, peer- and performance assessment.

Traditional 'unseen' tests and examinations still make up the lion's share of assessment in higher education (cf. Dreyer, 2000: 272). Tests and examination dominate assessment; learner achievement is usually measured in terms of symbols and percentages and compared to that of other learners (norm-referenced) (cf. Republic of South Africa, 1997; Dreyer, 2000). Assessment also brings about responsibilities. For example, where different groups are taught by different lecturers but take the same test, it is vital that

the lecturers coordinate testing activities to ensure that the testing is valid and fair (Dudley-Evans & St John, 1998: 148).

According to Salvia and Yesseldyke (1995: 14 & 24), testing is part of a larger concept: assessment. Scores of tests and other information help lectures decide whether students have specific skills (see 2.3.3). Since testing emerges as a common assessment tool, Van der Walt (2001: 2) points out that language assessment requires a norm. Salvia and Yesseldyke (1995: 134) state that norms should be relevant in terms of the purposes for testing and that they should be used correctly. For example, tests can require students to select or supply responses to stimuli. The stimuli are usually auditory or visual and students' responses are usually vocal or written (cf. Salvia & Yesseldyke, 1995: 237; 3.4.5; 4.3.1).

Moreover, Graves (1996: 30) points out that even though there are several assessment tools and procedures that can be used to monitor students' progress and achievement, testing seems to emerge as a common assessment tool in language teaching and learning. Tests are, however, not the only means lecturers have to assess their students. For example, lecturers may structure their classroom activities so that they can assess their students while the students participate in classroom activities.

Lecturers may use the portfolio approach in which students put together a portfolio of their work, or they may involve their students in deciding what should be assessed and how the assessment should be done. A portfolio can be defined as a meaningful collection of student work that tells a story of a student's efforts, progress or achievement in a given area over a period of time. Portfolios can reflect development; they give a fuller picture of what a learner has achieved (Dreyer, 2000: 272).

According to Dreyer (2000: 272), self-assessment occurs when students evaluate their own work. With self-assessment, students are active participants in deciding what and how much to learn and in setting the criteria

by which their learning is evaluated. Thus, a student learns about learning through reflecting on his own activities (O'Malley, 1997: 4).

Peer-assessment occurs when some or all the other students evaluate a student's work. For example, students can rate the oral and written work of their peers and identify areas that can be improved as well as areas that are presented effectively. A student learns about learning through reflecting on activities of other students (O'Malley, 1997: 4).

Information gathered through self- and peer-assessment can be used by students to make judgements on their learning and the learning of their peers. Self- and peer-assessment are designed to allow students to take more responsibility for their learning by reflecting upon it and by receiving feedback from their peers. These can also serve as formative evaluation methods (O'Malley, 1997: 4; 3.4.2.2).

A key feature of all performance assessments is that they require students to be active participants; students are responsible for creating and constructing their responses. This type of assessment provides lecturers with information about how a student understands and applies knowledge. Performance-based assessment requires students to demonstrate that they have mastered specific skills and competencies by performing or producing something (cf. Hibbard, 1996: 5; Masters & Forster, 1996: 25). Thus, the lecturer should decide on the type of knowledge, skills and concepts he wants to assess as well as the level at which his students should be performing. An activity or task that students should perform is based on the decision the lecturer takes (cf. Dreyer, 2000: 274; Hellekjaer, 2006: 58; 4.3.3).

Dreyer (2000: 279) points out that probably the best way to do students justice is to use as wide as possible a mixture of the assessment methods allowing students a range of processes through which to demonstrate their respective strengths and weaknesses (see 4.3.1). The greater the diversity in the methods of assessment, the fairer assessment is to learners (Dreyer, 2000: 279).

Salvia and Ysseldyke (1995: 5) state that when students are assessed, the way they perform a variety of tasks in a variety of settings or contexts, the meanings of their performances in terms of the total functioning of the individual and the likely explanations for those performances are considered. Good assessment procedures take into consideration the fact that a student's performance on any task is influenced by the demands of the task and by the factors inherent in the context in which the assessment is carried out (see 2.3.1, 4.3.1 & 4.3.9.2.7)

4.3.12 Role of the ESP Lecturer

According to Robinson (1991: 1), ESP lecturers generally have a great variety of simultaneous roles: research, course design, materials writing, testing, evaluating as well as lecturing. In addition, Robinson (1991: 81) points out that an ESP lecturer is very often involved in planning and administering the ESP course. He should be able to select, in a principled way, the language items which need to be taught. Furthermore, Graves (1996: 6) maintains that successful course design depends on the lecturer's ability to make sense of his experience through reflection and understanding and the ability to make a bridge between practice and thought so that one can influence the other. Lecturers should also use various tools such as journals, notes, reading and conversation to aid in reflection and analysis.

Dudley-Evans and St John (1998: 148) argue that the role of an ESP lecturer is very important but at the same time controversial. In many situations the lecturer is expected to control the class, to provide information about skills and language and to control activities in class. In these situations the role of the lecturer generally matches the expectations of the learners. The role of the lecturer could be defined as provider of input and activities.

Dudley-Evans and St John (1998: 150) state that the ESP lecturer manages rather than controls in some situations; he may make decisions about the course but will negotiate with the learners about what is most appropriate to

include and when to include it. He will get members of the class to bring material for exploitation in class. The lecturer could be defined as facilitator or consultant. For instance, where the lecturer knows relatively little about the content or the skill that is being taught in the ESP class, he proceeds by pulling together and organising the information that the learners and, if possible, the lecturer is able to provide about the language skill. In a sense, the ESP lecturer becomes an equal with the students, but uses his greater knowledge of the language and the nature of communication to help them interpret what is happening in the specialist course or training. In this way, lecturer's past experience and successes can serve as bridges to new situations. The experience of developing a course enables lecturers to make sense of the theories and expertise of others; it gives them opportunities to clarify their understanding of theory and make it concrete. Their practice in turn changes their understanding of the theories. For instance, examining needs assessment tools, understanding the rationale of two different models for integrating content, or examining other course syllabi can trigger the appropriate steps and solutions (Graves, 1996: 6).

In many situations, however, the role of the lecturer may constantly move between that of 'provider of knowledge' and that of 'facilitator' or 'consultant' (cf. Robinson, 1991: 81; Dudley-Evans & St John, 1998: 150; 4.2). A good ESP lecturer will have certain information to impart to students and, at other times, the lecturer may move towards a stance in which he, as an equal, works out a strategy for a reading or writing task together with the students (cf. Dudley-Evans & St John, 1998: 150; 3.4.1; 3.4.2).

Graves (1996: 6) asserts that lecturers develop an approach to course design that guides them in developing other courses. The approach is the result of experience, not a condition for it. The approach one develops can eventually be articulated in rational terms such as a series of steps or a framework; the rationale for a framework or plan is a later result of the process. Thus, a framework evolves. Course development is therefore a dynamic ongoing process; the variables that make a context unique continue to change, as does the lecturer's experience. The continuous interaction of practice and

reflection shapes course development and both are shaped by it. Consequently, an approach that can continue to serve in developing one's courses must be flexible.

An ESP lecturer needs personal attributes such as enthusiasm, work-rate, rapport, knowledge of the student's world, the ability to write teaching materials or the ability to perform a needs analysis. The key quality needed by the lecturer is flexibility; the flexibility to cope with different groups of students (cf. Robinson, 1991: 80; 2.3.2; 4.3.1)

4.3.13 Resources and Constraints

Resources and constraints are two ways of looking at the same thing. For example, a prescribed course book may be a constraint for one lecturer and a resource for another. A class of fewer than thirty students may be a resource for one lecturer and a constraint for another. Even though these givens may seem secondary to the processes of course development, they play a primary role because it is in considering the givens that a lecturer begins to make sense of processes such as needs assessment and material selection. This could be described as defining challenges of one's situation so that one can make decisions about what to do (cf. Graves, 1996: 32; Davies & Pearse, 2000: 12).

The institutional philosophy, policy and curriculum are important givens. Having to work within existing curricular guidelines is both a constraint and a resource, and so is having to devise one's own syllabus. The type of administrative and clerical support provided by the institution affects a lecturer's choices. For instance, support from the administration will encourage experimentation whereas lack of clerical support will suggest streamlining paperwork and materials (Graves, 1996: 34).

Furthermore, Graves (1996: 34) maintains that the constraints and resources of one's situation take many forms, some tangible, others not. For instance, lecturers may work with or without physical and material resources. The lack

of physical resources may encourage a lecturer to use available resources in creative ways, whereas the availability of technology may allow a lecturer to have groups of students work independently.

A concern raised by ESP lecturers everywhere relates to status, pay and conditions such as an appropriate teaching load and realistic preparation time. The ESP lecturer is usually housed in a curriculum unit which exists on the margin of the academic world. This situation is not conducive to a strong sense of professional identity. Although lecturers need to take a tougher attitude towards their conditions of employment, the realities of a job market can make this risky because such problems derive from economic and political causes relating to the situation of the institution offering the courses. One thing that lecturers can try to do is to develop their professional competence. This may involve specialising in a particular discipline or profession, or undergoing further training, or carrying out research alongside one's teaching (cf. Robinson, 1991: 82 – 83; 2.3.1.2; 2.3.4).

Course design around a syllabus can be restricted by several factors. These include the number of tutors available, their experience and capabilities, students to be catered for, other staff such as staff in the administration and the clerical, length of the course, space available, facilities, accommodation and finance. The numbers and level of the students are both a constraint and a resource. For instance, a large class may lead a lecturer to focusing on classroom management. A multilevel class, on the other hand, may influence the lecturer's selection of material or activities (cf. Graves, 1996: 34; Jordan, 1997: 64; 4.3.3).

Graves (1996: 34) asserts that the lecturer himself is the most important given. His background, experience and beliefs play a significant role in the choices he makes. For example, one lecturer may focus on certain content because he deems it essential for successful language learning, while another may ignore the same content. A lecturer that usually develops his own materials may choose to use published materials when teaching a course whose content is new to him (see 2.3.4 & 4.3.10).

Graves (1996: 34) argues that the givens of a situation cover a broad range of factors and affect every decision a lecturer makes. Lecturers plan and teach courses not in the abstract but in concrete of their constraints and resources. Therefore, the givens of one's teaching situation, both tangible and intangible, cannot be ignored; problematising enables a lecturer to decide what he can change, what he cannot and where to start. It is against this background that Schleppergrell (1991: 19) asserts that no lecturer who is not creative will undertake an ESP class.

The components discussed above should serve as a set of tools for talking about, understanding and directing the process of course development. Each component is contingent on every other component. For instance, assessment depends on how one conceptualises content or on how one interprets students' needs. Conceptualising content in turn influences the course goals and objectives. Wherever one starts in the process, each component will eventually come into play. Each component is in many respects one way of working with the whole (Graves, 1996: 35).

4.4 CONCLUSION

Course design in ESP is a unique, reflective and demanding process which dictates accountability to the lecturer. The process is anchored in needs analysis for purposes of deciding on relevant content, teaching materials and assessment tools. The incorporation of various content types, such as vocabulary, grammatical, notional-functional, situational, skill-based and task-based content in content-based approach can meet the needs of ESP students. The co-ordination and harmonisation of needs analysis, content, teaching materials and assessment in course design foster autonomy and the development of a sense of ownership for the course designer.

The next chapter deals with methods of evaluating a course.

CHAPTER 5

METHODS OF EVALUATING A COURSE

5.1 INTRODUCTION

Course evaluation is an applied discipline that can add value to teaching-learning practices. Reasons for the evaluation may range from course improvement to justifying course funding. Each evaluation setting will be unique with regards to instructional objectives, evaluation context and academic community.

The aim in this chapter is to give an overview of course evaluation and discuss forms of evaluation, salient features of course evaluation and some methods of course evaluation.

5.2 COURSE EVALUATION: AN OVERVIEW

Course evaluation is an activity of gathering information to be used in making educational decisions. Sometimes these decisions are about students, but more often they are about instruction (Genesee & Upshur, 1996: 140).

Course evaluation is concerned with determining what learners have learned from a course and also with making judgements about why instruction has or has not been successful (Nunan, 1992: 190). Making judgements and course evaluations form an integral part of day-to-day teaching-learning activities (Nunan, 1992: 184).

Genessee and Upshur (1996: 4) maintain that the three essential components of course evaluation are information, interpretation and decision-making. These three components are essential and it is important to distinguish among them. Information about teaching and learning is rarely meaningful by itself; it becomes meaningful when it is interpreted. Meaningful interpretations are needed in order to decide what actions to take or what changes to make to instruction.

As with other types of research, it is of vital importance to clarify, from the beginning, the aims and objectives of the evaluation. This is not always easy to achieve and can involve considerable negotiation, particularly when there are numerous interest groups involved. For example, educators, administrators, guardians, funding authorities and learners will often have quite different perceptions of the purpose of evaluation. If these are not dealt with satisfactorily and put in writing before evaluation begins, then other steps in evaluation will be most impossible to carry out (Nunan, 1992: 197).

In line with the above, course evaluation may be defined as a systematic process of determining the extent to which instructional objectives have been achieved by learners. This therefore implies that course evaluation is a systematic process and it assumes that instructional objectives have previously been identified. It would otherwise be difficult to judge clearly the nature and extent of learning (Nunan, 1992: 184). For example, any language teaching course has certain evaluation requirements, but in ESP these requirements are brought into focus by the fact that ESP teaching normally follows specified objectives. An ESP course and by extension ESS, dictates accountable teaching. The learners and sponsors are investors in the ESP course and they want a return on their investment of time and/or money. The managers of the ESP course are accountable to these investors (Hutchinson & Waters, 1987: 144).

In the literature on course evaluation it is traditional to distinguish between formative and summative evaluation. Formative evaluation takes place during the course of programme delivery and therefore provides a mechanism for improving the programme during the course of its delivery. Summative evaluations take place at the end of the programme and are carried out to provide information for the modification or curtailment of succeeding courses (Nunan, 1992: 190 & 192).

Alderson and Beretta (1992: 16) distinguish among four evaluation approaches: context, input, process and product approaches. Context

evaluation refers to the analysis of the situation, input evaluation to the extent to which the evaluator lends assistance in programme design, process evaluation focuses on implementation using a variety of methodologies from participant observation to interviews and rating scales and produce evaluation reports on the degree to which objectives were or were not achieved.

Course evaluation helps to assess whether the course objectives are being met, that is, whether the course is doing what it was designed to do. For example, an ESP course is assumed to be successful because it is set up in order to enable particular learners to do particular things with language. The function of such an evaluation is to provide feedback on the ESP course (Hutchinson & Waters, 1987: 145). This implies that evaluating an ESP course helps to establish whether the course is meeting its aims. The information gathered during the evaluation forms the starting point for any necessary revisions of the course. It could also help guide the design of other similar courses in a teaching institution or elsewhere (Hutchinson & Waters, 1987: 52). In addition, Hopson and Scally (1981: 196) state: "Evaluation will be most meaningful if it relates to the teaching/learning objectives one had in setting up the experience."

The data resulting from evaluation assist in deciding whether a course needs to be modified or altered in any way so that objectives may be achieved more effectively. It follows that evaluation is not just a process of obtaining data: it is also a process of decision-making. In addition, evaluation can be product-oriented; it can be concerned with whether an examinee has mastered the content he has been taught. That is, it can be concerned with the outcomes of the learning process rather than with the process itself (Nunan, 1992: 185).

There is a perennial need for language education courses to be evaluated. This could be motivated by an internal quest for course improvement or by an externally imposed requirement in order to justify programme funding (Lynch, 1996: 2).

Everything of significance should be evaluated. For instance, in a learning centred-approach to ESP, the overall aim of the course is to meet two main needs of learners: their needs as language learners and their needs as language users. The 'what' of ESP is concerned with assessing the extent to which the course satisfies both kinds of needs (cf. Hutchinson & Waters, 1987: 152; 2.3.5).

Ellis (1998: 223) points out that the objectives model approach and the responsive one to evaluation reflect two general purposes for carrying out an evaluation: accountability and development. Where accountability is at stake, the purpose of the evaluation would be to determine whether the stated goals of the programme have been met. In the case of development, the purpose may be either to improve the curriculum or to foster teacher development, or both. In general, evaluation for accountability will require an 'objectives model' approach, while evaluation for development will require a 'responsive' approach.

Since course evaluation is an applied discipline, its primary goal is to arrange for relevant inquiry in the short run. However, a number of evaluations in the long term might be able to contribute to theories of language learning (Beretta, 1990: 1).

A sound evaluation system will provide a deeper insight from all sides into the nature of the most effective learning experiences and processes that can be accommodated. It helps to assess how well the needs that have been created and the demand for a course are being served (Hutchinson & Waters, 1987).

5.3 FORMS OF COURSE EVALUATION

There are different forms of evaluation. In line with this, Ellis (1998: 217-219) distinguishes between macro- and micro-evaluations as follows:

5.3.1 Macro-evaluation

Ellis (1998: 218) argues that macro-evaluation can be defined as an evaluation that seeks to answer one or both of the questions below:

- To what extent was the course or project effective and efficient in meeting its goals?
- In what ways can the course or project be improved?

Since the first question deals with 'accountability evaluation' and the second, 'development evaluation', in order to carry out macro-evaluation of a programme or project, the evaluator needs to collect various kinds of information relating to one or both of the following:

- Administrative matters (logistical and financial underpinnings of the programme)
- Curriculum matters (materials, lecturers and learners).
(cf. Weir & Roberts, 1994).

A macro-evaluation is therefore an evaluation carried out for accountability and/or developmental purposes by collecting information relating to various administrative and curricular aspects of the programme (Ellis, 1998: 218).

5.3.2 Micro-evaluation

A micro-evaluation is characterised by a narrow focus on some specific aspect of the curriculum or the administration of the programme. For example, in the case of educators or teaching, focus could be on the kinds of questions educators ask during a lesson. In the case of learners, the focus could be on 'which learners participate productively in a lesson?' (Ellis, 1998: 219).

It is therefore implicit that any macro-evaluations that lecturers make are likely to be the result of a whole series of micro-evaluations carried out on a day-to-

day or on a lesson-by-lesson basis. This is probably why educator-oriented approach to evaluation will emphasise micro-evaluation (Ellis, 1998: 218).

5.4 Uses of Course Evaluation

Bless and Higson-Smith (1995: 47) differentiate among diagnostic, formative and summative uses of evaluation.

5.4.1 Diagnostic Use

Bless and Higson-Smith (1995: 48 & 47) point out that diagnostic evaluations are designed to inform researchers and practitioners about the present situation within courses, highlighting current problems, trends, forces and resources. If evaluation research is used as a diagnostic tool it may help the people implementing an intervention to identify neglected areas of need, neglected target groups and problems within organisations and programmes. Thus, diagnostic evaluation is a technique for gathering data which is crucial in the planning of a new project. This makes it important that such research is carried out before a project is designed.

5.4.2 Formative Use

Bless and Higson-Smith (1995: 49) maintain that formative evaluation relates to the development and implementation of a course in order to improve it. Its aim is to shape the course so that it will have the greatest beneficial impact upon the target students. This evaluation should always form part of the initial planning of a course.

5.4.3 Summative Use

Summative evaluations set out to determine the extent to which programmes meet their specified aims and objectives. The information gathered through summative evaluation is used to gain credibility with various groups of people, particularly potential funders and target communities. In addition, if the

designers of a programme can demonstrate scientifically that their programme has had certain positive effects, people are likely to be enthusiastic about the programme being implemented in their community. They are also likely to receive funding for similar programmes. In this way, successful programmes may be replicated in other communities. Although summative evaluations ought always to happen at the end of a programme, such evaluations are often carried out at regular intervals during the life of long programmes as well (cf. Bless & Higson-Smith, 1995: 5; 2.2).

Although presented separately in this chapter, diagnostic, formative and summative evaluations are all interrelated and occur side by side in the course of ongoing interventions. Comprehensive and integrated programme evaluation, which uses all three forms maintains the ongoing effectiveness, facilitates flexibility in response to changing circumstances and ensures credibility and the ongoing existence of programmes (Bless & Higson-Smith, 1995: 54).

5.5 SALIENT FEATURES OF COURSE EVALUATION

There are several features of course evaluation: preliminary thematic framework, context inventory, identifying an audience, data collection design, data collection and analysis, communicating the findings, disciplined inquiry and academic integrity.

5.5.1 Preliminary Thematic Framework

Preliminary thematic framework (PTF) focuses on answers to the following questions: Where should the evaluation begin? What aspects of the course should the evaluator investigate in detail? The framework provides a conceptualisation of the course in terms of the salient issues and themes that have emerged from the determination of audience and goals, and the elaboration of the context inventory. Articulating this framework provides the evaluator with a focus that will guide the collection and analysis of evaluation data (Lynch, 1996: 6).

Beretta (1990: 2) points out that it is essential to first come up with a PTF and then shape a user-oriented evaluation by obtaining a hearing from the would-be audience, establishing who constitutes the policy shaping community (PCS) and negotiating reasonable research questions. These three points collectively provide fertile ground for data collecting and communicating the research findings.

5.5.2 Context Inventory

Since evaluation efforts need to be tailored to the specific concerns of language education courses, Lynch (1996) formulated the context-adaptive model (CAM) for course evaluation and used this model as a framework for presenting the critical issues for course evaluation. CAM is meant to be a flexible, adaptable heuristic; a starting point for inquiry into language education courses that will constantly reshape and redefine itself depending on the context of the course and the evaluation (Lynch, 1996: 3).

According to Lynch (1996: 5), the context inventory is an essential phenomenon or feature that characterises the course and its setting. The following checklist or inventory of potentially relevant dimensions of language education courses can be used:

- Availability of a comparison group such as a 'traditional' language course in a similar setting.
- Availability of reliable and valid measures of language skills such as criterion-referenced and/or norm-referenced tests with course specific and/or course-neutral content.
- Availability of various types of evaluation expertise such as statistical analysis, naturalistic research, etc.
- Time frame for the evaluation; how much time is available to conduct the evaluation.

- The selection process for admitting students into the course (Is it random-selection, self-selection or selection according to pre-established criteria?)
- Characteristics of the students taking the course (native language and culture, age, sex, socio-economic status, previous education, previous academic achievements, previous experience with the language and culture being taught in the course.
- Characteristics of the staff offering the course (similar to characteristics of students, also job descriptions, experience, availability, competence and attitude towards course evaluation.
- Size and intensity of the course (number of students, classrooms, proficiency/course levels and number of hours per week or term).
- Instructional materials and resources available to the course (textbooks and other instructional media and materials, human resources, office supplies).
- Putting the course into perspective and identifying its purpose (notions, beliefs and assumptions concerning the nature of language and the process of language learning; explicitly stated and informally articulated curricular goals).
- Social and political climate surrounding the course such as perception of the course by the surrounding academic and social community, student and community attitudes towards language and culture being taught in the course, the relationship of the course's purpose to the larger social and political context.

Some of these dimensions will be more relevant in certain contexts than in others. Part of the adaptive nature of the CAM is the recognition that such an inventory will need to be tailored to a particular course setting. Thus, along with the information on audience and goals, the context inventory can act as a guide for subsequent steps in the evaluation of the ESS course (cf. Lynch, 1996: 6; 2.3).

5.5.3 Audience

Another key step of CAM is concerned with identifying the audience and goals for the evaluation. For example, the following questions can help the evaluator reflect on the activity: Who is requesting the evaluation? Who will be affected by the evaluation? The answers to these questions help to determine stakeholders or clients, who have an immediate interest in the ultimate findings of the evaluation. Examples of stakeholders are the programme staff and the agencies that fund the course. The course staff may elect an internal evaluation carried out by the programme's own educators and administrators in order to take advantage of their close understanding of the programme context. The students of the programme, although not clients per se, can also be thought of as an important audience for the evaluation. The concept of an evaluation audience can be broadened further to include all those potentially interested in the conduct and results of the evaluation; examples of this peripheral audience are programme administrators, curriculum developers, educators and researchers from other programme settings. Before undertaking a research project, researchers need to make a decision about their roles and relationships with participants (cf. Lynch, 1996: 3; Scott, 2003: 94; Rager, 2005: 24).

Identification of the evaluation audience leads to determining the evaluation goals or purpose. Key questions are: Why is the evaluation being conducted? What information is being requested and why? The answers to these questions can be quite varied, depending on the evaluation audience. Different subsets of the audience may also have different or even conflicting goals (Lynch, 1996: 3).

Audience is also an important preliminary consideration because different audiences will often perceive different purposes. For example, funding authorities will want to know whether their money is being spent wisely and may look to a summative evaluation which measures what learners have or have not achieved as a result of taking part in a programme. On the contrary, educators may want a rich, interpretive account of the programme which is

formative in nature, non-judgemental and reflective of multiple perspectives and interpretations (Nunan, 1992: 197).

The academic community or the policy shaping community (PSC) could be made up of the educator, the guardian, the administrator, the programme planner and the funding body. The more diverse the PSC and the more political its constitution, the less the expectation that research findings could be used in a direct and obvious way. Since there are so many other variables that can have an influence on the evaluation, it would be unrealistic to place the full burden for the use of an evaluation on the shoulders of the evaluator (Beretta, 1990: 2). Once the PSC and pertinent evaluation questions have been identified, the evaluator is in a position to make decisions regarding design and data collection (Beretta, 1990: 9).

Beretta (1990: 7) states that localising the evaluation might increase the chances of utilisation. For example, evaluators might be able to promote course evaluation use through careful attention to local needs and through evaluation designs that are responsive to local circumstances.

Nunan (1992: 189) points out that a major practical impediment to the successful completion of an evaluation may be a disagreement on the part of those closely involved in the evaluation in terms of scope, nature, purpose and respective rights of those involved. Each of the key players in an evaluation such as educators, learners, administrators, bureaucrats or the evaluators themselves bring their own perspectives, sets of beliefs and realities to the evaluation.

Since course evaluation is concerned with people's perceptions of value, their views will vary according to their own interests and concerns. For instance, bodies closely concerned with the ESP teaching institution, the ESP educators, the learners and the course sponsors should be involved in ESP evaluation. In addition, former students can also provide useful information. It is therefore important to get a representative cross-section of views and take them properly into account (cf. Hutchinson & Waters, 1987: 154; 2.2).

A premium should be placed on attending meticulously to PSC concerns. Thus, evaluations will be useful only to the extent to which they relate to questions policy makers want answered. Guardians and official bodies, the educator, the course developer, the learner, the educator trainer, the textbook writer or the researcher can constitute the PSC. Few of these groups would be in a position to provide funding but as potential users of evaluation findings, their interests would be sensibly taken into account (Beretta, 1990: 7 & 8).

The PSC member requesting an evaluation might be encouraged to bear in mind past experiences and to anticipate inconclusive findings. In addition, the member needs to reflect on the following: whether the information required can be gathered within the time-scale set, the real purpose of the evaluation (to decide on which textbook to use, to save money, or curiosity), whether the evaluator be best advised to look into alternative issues or to call off the investigation (Beretta, 1990: 8).

The questions which the evaluator settled for as the targets of inquiry dictate the kind of inquiry needed. The door is initially left open to any form of research from the most quantitative, experimental, replicable to the most qualitative and naturalistic. If prior uncertainty can be reduced by nesting an experimental study within a larger design, then the study can be included. If leverage can be assisted by the findings of participant observation, interviews or descriptive accounts then they too can be included. The point is that an evaluator should allow the research questions to speak to the design (Beretta, 1990: 9). Thus, the research question(s) can dictate the research methods (Desimone & Le Floch, 2004: 3).

5.5.4 Data Collection and Analysis

The evaluation audience and goals, context inventory and PTF combine to suggest questions that the evaluator needs to answer. The critical issue to be addressed is how to obtain the information necessary to answer the

questions: What type of data will need to be gathered (Quantitative, qualitative or both)? What will be the best method for gathering data? How can the course be improved (Lynch, 1996: 6)?

Data collection and analysis follow logically from the type of design chosen for the evaluation. The critical issues that concern the evaluator here have to do with the appropriate conduct of the data-gathering procedures and the interpretation of results. For instance, in the case of quantitative designs, have the assumptions of the designs and statistical models been met? In the case of qualitative designs, have the procedures for data gathering been portrayed accurately and have alternative interpretations of the data been pursued (Lynch, 1996: 7)?

Data can constitute powerful evidence (Harry et al., 2005: 12). The technique the evaluator uses depends on what suits his teaching situation best. Gathering the evaluation information is only the first stage in the process; the information must next be collated, and if extensive, summarised. After this, it needs to be discussed with all interested parties and some conclusions drawn. Finally, it should be included in a detailed course evaluation report as a basis for further discussions and decision-making (Hutchinson & Waters, 1987: 154).

There are many methods of collecting information for course evaluation purposes. Hutchinson and Waters (1987: 153) point out that there are many ways in which ESP courses can be evaluated, ranging from simulation to suggestion boxes. However, in practice, most ESP courses are evaluated using one or more of the following techniques: classroom observation, interviews, questionnaires, tests results, surveys, discussions, informal means (such as unsolicited comments, 'casual' chats, etc.) and studying of documents.

Thus, evaluation refers to a wide range of processes which may or may not include assessment (cf. Nunan, 1992: 185; Bless & Higson-Smith, 1995: 113; Genesee & Upshur, 1996: 140; 4.3.11). It is also very important that the

researcher chooses carefully from the methods available (Bless & Higson-Smith, 1995: 113).

5.5.4.1 Classroom Observation

Observation is basic to assessing human skills and behaviours. In fact, all methods of collecting information for second language assessment can be thought of as specialised methods for eliciting behaviour, attitudes or skills to be observed under specific circumstances (Genesee & Upshur, 1996: 77). As language classrooms are specifically constituted to bring about learning, it is reasonable to collect data about what goes on there as a means of adding to our knowledge of language learning and use (Nunan, 1992: 91).

According to Seliger and Shohamy (1989: 162), observation is one of a family of procedures used to collect data in qualitative research. Observations are most often used to collect data on how learners use language in a variety of settings, to study language learning and teaching processes in the classroom, and to study teachers' and students' behaviours. Thus, the main use of observation is the study of phenomenon at close range with many of the contextual variables present.

Hopkins (2002: 69) points out that observation does not only play a crucial role in classroom research but also more generally in the professional growth of educators. It is the pivotal activity that links together reflection for the individual educator and collaborative enquiry for pairs or groups of educators. Observation also encourages the development of a language for talking about teaching and provides a means for working on developmental priorities for the staff as a whole.

Bless and Higson-Smith (1995: 105) distinguish between two types of observations: non-participant which is the recording of events as observed by an outsider, and participant, wherein observers hide the real purpose of their presence by becoming participants themselves.

Researchers have devised sophisticated formal methods of observing educator-learner interaction in order to describe and understand second language teaching and learning better. For instance, real-time observation of second language classrooms by trained observers permits the compilation of detailed and complex information about language use by lecturers and students. This information may be difficult for the participants themselves to collect. Observation by trained observers is thus an important aspect of language research and is also used in some educator training programmes (cf. Genesee & Upshur, 1996: 77; Flick, 2006: 216). Through observations and interactions the lecturer will be able to judge the students' level of experience and background in projects and plan a continuum of activities (cf. Nagel, 1996: 134; 2.3.2; 4.3.3).

Informal observation is an integral part of everyday teaching because lecturers continuously observe their students' language use during formal instruction or while students are working individually at their desks. Lecturers can observe how students respond to and use instructional materials and how they interact, and how they interact during group work. Lecturers can also observe how they themselves effectively present particular lessons, units and so on (Genesee & Upshur, 1996: 79).

Observations can vary in their degree of explicitness. Those of a high degree of explicitness are 'structured' observations; the researcher determines in advance what to look for in the observed context. Those of a low degree of explicitness are 'unstructured' or 'open' observations in which the data being recorded are broad and more general (Seliger & Shohamy, 1989: 163). For example, data obtained from structured observations will be in the form of checks, tallies, frequencies and ratings, whereas data obtained from the open observations will be in the form of impressions, field notes, tapes or transcripts. However, for all types of observations it is recommended that observers be trained in observational techniques such as note-taking and recording information (cf. Seliger & Shohamy, 1989: 164; 3.4.3).

Since the first appearance of observation schemes on the research scene, they have become increasingly sophisticated and lead to the relative simplicity of the earlier schemes (Nunan, 1992: 97).

❖ **Key Features of Classroom Observation**

According to Hopkins (2002: 70), there are at least five key features of classroom observation: joint planning, focus, establishing criteria, observation skills and feedback.

- **Joint Planning**

The first joint planning meeting between the observer and the observed is of crucial importance. It should precede the first in a series of observations since there is a need to establish, at the outset, a climate of trust between the observer and observed, to agree on a focus that both regard as worthwhile, to discuss the context of a lesson, to sort out the 'ground rules' and so on. Once the observer and the observed become familiar with each other's style and the roles are reversed, then the time spent in the initial meeting will be reduced (Hopkins, 2002: 70).

- **Focus**

Hopkins (2002: 70) points out that focus of classroom observation activities can broadly be categorised as either general or specific. In the case of the former, everything counts and could therefore be commented on; in as far as the latter is concerned, observation is confined to a particular or well-defined classroom activity or teaching practice.

- **Establishing Criteria**

Ideally, criteria should be negotiated and agreed upon before the start of an observation. The contribution of classroom observation is enhanced if, during

the initial discussion by the observer and the observed, criteria for the observation are established. It is also important that such criteria are subject to on-going review as those involved refine their definitions of good practice. When viewed in this way, the discussion of criteria can then act as a 'road map' for development as well as providing standards by which the outcomes of an observation will be discussed (Hopkins, 2002: 70).

- **Observation Skills**

There are three main skills involved: guarding against the natural tendency to move too quickly into judgement, interpersonal skills involved when 'invading another person's space' and knowing how to design schedules that will allow the observer to gather appropriate information on classroom behaviour or transaction or knowing which are the most appropriate checklists to use in a particular situation (Hopkins, 2002: 71).

- **Guarding against the Tendency to move too quickly into Judgement**

Guarding against the natural tendency to move too quickly into judgement can be achieved to some extent by having a clear focus for the observation and agreeing about the ground rules beforehand (Hopkins, 2002: 71).

- **Interpersonal Skills Involved When Invading Another Person's Space**

Hopkins (2002: 70) states that interpersonal skills involved when invading another person's space includes creating a sense of trust and being supportive in situations where the other person may feel threatened.

- **Knowing How to Design Schedules that will Allow the Observer to Gather Appropriate Information**

The observer can gather appropriate information on classroom behaviour or transactions if he knows what are the most appropriate checklists to use in a particular situation (Hopkins, 2002: 71).

- **Feedback**

Amongst other things, feedback appears to work best if it is based on factual data, factual data are interpreted with reference to known and agreed criteria, interpretation comes in the first instance from the educator who has been observed, it is given as part of a two-way discussion and it leads to the development of strategies for building on what has been learnt (Hopkins, 2002: 71).

- ❖ **Method**

An observation scheme is one of the methods used in classroom observation and research (Nunan, 1992: 91). Observers use the scheme to check the presence or absence of the behaviour. For example, used over time, checklists can document learners' rate and degree of accomplishments within the curriculum, since they specify learners' behaviour or products expected during progression through the curriculum (Carrasquillo & Rodriguez, 1995: 34).

Nunan (1992: 96) points out that in selecting an observation scheme, it is necessary to match the scheme to the purpose of the research. The following questions can assist in evaluating and selecting a scheme:

- Does the scheme employ a category or sign system? (A category system allows the observer to document behaviour. For example, an

educator asks questions every time it occurs. On the other hand, a sign system requires an observation to be made at regular intervals of time.)

- Should high or low inference behaviours be documented? (High inference behaviour requires observers to interpret the behaviour they observe on-task or off-task whereas low inference behaviours may require observers to state what they observe).
- Does the scheme allow a particular event to be assigned to more than one category or event?
- Is the instrument intended principally for research in real time or on video/audio recordings?
- Is the scheme intended principally for research or education?
- What is the focus of the instrument? (Schemes can enable the researcher to focus on one or more of the following: verbal, paralinguistic, non-linguistic, cognitive, affective, pedagogical content or discourse.)

❖ Uses

Genesee and Upshur (1996: 79) point out that on the basis of their observations, lecturers assess what students have and have not learned, infer the learning strategies students may be using that facilitate or impede learning, the effectiveness of particular teaching strategies, determine which instructional activities and materials students enjoy, and so on. Information derived from such observations is fundamental to the day-to-day functioning of the classroom because it provides a basis for understanding what is happening and making decisions about what should follow. Based on a number of observations, for example, a lecturer may judge that a particular student has not learned what was taught that week, whereas the other students have; the observation that only one student has not learned will lead to very different decisions by the lecturer than the observation that most of the students have not learned.

Lecturers also seek to understand how their students are learning and to explain those instances when learning does not occur as planned. Their explanations of these situations can be used to plan instruction that will promote learning. For instance, in seeking to explain failure to learn, lecturers use the observation to make inferences about instructional or learning processes or strategies, and observation of student behaviour when a particular unit is taught might lead the lecturers to infer that the students were using strategies that might be effective in their first language but lead to mistakes in the second language (Genesee & Upshur, 1996: 79).

Nunan (1992: 98) states that the use of observation schemes can provide a sharper focus for data collection than unstructured observation, and it can also serve to blind us to aspects of interaction and discourse which are not captured by the scheme; this may be important to our understanding of the classroom or classrooms being investigated.

Inferences concerning learning and teaching processes are much more difficult to make than inferences concerning learning outcomes, yet both are equally important for effective teaching. Inferences about language learning outcomes can be made on the basis of observations of concrete instances of the students' actual use. For example, a language practitioner might want to investigate whether students use the passive correctly and appropriately when speaking and/or writing. On the other hand, inferences about processes related to teaching and learning are based on observation of a wider range of behaviours and events, and their relationships. For example, a lecturer's understanding of student errors when writing and what to do about them might follow from observations directed at answering questions (Genesee & Upshur, 1996: 80).

5.5.4.2 Interviews

A research interview is a conversation between the researcher and participant(s) with the specific objective of gathering information about a topic that is being researched. The research aims provide the starting point for the

questions that the interviewer will ask in the interview (Poggenpoel, 2003: 143). An interview involves direct personal contact with the participant who is asked to answer questions (Bless & Higson-Smith, 1995: 106).

The interview has been widely used as a research tool in applied linguistics (Nunan, 1992: 149). The purpose of the interview is to obtain information by actually talking to the subject: the interviewer asks questions and the subject responds either in a face-to-face situation or by telephone. Because interviews are personalised, they permit a level of in-depth information-gathering, free response and flexibility that cannot be obtained by other procedures. As a result, the interviewer can probe for information and obtain data that often have not been foreseen (Seliger & Shohamy, 1989: 166).

Interviews can be used to obtain information of interest to a researcher. The interviews can be conducted with a learner or a group of learners. It is important to keep interviews as simple and to the point as possible (Carrasquillo & Rodriguez, 1995: 34). A good questioning technique will usually encourage interviewees to express themselves in detail (Cottrell, 2003: 206).

According to Seliger and Shohamy (1989: 167), interviews can be differentiated by their degree of explicitness and structure, ranging from very open interviews to very structured ones. 'Open' interviews provide the interviewee with broad freedom of expression and elaboration and often resemble informal talks. These allow for greater depth, and one question leads to another without pre-planned agenda of what will be asked. There is usually a topic for the interview but by allowing the respondent maximum freedom of expression, ample and often unexpected information emerges as the interview proceeds. In 'semi-open' interviews specific core questions are determined in advance, and the interviewer branches off from the questions to explore in-depth information, probing according to the way the interview proceeds, allowing elaboration within limits. The 'structured' interview consists of questions defined from the start and presented to the interviewee; no elaboration is allowed in either the questions or the answers. This type of

interview is usually employed to get uniform and specific information, and when it is necessary to interview a large number of subjects.

Interviews can be characterised in terms of their degree of formality; most interviews can be placed on a continuum ranging from unstructured through semi-structured to structured ones. An unstructured interview would be guided by the responses of the interviewee rather than by the agenda of the researcher and as a result, the researcher exercises little control and the direction of the interview gets relatively unpredictable (cf. Nunan, 1992:149; Poggenpoel, 2003: 148)).

In line with the above, it is implicit that the nature of the interview will determine the type of data obtained. For example, more structured interviews will elicit brief and concise data in the form of checks, marks and short responses. On the other hand, open interviews will elicit generally more elaborated data in the form of impressions, descriptions and narratives obtained from interviews (Seliger & Shohamy, 1989: 168). It is against this background that Poggenpoel (2003: 150) points out that an interview is considered to be an effective method of collecting information during research.

❖ **Types of Interviews**

Poggenpoel (2003: 148) differentiates among structured, semi-structured and unstructured interviews. Bless and Higson-Smith (1995: 110) point out that unstructured and semi-structured interviews are very helpful in exploratory research as well as when considering a pilot survey before the formulation of the final questionnaire.

- **Unstructured Interviews**

Unstructured interviews are used when a researcher does not really want to investigate a concrete topic but wants to know more about a group of people;

the conversation should deal with everyday occurrences and the people involved in them (Poggenpoel, 2003: 148).

- **Semi-structured Interview**

According to Poggenpoel (2003: 148), in a semi-structured interview, an open-ended question is asked and the interviewer follows up on clues about a specific topic provided by the participant. An example of a semi-structured interview is the phenomenological interview where one central question is formulated: 'How do you manage a class of 90 students?'

This type of interview gives the researcher a general idea of where he wants to go and what should come out of it, but he does not enter the interview with a list of predetermined questions. Instead, questions and issues determine the course of the interview. Because of its flexibility, the semi-structured interview has found favour with many researchers working within an interpretive research tradition, in particular (cf. Nunan, 1992: 149; Poggenpoel, 2003: 148).

- **Structured Interview**

A structured interview is an interview where a set of questions has been decided on before the interview; only these questions are asked in the interview. Although this type of interview resembles a questionnaire, the researcher personally asks the questions (Poggenpoel, 2003: 148).

Bless and Higson-Smith (1995: 110) state that the wealth and quality of the data gathered are strongly dependent on the skills of the interviewers, the confidence they are able to awaken in respondents, the type of questions which are asked and the encouraging comments which are made at the correct moment.

- **Focus Group**

According to Bless and Higson-Smith (1995: 113), another form of interview is the focus group. In order to use focus groups the researcher must be skilled at facilitating group discussions as it is also often very useful to allow participants to share their thoughts with each other. This helps spark off new ideas in each other and consider a range of views before answering the researcher's questions. The focus group enables members of a group to share their experiences and to reach some kind of consensus about the topic of research.

❖ **Skills that an Interviewer should have**

According to Poggenpoel (2003: 144), an interviewer should have interpersonal as well as interviewing skills in order to conduct an interview. Interpersonal skills include communication, non-verbal as well as verbal skills. Open body language, conveying interest such as nodding of the head, sitting forward or maintaining eye contact if it is culturally appropriate, are non-verbal communication skills that can encourage a respondent during the interview. Verbal communication skills the interviewer should have include the ability to listen and hear minimal verbal responses as well, to reflect, to request for clarification, to ask for more information and to summarise what has been said. The interviewer should also have the ability to create a context favourable for conversation during the interview. This can be done by setting the participants at ease, explaining what the discussion will be about and what the interview aims to achieve. Aspects of confidentiality, anonymity, protection from harm and feedback to the participants must also be communicated to the participants (cf. Poggenpoel, 2003: 144; Flick, 2006: 169).

❖ **Phases of the Interview**

Nunan (1992: 152) points out that the structure of the interview will depend on the extent to which the sequence of the interview is fixed. Practical suggestions include the physical positioning of the interviewer and the

interviewee, and deciding on how the interview is going to be recorded (tape-recording or taking down notes).

An interview consists of different phases such as the preparation, piloting, selection of subjects, the interview and the post-interview phases (Cottrell, 2003: 207).

- **Preparing the Interview Schedule**

Cottrell (2003: 207) maintains that good preparation helps to ensure that the interviewer remains in control of the situation, keeping it focused and limited to a reasonable length.

Poggenpoel (2003: 146) states that it is important for the researcher to identify people who have the necessary information and can answer the research questions. For example, when the researcher comes into contact with the chosen participants, he should explain what the research is about and ask participants to take part. The researcher should further explain the subject of the interview to the participant and that the participant's right to withdraw from the research will be applied. Before the researcher officially begins to conduct the interview, he should conduct a pre-interview to ensure that the questions that he will ask and the method he follows will actually elicit the required information.

Once research objectives have been established, the researcher has to translate the objectives into interview questions. The question format and response mode will vary according to the nature of the variables under investigation, the type of subjects, the resources available to the researcher and so on. However, the researcher will still need to decide on the type of questions to be used and in what form the responses are to be collected and analysed (Nunan, 1992: 151).

A range of question types may be used in the less structured ethnographic interview. The researcher may also use a variety of other strategies in order to

encourage the respondent to recount his experiences, opinions and so on (Nunan, 1992: 152).

- **Piloting**

Because of the potential problems in the use of the interview already identified, it is very important that interview questions are piloted with a small sample of subjects before being used. This would give the researcher the opportunity to find out if the questions are yielding the kind of data required and to eliminate any questions which may be ambiguous or confusing to the interviewee. It is thus vital for all elicitation instruments to be thoroughly piloted before being used for research (Nunan, 1992: 151).

- **Selection of Subjects**

Nunan (1992: 152) states that every effort should be made to secure a representative sample, even in a small scale study. This involves selecting appropriate proportions of subgroups of the population, using whatever variables the researcher has determined to be important. In the selection process, it might be necessary to negotiate access to subjects or data collection sites with individuals or institutions.

- **Interview Phase**

Before the interview can begin the researcher should explain the nature of the research and the purpose of the interview to the interviewee. Questions such as how the data are to be used should also be answered (Nunan, 1992: 152).

At the meeting between the interviewer and the participant, the interviewer should create an environment that is favourable for conversation. For example, the interviewer could do this by warmly thanking the participant for his willingness to participate and implying that he is an expert in the topic of the interview. The interviewer can further explain that the interview will be

recorded on tape so that the information that the participant provides can be reproduced accurately (Poggenpoel, 2003: 147).

- **Post-interview phase**

According to Poggenpoel (2003: 147), immediately after the interview, the researcher should make notes about the observations made during the interview; the researcher should make notes about his personal experience during the interview and observations made, comment on the methods that he followed in conducting the interview and indicate positive aspects and any inadequacies. An interview that has been conducted and recorded on tape must be transcribed including any silences that may have occurred. This transcribed interview should be analysed according to a descriptive method.

5.5.4.3 Questionnaire

Questionnaires are printed forms for data collection, which include questions or statements to which the subject is expected to respond, often anonymously. They do not differ greatly from interviews; both require subjects to provide information in response to a stimulus provided by the researcher and they are often used in combination. In questionnaires, the answers are usually expressed in a written form (Seliger & Shohamy, 1989: 172). Thus, research based on elicitation techniques differs from naturalistic observation in a number of important respects; most particularly in that the researcher determines in advance what is to be investigated (Nunan, 1992: 138).

According to Leedy (1993: 187), a questionnaire is a commonplace instrument for observing data beyond the physical reach of the observer. In line with this, Booyesen (2003: 127) points out that the questionnaire is a fairly elaborate schedule that is designed to serve as a form of systematic observation. It is used as a versatile instrument of measurement or a data collection instrument in a qualitative descriptive survey, in a quantitative analytical survey and in a structured interview.

Even though studies utilising elicitation are extremely common in the applied linguistics literature, elicitation techniques vary enormously in scope, aim and purpose. They include studies which obtain their data by means of a stimulus such as a picture, diagram or standardised test as well as those based on a questionnaire survey or interview data (Nunan, 1992: 136).

A questionnaire refers to documents that are completed by an interviewer in a direct person-to-person situation and those documents that are mailed or handed to the people for completion without the assistance of the researcher (Booyesen, 2003: 127). The questionnaire enables the researcher to collect data in field settings and the data themselves are more amenable to quantification. The construction of valid and reliable questionnaires is a highly specialised business (Nunan, 1992: 143).

The construction of a reliable questionnaire which will fathom what the researcher wants to know, can be difficult and extremely time-consuming. When constructing questionnaire items it is first of all important to be very clear about objectives of the study and each item should be directly referenced against one or more of the research objectives. The researcher should also determine in advance how the data to be gathered will be analysed. Because of these and other pitfalls, it is imperative to pilot any questionnaire which is developed (Nunan, 1992: 145).

❖ Questionnaire Items

Questionnaire items can be relatively closed or open-ended; a closed item is one in which the range of possible responses is determined by the researcher, whereas an open-ended item is one in which the subject can decide what to say and how to say it. Questionnaires can consist entirely of closed questions, entirely of open questions or a mixture of both closed and open questions. While responses to closed questions are easier to collate and analyse, more useful information is often obtained from open questions. It is highly likely that responses to open questions will more accurately reflect what the respondent wants to say (Nunan, 1992: 143).

Many student projects involve questionnaires. Well-worded questions are at the heart of good research. Different kinds of questions are useful for research based on quantitative research and for qualitative research (Cottrell, 2003: 205).

❖ **Criteria for Questionnaire Design**

In a nutshell, Poggenpoel (2003: 141) maintains that important considerations in questionnaire design can be summarised in a checklist as follows:

- Questions should be conversational.
- Wording should be clear and unambiguous.
- Familiar vocabulary should be used.
- Each question should ask only one thing.
- The researcher should not assume too much knowledge or existing opinion.
- Loaded phrases that suggest certain responses should be avoided.
- The researcher should remember to offer 'don't know' options.
- Questions should offer alternatives that are given equal weight.
- Response categories should be easy to remember.
- The response categories should offer a real range of alternatives.
- The purpose of each question or item in the questionnaire should be defined.

❖ **Question Wording**

When constructing a questionnaire, careful attention should be paid to the wording of questions. A danger with any type of elicitation device is that the responses one gets will be artifacts of the elicitation devices themselves. It is particularly important that the researchers not reveal their own attitudes through leading questions. Questions should not be complex and confusing (Nunan, 1992: 143).

In language education, culturally biased questions should be avoided. Major differences may exist between the culture of the interviewer and that of the respondent, and these differences may affect the responses given (cf. Nunan, 1992: 145). In addition, questions on subjects that respondents may regard as embarrassing or too personal to discuss are likely to yield unreliable data (Poggenpoel, 2003: 133).

❖ **Pre-testing the Questionnaire**

Poggenpoel (2003: 140) maintains that the final stage of pre-testing or a pilot study is one of the most important in questionnaire construction. Pre-testing is a non-negotiable part of questionnaire design. It may be conducted on a small sample or if necessary on five to ten friends or acquaintances. A pre-test should be conducted in the same manner as the final study. For example, the pre-test should be mailed or should be in the form of interviews, depending on the form of the actual study (Bless & Higson-Smith, 1995: 108 & 111; Poggenpoel, 2003: 140).

❖ **Interpreting Responses**

After constructing, piloting and administering a questionnaire, the next task would be collating and interpreting responses. One of the great advantages of closed questions is that they yield responses which can readily be quantified and analysed. On the other hand, free-form responses from open questions are more difficult to quantify (Nunan, 1992: 145).

❖ **Quantifying Qualitative Data**

According to Nunan (1992: 147), qualitative data can be condensed and quantified. The researcher can determine whether different responses are significant, using the procedure for calculating chi-square.

There is an alternative way of quantifying qualitative data. The first step is to place each individual entry onto library index cards. At the beginning of the process, new categories emerge rapidly but the rate of emergence declines as more and more cards are processed. Once all the cards have been assigned, the analyst must devise categories and labels for each of the groups. The internal reliability of the procedure will rest on the extent to which an independent analyst agrees on the categories and the way in which individual cards have been assigned to the different categories (Lincoln & Guba, 1985: 347-348).

5.5.4.4 Testing

One formal method of measuring is to test (Douglas, 2000: 1). Tests are what some teachers refer to as examinations, tests and quizzes. This, however, does not suggest that examinations and quizzes are identical because they often differ with respect to their scope, importance, function and the care with which they have been prepared. Nonetheless, they are alike in so many other respects that it may be useful to consider them all as tests. For example, they all consist of a set of standard tasks that are attempted by a group of students, not necessarily at the same time, in order to demonstrate their knowledge or ability (Genesee & Upshur, 1996: 141).

❖ What is a test?

A test may be defined as an activity whose main purpose is to convey how well the testee knows or can do something. It is often conventionally assumed that tests are mostly used for assessment because a test would usually give a score which is assumed to define the level of knowledge of the testee (Ur, 1996: 33).

Buck (2001: 195) states that a test or any assessment is a measurement, and as a measurement, it must have two properties: reliability and validity. Reliability is concerned with how accurately the test measures. Conceptually, this implies that the test-developer would get the same results testing the

same person in the same situation. As a general rule, the more important the decision based on the test, the more reliable the test needs to be. Construct validity refers to the extent to which the test measures the right construct. This is the most important property of a test and many other aspects of usefulness flow from it. Traditionally, reliability has been regarded as a pre-condition to validity on the grounds that a test cannot measure the right construct if it is not measuring anything. For instance, testing language for specific purposes (LSP) refers to that branch of language testing in which the test content and test methods are derived from an analysis of a specific language use situation such as English for Science or English for Business. Thus, all tests are developed for some purpose (cf. Douglas, 2000: 1; 4.3.11). For example, a case could be made for the beginning of LSP testing. LSP teaching has a relatively short history; the University of Cambridge Local Examinations Syndicates' (UCLES) Certificate of Proficiency in English was established in 1913. This was a test designed for prospective English teachers to demonstrate their proficiency in the language (Douglas, 2000: 2).

LSP testing and by extension ESS testing, requires an analysis of a target language use situation, from which characteristics of test content and method are derived, as well as an interaction between language knowledge and specific purpose content knowledge. Thus, a theory of LSP testing establishes these two characteristics as fundamental goals (Douglas, 2000: 3).

Buck (2001: 194) points out that each testing situation is unique and there are many different variables that affect test design and construction and, as a result, it is impossible to offer any hard and fast rules.

Genesee and Upshur (1996: 141) maintain that, although a test is one method for collecting information, it is difficult to use a test to do so. It is, however, possible to identify what makes a test uniquely different from other methods of collecting information. Because it is difficult to distinguish tests from other methods of information collection, the following important aspects should be considered when devising and using tests:

❖ Purpose

Testing as a teaching act may serve different purposes. For instance, a test may be used to decide whether a testee is suitable for a certain job, can be admitted to an institution, has passed a course or can enter a certain class (cf. Ur, 1996: 33; 2.3.3). Thus, a test is a procedure used to collect data on subjects' ability or knowledge of certain disciplines (Seliger & Shohamy, 1989: 176).

A placement test can be sufficiently reliable for grouping students and advising them what language classes to attend. A short written exercise may be given too, partly for validity and partly for making up for the reading and listening sections where it is not clear which group a student is best suited to. Progress tests measure mastery of classwork; a desirable outcome would be for all learners to get full marks. Achievements tests measure mastery of a syllabus and take a longer and wider perspective than progress tests. It is theoretically possible that all students gain full marks. This is however, unlikely, since individuals have particular strengths and weaknesses (cf. Dudley–Evans & St John, 1998: 213; 4.3.1).

ESP tests may be given as part of a PSA, to place, to check progress or to measure proficiency. For example, as part of a PSA, an organisation may selectively test students to determine which macro-skill areas identified in the needs analysis actually require more attention (cf. Dudley – Evans & St John, 1998: 213; 4.3.2). Relevant aspects can be tested at an appropriate level (cf. Dudley – Evans & St John, 1998: 213; 4.3.3).

A proficiency test aims to measure how well the students will perform in their target tasks and so fits within ESP principles. To help students learn communication events, processes are broken into separate micro–skills and language items and these provide practice in them as discrete items and as a whole. Identifying and separating discrete language items is a teaching device. However, an ESP proficiency test will assess the whole rather than

discrete items; it will contain a series of tasks and measure performance on these (cf. Dudley–Evans & St John, 1998: 213; 3.4; 4.3.9.2.7).

The ultimate proof for an ESP course is how well the learners fare when using English in their target situation. After the course, students should be more effective and more confident when using English in their target situations (Dudley-Evans & St John: 1998: 210).

❖ Content

Content by itself is an abstraction; it needs to be operationalised, instantiated or expressed in some way. Since a test is about something, the content of educational tests can be based on academic subjects, knowledge or skills. These could be used to test intelligence, selection, second language proficiency, and so on. This implies that tests have subject matter or content. The actual content of a test is generally narrower than the subject matter, knowledge or skills it seeks to assess. An intelligence test, for instance, does not require test takers to solve all problems that pertain to intelligence. The content is thus a sample of the subject matter, knowledge or skills being assessed (Genesee & Upshur, 1996: 142).

The most important factor to consider when choosing which type of test task to use is the aims of testing. The lecturer should choose test tasks that focus on the same kinds of language skills described in the aims as well as the range and standards of performance expected of learners (cf. Genesee & Upshur, 1996: 177; 2.3.1.1; 4.3.4).

The quality of classroom tests, like all tests, will depend on whether the content of the test is a good sample of the relevant subject matter. For instance, if the content of a test is a poor reflection of what has been taught or what is supposed to be learned, it follows that performance on the test will not provide a good indication of achievement in that subject area. In addition, if the content of a test reflects more than one subject matter, knowledge or set

of skills, then test performance will reflect achievement in more than one area (Genesee & Upshur, 1996: 142).

An individual's performance on a test is a reflection of subject matter, knowledge and skills because the content of the tests is a sample of subject matter. Moreover, because the content of tests is a sample of a larger set of abilities or skills, interpreting test scores in terms of those abilities is a matter of inference. For example, test takers' levels of general reading proficiency would be inferred on the basis of a sample of their performance on a reading test (cf. Genesee & Upshur, 1996: 142; 4.3.3).

❖ **Frame of Reference**

According to Genesee and Upshur (1996: 141), tests yield scores that represent characteristics or attributes of individual learners. But in order for scores to be meaningful, test scores must have a frame of reference. The tests scores, along with the frame of reference used to interpret them, are referred to as measurement. Tests are therefore a form of measurement.

Even though a variety of tests can be used to assess learners' needs and strengths, most tests fall under three classifications: standardised (language proficiency/academic), cloze and criterion-referenced. These provide information on learners' academic status. Cloze tests, for instance, provide a measure of reading comprehension. Criterion-referenced tests, on the contrary, measure progress through the curriculum and can be used for specific instructional planning (cf. Carrasquillo & Rodriguez, 1995: 34; 4.3.11).

In the measurement of educational qualities and abilities, the frame of reference that is generally used is the knowledge and ability of a known group of people or explicit definitions of the knowledge or the ability being measured. Reference to a known group is called norm referencing but reference to defined knowledge or ability is known under various names: domain referencing, criterion referencing and objectives referencing. The term criterion-reference can be used with different meanings by different writers.

For instance, Genesee & Upshur (1996: 146) prefer to differentiate between domain reference and objectives reference within a given context.

- **Norm Reference**

According to Genesee and Upshur (1996: 149 -150), norm-referenced tests provide interpretations of test scores relative to other learners. Although norm referenced testing can be advantageous in some cases, it should not be used to the exclusion of the other considerations about test content and method.

- **Domain Reference**

Genesee and Upshur (1996: 150) point out that test scores can also be interpreted with reference to domain of knowledge or skill. In education, a domain is an academic discipline such as Mathematics or Science. The use of domains for test construction purposes requires consensus on what knowledge or skills comprise the academic discipline. If the domain can be described comprehensively and precisely, then test tasks that provide an accurate reflection of the domain can be devised. If this is done, then it also becomes possible to interpret performance on the test with reference to how much of the domain in question has been mastered by individual learners. Thus domain-referenced tests provide interpretations of test scores relative to an identified domain of knowledge or skill.

- **Objectives Reference**

Although objectives referencing is similar to domain referencing in that it provides for the interpretation of test scores with respect to a defined area of knowledge or skills, the main difference is that it does not require consensus on the description of the entire field of study. Instead, it depends upon the description of the knowledge or skills that make up a particular lesson, unit or course of instruction. In this form of testing, instructional objectives play an important role in defining the language domain of interest. It is for this reason

that this kind of test is referred to as objectives referenced (Genesee & Upshur, 1996: 151). So, testing is mainly based on objectives in this context.

Moreover, interpretations of objectives-referenced test scores are made with reference to how many of or how well the instructional objectives have been attained. It is of vital importance that interpretations of objectives-referenced test scores only be made by people who are familiar with the instructional objectives (Genesee & Upshur, 1996: 151).

❖ Test Specifications

Douglas (2000: 5) states that test specifications constitute a blueprint of the test to be developed, including a statement of the purpose, a description of the contexts and tasks intended to be included in the test, details of how the test will be scored and an indication of how scores on the test should be interpreted.

According to Buck (2001: 197), test specifications are created when decisions about the construct, the tasks and the texts are made in test design. The test specifications form the overall design of the test; the plan that proceeds from a test purpose to a completed test. These are usually in a form of a written document which provides the official statement about what the test tests and how it tests it. Often these are kept confidential, especially when the aim is to develop new versions. They are often accompanied by public guidelines about what the test covers, what the scores would mean and how the test-takers should study.

Furthermore, Buck (2001: 198) advises that even in the simplest situation, an explicit written statement of test specifications should be made. Although the bulk of these specifications would be taken up with details of the layout of the test and how the items will be constructed, at the very least, the statement should contain:

- statement of the purpose of the test

- a statement or description of the construct to be assessed
- details of how the construct will be operationalised in actual test items, including number of items, characteristics of tasks, texts, layout and so forth.

The level of detail of the specifications will vary depending on the purpose of the test, who will use it and so forth. For example, specifications tend to be more detailed when the stakes are high, when the test has more than one form, when there are more people working on it and when new forms will be made at a later time (Buck, 2001: 198). At the most detailed level, Alderson et al. (1995: 9) suggest the following three main groups for specifications: item writers, test validators and test users. Each group would then provide a separate list of what test specifications should contain.

Authenticity of task and the interaction between language knowledge and specific purpose content knowledge distinguishes language for specific purposes (LSP) from general purpose language testing. Authenticity of task means that the LSP test should share critical features of tasks in the target language use situation of interest to the test takers. The intent of linking the test tasks to non-test tasks in this way is to increase the likelihood that the test taker will carry out the test task in the same way as the task would ideally be carried out in the actual target situation. The interaction between language knowledge and content or background knowledge is perhaps the clearest defining feature of LSP testing. Background knowledge is a necessary, integral part of the concept of specific purpose language ability in LSP (Douglas, 2000: 2).

In the case of a test being developed for the first time, design of the test will tend to proceed cyclically. The test-developer will usually draft a set of specifications, and start developing and trying out tasks. Then, as the developer learns more about the test tasks and how they relate to the construct, the specifications will usually be revised, and then reviewed and revised again a number of times. It is a subjective process in which the test-

developer must use knowledge and judgement to develop a test of the most appropriate construct, in the most efficient manner (cf. Alderson, 2000; Buck, 2001). For example, task-based testing is seen as a way of achieving a close correlation between the test performance (what the testee does during the test) and the criterion performance (what the testee has to do in the real world) and thus ensuring the validity of the assessment (Ellis, 2003: 279).

On the basis of the specifications, test tasks would be produced and a specific test for English for business would be assembled, for example. After trying the new test out, perhaps by giving it to a group of business people, and revising it, it would be offered to a target group of prospective traders. Their performance on the test would be interpreted as evidence that they could or could not use English well enough to succeed in the tasks required of them in the marketplace (Douglas, 2000: 5).

Buck (2001: 198) points out that in the case of a test-developer making a new version of an established test, the process is very different. The test specifications will function somewhat like a recipe in that the test-developer will have to follow the specifications and create a test which is as similar as possible to previous versions of the test.

❖ Test Methods

According to Genesee & Upshur (1996: 142), test methods give form to test content in that they are the kinds of tasks that test makers are asked to perform. Examples of methods include reading texts accompanied by questions that require written or multiple-choice answers among which test takers must choose. The same testing method can be applied to different kinds of contents. For instance, multiple-choice methods can be used to test diverse attributes such as to repair clocks, knowledge of first aid regulations and the acquisition of certain grammatical rules in a second language.

Furthermore, Genesee and Upshur (1996: 141) state that since a test is a task or set of tasks, it elicits observable behaviour from the test taker. For

instance, a test may consist of only one task such as writing a laboratory report, or a set of different tasks such as in a lengthy multiple-choice examination in which each question can be thought of as a separate task. In the same vein, different test tasks represent different methods of eliciting performance, so that, taken together, tests are not a single method of collecting information.

Testing methods can have an effect on test takers' scores because they call for certain kinds of knowledge or skills that is independent of the content itself. Responding successfully to multiple-choice tests, for instance, draws on test-taking skills that are different from those required for responses to other kinds of test tasks (Genesee & Upshur, 1996: 143).

5.5.5 Communicating the Findings

Since evaluations have the potential to yield huge quantities of data, decisions need to be made on how the qualitative data resulting from interviews and questionnaires are to be reduced to manageable proportions (cf. Alderson & Beretta, 1992: 20; Nunan, 1992: 200).

In order to produce a useful final report, the evaluator must be extremely sensitive to the audience and goals of the evaluation. The social and political climate dimension of the context inventory also needs to be considered carefully at this stage. One of the critical issues in course evaluation is how to communicate the findings of the evaluation honestly and successfully. The evaluator may find that certain conclusions and the evidence on which they are based need to be omitted from this communication, be it a formal, written document or an informal, oral report. Rather than a covering up or withholding of the truth, this should be seen as a concern for communicating effectively with the audience. The evaluator may find it necessary to provide multiple reports that highlight different types of evaluative information or that express evaluation findings in different ways depending on the intended audience (Lynch, 1996: 9). Thus, the relationship between the findings and the communication of those findings is characterised by pragmatism. When

findings have been arrived at, the evaluator becomes a 'storyteller' (Beretta, 1990: 10).

Beretta (1990: 10) states that evaluation reports may be formal or informal, verbal or written, and so on. Although several reports may be necessary in any given evaluation, one type that is the archive-document, will be necessary in all evaluations. The document must contain all the relevant data, the rationale for the chosen design, caveats, and so on. The primary audience for this document is the research community who may be called in by the PSC to evaluate the evaluation.

5.5.6 Disciplined Inquiry and Academic Integrity

The concept of 'disciplined inquiry' is invoked and recommended as a standard for evaluators to observe as a fundamental criterion in the maintenance of research quality (Beretta, 1990: 11). The evaluator has to serve two masters: the PSC, who are the clients, and scholars, who judge standards of research (cf. Beretta, 1990: 11; 5.4.3).

Most research in language uses human subjects from whom the data are collected (cf. Genesee & Upshur, 1996: 124; Seliger & Shohamy, 1989: 195). This implies that research involves the creation of a balance between rapport and appropriate distance with research participants and self-awareness that allows for a critical view of one's own role in the research (Harry et al. 2005: 12). The researcher should therefore be sensitive to cultural considerations such as the difference between high-context (collectivistic) and low-context (individualistic) cultures. For instance, in low-context cultures, speakers are expected to offer relevant comments that are directly to the point. In high-context cultures, speakers' comments are frequently more indirect, ambiguous and seemingly less relevant. Thus, the researcher must know or infer more about speakers' intentions in order to understand the relevancy (du Plooy-Cilliers & Olivier, 2001: 185).

Much attention should also be given to the ethical and legal considerations involved in conducting research and collecting data from human participants. For instance, any researcher carrying out research with human participants at a university or in a school system must follow the institution's rules and procedures (cf. Genesee & Upshur, 1996: 124; Seliger & Shohamy, 1989: 195).

5.6 CONCLUSION

Methods of evaluating a course can serve as a backbone for a data collecting process in the learning and teaching of language. The methods could be documents, interviews, classroom observations, test results, questionnaires and so on, depending on what the researcher would like to attain. Guided by the aim of the researcher, such methods are selected for a purpose.

Although diverse, the methods can be used in a complementary manner and can collectively contribute to research and development in language activities. In addition, these can also help the lecturer foster reflective educational practices, accountability and in the long term, course development. Thus, the careful selection and usage of methods in evaluation can add value to a language course.

The next chapter focuses on the research method used in this study.

CHAPTER 6

METHOD OF RESEARCH

6.1 INTRODUCTION

In this chapter, the research method employed in this study to evaluate the ESS course at UL, Turfloop campus is discussed. The method consists of evaluation of documentation, students' interviews and questionnaires, lecturers' interviews, observation of lectures, evaluation of course materials and a survey of the state of foundation/bridging English courses at other tertiary institutions.

In this and the following chapter, the ESS course currently offered at UL, Turfloop campus is described and analysed. The aim is to discuss the course with regards to stakeholders, background and history, aims of the evaluation, elements to be evaluated, and how the evaluation will be done.

6.2 STAKEHOLDERS

The main stakeholder is the management of UL, Turfloop campus. Permission to do this study was granted by the Deputy registrar, on behalf of management. In addition, the Faculty of Sciences, Health and Agriculture, the UNIFY programme and former UNIFY students are stakeholders.

Sources of information, namely, students, ESS lecturers, foundation/bridging English lecturers at other tertiary institutions and the researcher herself are also considered as stakeholders.

6.3 AIMS OF THE EVALUATION

As pointed out in Chapter 1, the aim of this study is to evaluate the ESS course and to do so in terms of the aims and concerns of the course, its content, activities and materials, student achievement of the course aims, student attitudes and experiences, lecturer effectiveness and attitudes, as well any problems related to the course. The goal is to devise a revised syllabus for the ESS course.

6.4 ELEMENTS OF THE COURSE TO BE EVALUATED AND HOW THE EVALUATION WILL BE DONE

Evaluation of the ESS course will be done in terms of course documentation, attitude and experiences, aims of the course, activities and materials as well as lecturer effectiveness and attitudes.

A course outline, student interviews and questionnaires, lecturer interviews, an observation scheme, materials evaluation criteria, and surveys will be used as sources for elements in this study. A summary of the sources is given in Table 2.

Source	Instrument	N
Documentation	Course Outline	1
Student	Interview	139 (6 groups of about 20 students)
	Questionnaire	58
Lecturers	Interviews	2
Observation	Observation Scheme	10 lessons
Course Material (ESS course outline, Course materials, Prescribed Books & Study Guides)	Evaluation Criteria Framework	21 criteria
Survey of Foundation/Bridging Courses	Questionnaire	9 Language Courses at other Tertiary Institutions

Table 2: Summary of Sources of Data

The elements are now discussed.

6.4.1 Course Outline

A course outline contained in the Grammar and Word Classes module was evaluated in terms of aims and objectives, themes and topics, inclusion of the four skills, linguistic aspects, pair and group work and user-friendliness (cf. 7.2.1).

6.4.2 Students Interviews

Interviews were conducted with students enrolled for the course. The researcher designed 18 open-ended interview questions as well as their sub-questions (Appendix A).

The interview was piloted on a small group of first-entering mainstream students. Questions 3, 5, 6, 8 and 9 were merged with 'their' sub-questions respectively, and as a result, the number of questions came to 13.

All students enrolled for the course were interviewed for 30 minutes in groups of about six towards the end of the course. An open-ended format was used. The researcher obtained the participants' perspective on the course, in their own words. Their responses were recorded on tape and later transcribed.

Introverted students could have missed out on the opportunity of giving their opinions on the ESS course during the interviews. Some students were desperate to be 'heard' irrespective of what the questionnaire asked for. That is why some of their answers were irrelevant and were disregarded. A response to question 10 can serve as an example of such an irrelevant answer (see Appendix A): 'ESS and UNIFY as a whole concentrated on Physical Sciences and Health Sciences, and neglected the Mathematical Sciences (i.e. Computer Science) topics towards which most of us are attracted'.

6.4.3 Student Questionnaires

A questionnaire was also designed for former UNIFY students. It was intended to tap the students' views on the ESS course, whether they had benefited from it, and how they thought it could be improved (cf. Appendix B).

The questionnaire was piloted on a small group of mainstream students.

70 former ESS students at different levels in the mainstream were initially requested to fill in the questionnaires. They were randomly selected from former UNIFY students reading for a science degree in the Faculty of Sciences, Health and Agriculture. Special arrangements were made with mainstream lecturers for

the fielding of the questionnaires. An open-ended format was used. A total of 58 students eventually filled in the questionnaire.

6.4.4 Lecturers' Interviews

Interviews were conducted with two ESS lecturers. The focus of the interviews was on the teaching approach, the course and its implementation, as well as the lecturers' experiences and impressions of their success, and that of students (Appendix C).

Interview questions were piloted on one mainstream lecturer in the English department. The piloting exercise resulted in the researcher providing a slot for lecturers' personal details and 20 questions being grouped according to 10 ESS course aspects, namely, personal information, learner characteristics, aim, language view(s), content, teaching approach, materials, assessment, evaluation and on how the course could be improved.

The two ESS lecturers were interviewed for 30 minutes each. The interview was conducted at the end of the course and an open-ended format was used.

6.4.5 Observation

An observation scheme (cf. Appendix D) was designed in order to record activities in the classroom. The focus was on the teaching-learning activities and approaches that the lecturer employs. These were subsumed under goals, language problems addressed, content, teaching approach, teaching materials, accommodated learning styles, assessment and evaluation. Provision was also made for open-ended note taking.

The scheme was piloted on two ESS classes and adapted.

The researcher observed 10 ESS classes during which the following ten different topics from the ESS course outline were taught:

- An Introduction to the ESS Course
- Abbreviations and Symbols Used in Marking
- The Impersonal Scientific Style of Writing
- Reading Comprehension Passage
- Common Terminology Used in Describing Graphs
- Feedback on Test
- Using a Graph to Write a Paragraph
- Key Words Used to Describe Structure, Function and Content
- Note-taking Practice based on a Listening Comprehension Passage and
- Corrections of the Note-taking Practice

Each period lasted for 45 minutes.

6.4.6 Course Materials Evaluation

The materials used in the course were also assessed. The researcher developed a course materials framework (cf. Appendix E) to evaluate the ESS course outline, course materials and prescribed books. Criteria used in the framework were adapted from Cronje's (1993) evaluation model.

One former ESS lecturer was asked to comment on the framework and as a consequence, small changes were made.

The course outline and course materials (study manuals and textbooks) were scrutinised by the researcher to determine whether the materials fit the purpose of the course.

6.4.7 Survey of Foundation/Bridging English Courses at Tertiary Institutions

The researcher developed a questionnaire to survey the state of Foundation/Bridging English courses at other tertiary institutions (cf. Appendix F).

The questionnaire was piloted on two colleagues in UNIFY. The revised questionnaire comprises 33 main questions and about 36 sub-questions. The nomenclature 'Foundation/ Bridging' English course featured in the title of the survey as a way of accommodating all the relevant institutions. Potential respondents were requested to participate in the survey by either telephone or e-mail.

The exercise of locating Foundation/Bridging English course lecturers in other tertiary institutions to take part in the survey was cumbersome and some of the responses trickled in over an extended period of time. A total of 9 Foundation/Bridging English lecturers at different tertiary institutions, including the University of Limpopo, eventually completed the questionnaire.

6.5 CONCLUSION

The method of research serves as a vehicle towards the attainment of specific research goals. The data collected on course evaluation from the course outline document, stakeholders such as students, lecturers, observation of ESS lectures and course materials as well as other tertiary institutions offering foundation/bridging English courses chart a way for the data to be interpreted and analysed in the next chapter.

The next chapter discusses results of this study.

CHAPTER 7

ANALYSIS OF RESULTS

7.1 INTRODUCTION

This chapter contains the data collected for purposes of evaluating the ESS course. The aim in this chapter is to present and discuss the results emanating from an analysis of the course outline of the present course, interviews with UNIFY students, the questionnaire for former UNIFY students, interviews with lecturers, observation of lectures, the analysis of course materials and the survey of other foundation courses.

7.2 DATA ANALYSIS

7.2.1 Course Outline

The following outline of the course is provided at the beginning of the Grammar and Word Classes module:

Course Structure and Organisation

The course is organised on a modular basis. There are four modules which are as follows:

Module 1: Reading Comprehension

The Reading Module will run throughout the ESS course and will be regularly assessed. Some readings will be done on a regular basis in class and others will be done as part of the self-study component

of the course. The module consists of a number of texts relating to topical areas of science and technology. They aim to offer students a background to key issues of interest and relevance to build a broader scientific knowledge other than the subject content of the other courses. The exercises that accompany them will help the student to develop vocabulary and language skills, as well as introducing strategies which will aid understanding and build efficiency and competency in reading. Assessment will be through timed readings and/or as part a more comprehensive test involving other skills and language use.

Module 2: Grammar and Word Classes

This module will run for eight weeks and students' learning will be assessed through tests at the end of this period. The module aims to help students with the important aspects of grammar they will find most important in their science studies. The focus is on raising students' awareness of what language comprises and how it is constructed. 'Practical English Usage' is a comprehensive guide to language use which accompanies the course and will be a useful reference in this module to help understand the 'labels' attached to language. Exercises will focus on language analysis and the use of particular structures for specific writing functions; written exercises will concentrate on improving accuracy at the sentence level with some practice of writing paragraphs. Dictionaries will be used extensively to aid greater efficiency of learning and to build vocabulary.

Module 3: Writing Module 1 - Notions and Concepts in Science Writing

Leading on from the grammar module is the development of the writing skill beyond the sentence level. Writing will form the basis of much assessed work, here in UNIFY, and in a student's university life, whether this is through class work or through tests and exams, but it is also a necessary life skill. It is, therefore, vitally important that a student's written work can be clearly followed and understood. The module deals with the written communication of some of the key notions and functions in science, such as cause and effect and comparison and contrast. While some of the early work will practice the relevant structures at the sentence level, but later students will be expected to write paragraphs and mini-essays. The ability to create more extended and well-organised pieces of writing depends on the use of effective linking devices, which are introduced in the grammar module, but will be put to effective practice in this one. This module runs for eight weeks and learning will be assessed on completion.

Module 4: Writing 2 - Interpretative Writing and Listening and Note-taking skills

This is the final eight-week module and it will be assessed in a similar way to the previous two. This module encompasses a number of cognitive processing skills employing integrated language skills. The main emphasis is on the different types of note-taking and note-making exercises. This ranges from making notes from textbooks and scientific texts, and taking notes from listening to lectures - hence the listening skills component. Improved competency in these skills will lead to more efficient and

effective learning in the students' further studies and these will continue to develop as their studies progress. The module also concentrates on developing interpretative skills, such as reading information from graphs, reformulating or transforming text and data into different textual forms, summarising long texts in one's own words, or expanding notes into fully comprehensible sentences and paragraphs to produce writing of essay length. Much of this will be achieved through the medium of note-making or note-taking and the types of exercises they encompass - hence the use of integrated skills to complete them.

Language and Skills Development

Through the above modules the following language areas are introduced and the various skills developed:

Writing Skills

The following topics are covered thoroughly as a preparation for the writing of laboratory reports and assignments:

Structure and Content
Cause and Effect
Quantity and Comparison
Sequence
Proportion
Probability
Definitions

These grammatical and quasi-grammatical devices are covered, either as separate topics or in combination with the topics listed above:

Subject/Verb Concord

The Impersonal Passive

Countable and Uncountable Nouns

The Use of the Articles

Cohesive Devices

The writing courses culminate in the writing of laboratory reports and other short assignments (mini-essays) based on information presented to the students in the form of notes, diagrams, graphs, tables or texts.

Reading Skills

Practice is given in the intensive reading of selected comprehension passages on scientific topics, taken from various sources.

It is hoped also to do some skimming/scanning exercises, using subject text books.

Note-Taking Skills

Students are introduced gradually to the techniques used in taking notes from lectures and texts, leading to them taking notes without guidance from full-length lectures.

Notes themselves are used as a departure point for the writing of mini-essays.

Information presentation and interpretation

Students are familiarised with the presentation of information in the form of lists, notes, tables, diagrams and graphs. Students practise interpreting and describing visually presented information, paying particular attention to the logical organisation of information, the differences between generalizing and being specific, and between fact and speculation.

Reference Skills

Particular attention is paid to the use of the dictionary for finding the correct meaning, for other information to be found in the dictionary, and how to use the pronunciation guide. Other types of dictionary, such as a thesaurus and a science dictionary will also be used as reference aids to discover the origins and derivations of scientific terms and terminology, build vocabulary, clarify meaning and broaden the foundation of a student's scientific knowledge.

It is hoped to do work on reference skills using the subject text books for the purposes of researching materials for project work.

Computer Literacy and Computer Assisted learning

In collaboration with the computer section of UNIFY, students will be introduced to the basics of word processing. Suitable software will be used to help remediate language weaknesses and reinforce certain topics in the ESS course.

Other Skills

Skills such as time management and examination techniques are emphasised throughout the course. The Counselling Centre also runs a course for UNIFY on Life Skills.

Evaluation

The module description is very similar to an entry in a university calendar. There are no aims for the course, and it is not clear what outcomes are to be achieved by the students. There is no clear distinction between themes and topics. The skills of reading and writing are not clearly integrated but are instead presented as separate and discrete entities. The speaking skill is not included. Grammar topics are limited to 5 aspects and some pertinent topics such as tenses and other word classes have been left out. Grammar seems to be treated as a separate skill and is not integrated with the course. Themes and topics do not seem to be used. Tutorials and practicals are not included, and pair work and group work are also not accommodated.

The outline does not provide specific guidance to lecturers, and the most likely implementation is that a lecturer would merely follow the teaching materials, moving from one page (or exercise) to the next. It is clear that a detailed outline of the course, which can guide and direct the year's work, is required.

7.2.2 Student Data

7.2.2.1 Interviews with UNIFY Students

Six groups of students were interviewed for thirty minutes each (cf. Appendix A). Responses to 13 questions were given by the groups of students. For the sake of easy reference, the questions are repeated. The responses are as follows:

Do you think it is important to include English and Study Skills (ESS) in the UNIFY curriculum?

Students felt that the English and Study Skills (ESS) course was an important one because it enhanced their knowledge of English and aided those who did not do English first language in matric. One group pointed out that ESS was essential for future scientists as it taught study skills, particularly note-taking, and how to write scientifically, such as using the passive voice. It equipped them with the skills to perform better in other UNIFY subjects.

How different is ESS from the English you learnt at matric?

The ESS course differed greatly from the English course at school. At high school students communicated in their first languages in the English class, whereas in UNIFY they only communicated in English. The course was specifically related to the science context.

Does the ESS syllabus address all your language needs?

All the groups were unanimous that the ESS syllabus addressed their needs. In addition to being taught the scientific style of writing, they singled out the

following aspects: answering questions, writing laboratory reports and using articles in grammar. The students pointed out that ESS improved their writing skills and taught them how to write sentences in a science context.

Is/Are there any 'new' language aspects that you learnt from the course?

Students stated that most of the language aspects were new to them. These included the scientific style of writing taught, writing laboratory reports, describing a graph, and using science vocabulary. The course taught them referencing skills such as how to use a dictionary, and how to use phonetic transcription for pronunciation. They reckoned that they were more sensitive to language errors than they had been before.

Is/Are there any teaching material(s) which you think should be excluded from the course and why?

Students indicated that the teaching materials were all useful, especially the dictionaries and the manuals.

Did you find the ESS materials (study guides, etc.) easy or difficult? Why?

Students found the manuals easy to use. Moreover, most students regarded the materials as challenging. When students got their test scripts back they could refer to the *Grammar and Word Classes* module. However, the study guides did not provide enough guidelines on how they should be used and this rendered them not as user friendly as the manuals used in Chemistry and Physics. Students stated that reference skills such as using the thesaurus and the science dictionary needed to be included in the course.

What do you think about the assessment practices in ESS?

Four groups of the students stated that the assessment in ESS focused on what was taught. Students implied that they were tested on what they were taught. The assessment was thus focused and fair. Students pointed out that they appreciated it that they were told how they would be assessed. On the contrary, two groups of students commented that test questions were difficult while the questions in the manual were not. This was due to the fact that test questions were asked differently from the ones in the manual. Because corrections in class were important, students indicated that more time was needed for feedback, especially on tests. Students wanted more attention to be paid to the speaking skill in the form of oral presentation sessions.

Do you think that the time spent on the course was sufficient? Why?

Half of the groups thought that the time spent on the course was sufficient because they could cover everything in the syllabus. The other half thought that the time allocated to the course was not sufficient for a science-based course. They needed more time to learn pertinent language aspects, which would help them adapt to a science-based course because they come from a disadvantaged school background.

Did you benefit from team the teaching used in the course? In what ways?

All six groups were unanimous that they benefited from team teaching. One group commented that students would benefit more if the team teaching arrangement were made clear to them from the outset. Another group pointed out that the swapping of the groups by the lecturers should not be done without prior notice. It should also be done at the end of the second term.

What would you regard as good aspects of the ESS course?

Regarding the good aspects of the course, the student groups gave wide-ranging responses. Students pointed out that it was good that ESS was different from the English they were taught at high school. The course had links with other subjects in UNIFY. They also felt comfortable with the course. They further pointed out that responding to questions in class helped them practise how to speak in class and this built their confidence. Moreover, the ESS common lecture for note-taking practice also exposed them to a class size which was larger than the small UNIFY ones. In addition, their sentence constructions improved and oral presentations which they gave during the ESS research project helped them gain confidence to present information to a group of people.

What was the most frustrating aspect of the course?

Two groups commented that there was nothing frustrating about the course. In contrast, the rest of the groups stated that it was frustrating that ESS turned out to be one of the challenging courses in UNIFY, the workload was too much and a lot of homework was given to them. Students complained about fellow students who laughed at them when they mispronounced words. The note-taking activities frustrated them because the pace of the lecturer during note-taking practice was rather fast. In addition, lecturers did not provide answers to questions without students attempting to answer the questions first. Some ESS lecturers did not devote the allocated time to the lecture, while others were not experienced enough to teach the course.

If you were to improve the course how would you do it?

With regard to how the course could be improved, two groups proposed that more contact sessions should be allocated to it. However, the other four groups

proposed that the number of ESS lectures should be reduced. They also complained that many students did not attend classes regularly. Two groups pointed out that students should have more 'common lectures' where all the UNIFY groups could be taught as one large group. The various sections in UNIFY should liaise more about their curricula. Vocabulary building games such as quizzes, puzzles and scrabble should be included in the syllabus. Students also felt that group work should be given more attention. Manuals should include self-assessment exercises. They felt that students should not fail the course because it was essential for passing the UNIFY course as a whole.

What convinces you that you are now better equipped to study the sciences with confidence?

On the whole, students felt that they were better equipped to follow a career in science with confidence. Two groups stated that they could so because the team teaching experience exposed them to different lecturers. They were taught skills that they could use in their degree course, such as note-taking and the scientific style of writing. They could always refer back to the ESS manuals. The students were determined to do well in the mainstream because they felt they could apply the skills they were taught. They were better informed about the sciences and could work independently. They also stated that, since ESS covers Chemistry, Medicine and Physics areas, they were more confident than before to enrol for these courses.

Evaluation

Students were positive that the ESS course was relevant to the sciences and that it addressed their needs. They were taught relevant aspects of grammar and the scientific style of writing. They stated that the materials were good and useful and could still be used in the mainstream. They benefited from the team teaching

and the incidental group work that was done. On the whole, they were satisfied with the content of the course.

Students stated that the course could be improved by teaching them how to use the study guides, and including reference and speaking skills. Questions in the manuals and tests should be brought to the same level and more group work should be done. They also indicated that more time should be spent on feedback on tests.

A number of other aspects surfaced during the interviews. These pertained to the time allocated to the course and common lectures. Students wanted vocabulary games to be introduced and self-assessment exercises to be included in the manuals.

7.2.2.2 Questionnaire – former students

In this section, responses of the former UNIFY students to the questionnaire are analysed (cf. Appendix B). Questions are given in italics for easy reference.

Give at least 3 ESS skills that you find useful in the course you are taking now.

Many students (46.5%) regarded the writing skill as the most important one. Although nearly the same number of students (46%) thought that reading and grammar were both important, the lowest number of students (7%) indicated that listening, referencing and speaking skills were useful in the courses they were taking.

List 5 skills you acquired in ESS that you deem useful in your science studies.

Nearly half the students deemed the writing skill useful in their science studies. About a quarter of the students regarded the reading skill as useful. Almost the

same number of students cited listening and speaking as useful. Grammar and life skills were both considered useful by a negligible number of students.

Did class work form an essential part of ESS learning?

Students were unanimous that class work formed an essential part of learning ESS.

Do you regard homework as an essential part of ESS learning?

Ninety-eight percent regarded homework as an essential part of learning in the ESS course.

Did you benefit from error correction during ESS lessons?

Students were unanimous that they benefited from error correction that was done during ESS lessons.

Give a reason(s) for your answer to the previous question.

Students advanced various reasons for benefiting from error correction during lessons. 28% stated that they benefited from error correction because their performance improved, 10.3% indicated that their writing skills improved, 5.2% learnt to work independently and another 5.2% learnt to accept criticism. Some benefited because error correction sensitized them to language errors (3.4%), they acquired general skills (3.4%) and others (3.4%) attributed their benefiting to the diagnostic nature of error correction. They also improved their grammar (3.4%), writing (3.4%), reading (3.4%), a combination of speaking, reading and writing skills (3.4%), and word classes (3.4%) as a result of error correction. Others benefited because they could apply the theory they had learnt in class (1.7%); they benefited from regular class attendance (1.7%) and their confidence

in using the language was built (1.7%). Another 1.7% of the students reckoned that they did not benefit because their performance did not improve despite the error correction sessions, and 10.3% did not give reasons for having benefited.

Did feedback on marked tests enhance your learning of ESS?

Only 2% did not agree that feedback on marked tests enhanced their learning of ESS.

Do you find your ESS student material still useful in the mainstream?

A total of 81% found the materials still useful in the mainstream.

Mention the material(s) that you did not find useful.

Of the 19% that indicated that they did not find the ESS materials useful, 8.6% stated that they specifically found ESS study guides not useful, 6.8% pointed out that not all the ESS materials were useful and 3.4% of these students did not give reasons for their answers.

Give (a) reason(s) for finding the materials not useful.

Most of the students (48.6%) pointed out that the ESS materials were not useful because the writing that they did in the mainstream was different from the writing that was done in ESS. In addition, approximately a quarter of the students (25%) regarded the ESS grammar material as irrelevant to the mainstream environment.

About 15% indicated that none of the materials was useful. 11.4% of the students cited reading materials while 8.6% stated that materials which involved speaking activities were not useful.

What additional materials would you propose?

56.9% of the students proposed additional materials while 43.1% did not. 27.6% proposed extra reading materials, 17.2% extra writing materials, 6.9% proposed spelling and 5.2% proposed extra materials for all four language skills.

Give a reason(s) for your answer to the previous question.

The majority of the students (58.6%) did not give reasons for their answers. The most significant answers were: 27.6% stated that additional materials were essential, 12.1% indicated that the materials would give them support in learning while 1.7% of the students regarded the question as irrelevant.

Was taking the ESS course worthwhile?

96% of the students pointed out that taking the ESS course was worthwhile.

What was the best aspect about ESS?

About a quarter of the students regarded the acquisition of skills in general as the best aspect about the ESS course. Nearly 30% cited incidental development of the speaking skills. The rest of the students stated that a combination of skills such as the writing, reading, listening skills and error correction were the best aspects about the course.

What was the worst aspect regarding the ESS course?

Only 87.4% of the students responded to this question. 27.6% indicated that there was no worst aspect regarding the ESS course. The rest of the students stated lecturers' teaching approach (17.2%), activities related to the skills of

speaking (1.7%), writing (1.7%), how to use a dictionary (1.7%), and grammar as the worst aspects regarding the course. Other complaints pertained to course organisation, course content, attendance, assessment and promotion as well as affective factors. These complaints involved materials that were too long (1.7%), attending the double lectures (1.7%), taking a language course that lasted for one academic year (1.7%), learning countable and uncountable nouns (1.7%), answering questions in the reading comprehension passages (1.7%), lecturers not attending lectures (1.7%) and bunking of lecturers by students, which caused students to fall behind (1.7%). Some students complained about tests that were complicated (1.7%), failing an ESS test (3.4%) and the fact that they had to pass ESS in order to qualify for a UNIFY pass (13.8%), students being complacent about the course (1.7%), being laughed at by fellow students when speaking and reading in class (3.4%), and lecturers not giving students a chance to present information on the board in order to build their self-confidence (1.7%).

Did the course enhance your performance in the sciences?

Close to 97% of the students stated that the course enhanced their performance in the sciences.

Evaluation

The former UNIFY students were unanimous that they benefited from class work and error correction. They also stated that they benefited from interacting with other students during error correction. Nearly all of them benefited from homework.

The students regarded writing as the most important skill. Grammar was considered useful by a negligible number of them.

19% of the students did not find the course materials still useful in the mainstream. The former students also proposed additional materials for reading, writing and spelling.

Ninety six percent of the students stated that taking the course was essential and valuable. About a quarter of all the students indicated that the best aspect about the ESS course was the acquisition of the skills, while nearly 30% thought that it was the incidental development of the speaking skill.

Criticism of the course involved the teaching approach and the course workload. Out of the 47% that indicated that there were aspects of the course they did not like, 31% cited the teaching approach of some lecturers and lecturers who failed to make the course interesting. Some students pointed out that the work load was too heavy. Nonetheless, the majority of them (97%) stated that the course enhanced their performance in the sciences. Areas for improvement can thus focus on teaching approach and the course workload.

7.2.3 Interviews with Lecturers

The two ESS lecturers at the University of Limpopo were interviewed (cf. Appendix C). The interview questions were grouped into 10 clusters, and integrated as indicated below. The questions are repeated for easy reference.

Personal Information

What is your first language?

What is/are your second language(s)?

When did you join the ESS section?

What is your highest qualification?

One of the lecturers indicated that she was a first language speaker of English and the other one was a Swazi speaker. The English speaker spoke Afrikaans as her second language, and the Swazi speaker spoke English and Zulu as his second languages. The English speaker joined UNIFY in 1992 and holds a post-graduate certificate in Education. The Swazi speaker started working in UNIFY in 2001 and holds a Master's degree.

Student Characteristics

What are the common characteristics of ESS students?

What do you regard as the students' language needs?

The lecturers pointed out that most of the ESS students came from poorly equipped schools, which lacked most teaching resources. Students were taught though the medium of English, which was neither their L1 nor that of their teachers. The lecturers had the impression that teachers of English focused more on the teaching of literature and less on the teaching of language.

Students needed a good competence in grammar and quasi-grammatical devices such as subject/verb concord, countable and uncountable nouns and the use of articles. This implied that the course needed to focus on grammatical ability to a large extent. They also needed the ability to write English well and to read it fluently.

Aims of the course

What are the main aims of the ESS course?

Are there any additional aims that you would like to include?

Lecturers pointed out that the main aim of the ESS course was to support and enhance the students' performance in the sciences. Since the level of English of

ESS learners was generally below the required standard for university admission, particularly into the sciences, learners needed to be exposed to scientific reading and writing. This was at the core of the UNIFY curriculum. Thus, the main aim of teaching ESS was to equip students with academic language skills, and to help them cope with and pass their other subjects. The lecturers stated that learners needed to be taught how to read science passages with understanding, how to use the scientific style of writing and how to use a dictionary to find meanings of words. They needed to be taught concepts, how to write a laboratory report, how to read graphs, and so on.

The lecturers would like to build on and expand the writing skills that learners were taught. They could not achieve the required levels in the time at their disposal. They pointed out that they would also like to teach learners to use computers in class for referencing purposes, such as how to access information online, and use computers to develop learners' presentation skills, using Power Point. In addition, they indicated that they would like to include the writing of short dissertations, oral reports and more projects.

Language Teaching Approach

What is the language teaching approach which guides teaching-learning activities in the ESS course?

Why do you prefer this teaching approach?

The lecturers argued that ESS teaching-learning activities were based on a learner-centred approach; they strove to give learners what they needed. The process started by lecturers finding out what the students knew, and the course attempted to build on this. The course was very concrete in terms of what it was trying to achieve. Lecturers ensured that the materials they selected were relevant to the other subjects in UNIFY. For example, they taught the concept of

'relationships', which was also included in Physics, and the concept of 'proportion', which was also taught in Mathematics.

Initial Assessment

How do you determine the proficiency level of the students at the beginning of the course?

They conducted a needs analysis as follows: the first exercise in the Grammar and Word Classes module was based on errors that students had made in the selection test. Students were instructed to identify and correct errors in an exercise. The lecturers used the first exercise to determine the learners' English proficiency level. This served as a form of needs analysis. Thus, teaching started from the very basics, such as the subject-verb concord.

Content

Give any themes that are included in the ESS curriculum

Mention some of the topics that are included under these themes

The respondents pointed out that the ESS syllabus was mainly taught through the basic skills of reading and writing. They regarded these as themes. A variety of science-based topics were covered, such as subject-verb concord, laboratory report writing, which included practising passive voice, cause and effect, and note-taking from a lecture, and other grammatical items.

Materials

Mention both student and teacher materials used in the ESS course

Is there a need for further development of the materials?

As already indicated, the lecturers stated that student and teacher materials included four science-based study guides, a dictionary, a specific science dictionary and a grammar book, the Teacher Guide and the Answer Key. The science-based student materials were developed over the years by the lecturers using already published works such as the *Nucleus* textbooks from Longman as a guideline.

The respondents pointed out that the study guides contained all exercises that students did in the two semesters. The Teacher Guide modelled the teaching methodology and the Answer Key provided the lecturer with model answers for the exercises contained in the study guides. One of the lecturers commented that the dated reading comprehension passages needed to be updated.

Assessment

What assessment instruments are employed in the ESS course?

How often are these instruments used?

If you were to propose additional assessment instruments, what would you include?

The lecturers pointed out that the ESS course employed continuous assessment that culminated in a final examination. Instruments for continuous assessment included exercises, discussion in class, written assignments and written tests. ESS questions were contextual, and some tests and examinations questions required continuous writing in paragraph form from students, which was not required in the other UNIFY sections.

Sometimes the lecturers were guided by what other sections in UNIFY were doing. For example, ESS and the Biology section jointly planned a Biology Woodlice Experiment. Students handed in written laboratory reports on the Woodlice Experiment that they performed. Double marking was done with

Biology - Biology lecturers assessed the content and ESS lecturers assessed the method section of the report.

The assignment and tests contributed towards the final mark; tests constituted 40% while the examination constituted 60% of the mark. A test was written once a term and these added up to a total of four tests per annum. Lecturers gave feedback on the assessed work. The lecturers and students strove for a common understanding of the errors that students committed.

The lecturers proposed projects and peer group marking as additional assessment practices that could add to ESS assessment practice.

Evaluation of the course

Are ESS teaching-learning activities evaluated?

How is this done?

The ESS lecturers pointed out they held regular weekly meetings to discuss pertinent issues and plans for the future, in an informal way. The discussions cut across content, materials, teaching approach and assessment. The aim was to refine and adapt the teaching to the needs of the students.

Improvements to the course

Do you have any ideas or suggestions on how the course can be improved?

One lecturer stated that the course could be improved by using computer software for ESS teaching and learning purposes; if the materials were placed online, students would be at liberty to study at their own pace.

The other lecturer indicated that if the colleagues in the other subjects would show more interest in integrating the ESS course with their subjects, the course would improve and students would benefit more from it.

Evaluation

The interviews with the lecturers revealed that they are well qualified and experienced. The lecturers confirmed that students were generally ill-prepared for university study and that basic remedial work needed to be done in the course. They stressed the fact that ESS was a service course that had to prepare students for mainstream science courses.

The lecturers' interpretation of 'learner-centredness' seems to be based only on the notion of students' grammatical problems. The initial needs analysis therefore seems rather inadequate - one editing exercise is unlikely to reveal students' problems. A comprehensive diagnostic instrument should be developed.

The reading comprehension passages should be revised to reflect recent developments or discoveries in science. The lecturers do not seem have a clear conception of the distinction between themes and topics.

The use of continuous assessment and the collaboration with other sections such as Biology in the 'Woodlice Experiment' is commendable. The course work was discussed in an informal way on a weekly basis. The lecturers regarded the test and examination papers as contextual.

Lecturers suggested that projects should be introduced, and that relevant computer software should be introduced as supplementary materials. They also wanted further integration of the course with other sections in the UNIFY programme.

7.2.4 Observation of Lectures

The researcher observed 10 lectures to about thirty students during the course of the year, on the following topics (cf. Appendix D):

An Introduction to the ESS Course

Abbreviations and Symbols Used in Marking

The Impersonal Scientific Style of Writing

Reading Comprehension Passage

Common Terminology Used in Describing Graphs

Feedback on Test

Using a Graph to Write a Paragraph

Key Words Used to Describe Structure, Function and Content

Listening Comprehension Passage and Note-taking Practice

Corrections of the Note-taking Practice

These lectures are now described.

Topic: An Introduction to the ESS course

The lecturer introduced a group of about thirty students to the ESS course. He pointed out that it was a compulsory one year course for UNIFY students. The course focused on science concepts, language skills, grammar, spelling, reading and writing. Since the ESS course was skills-based, students were expected to take an active part in the course activities. About 90% of the exercises would be done by students under the supervision of the lecturer, during lectures. The rest would be done as homework. In addition to the study guides and the student handbook prepared in-house, students would each be loaned a copy of an English dictionary, a science dictionary, a thesaurus and a grammar reference book. Tutorial sessions would primarily be organised for weaker students.

Topic: Abbreviations and Symbols Used in ESS Marking

The lecturer stated that the goal of teaching students to use the abbreviations and symbols used when lecturers marked students' work would assist them in identifying the errors in their written work. He went on to explain that the abbreviation and symbols are used in ESS marking as an attempt to address students' language problems such as misconceptions, vocabulary, grammar and spelling. Students were then instructed to do an editing exercise which consisted of statements written by prospective students who sat for the UNIFY English selection test (cf. 2.3.3); these contained a number of language errors. The students had to identify the errors and then use the abbreviations and symbols to indicate the type of error or errors in a sentence. The lecturer led the corrections and discussion of the exercise, and constantly encouraged students to take part in the discussion.

Topic: The Impersonal Scientific Style of Writing

The lecturer pointed out that the action itself is more important than the person who performed it in academic scientific writing. The lecturer gave an example of a sentence in the active and passive forms ('I heated the test tube' and 'The test tube was heated by me'), which students read from the blackboard. Students were then instructed to construct sentences, first in the active and then in the passive. The lecturer also introduced the concept 'agent' to students. He explained the significance of not always mentioning the agent in academic scientific writing. The students were then instructed to study a table on passive forms of verbs in the grammar manual, and write down any problems they may have as they progressed with the reading in preparation for a discussion of the verbs in the table.

Topic: Reading Comprehension Passage

The lecturer instructed students to spend 10 minutes reading the comprehension passage (on energy problems in Malawi) and then twenty minutes providing answers to the comprehension questions. Most students experienced difficulty in answering the questions. For example, they did not know the meanings of 'silt', 'parastatal', 'whopping', 'exotic', 'astronomical', 'import duty' and the difference between 'wood' and 'charcoal'. They could not work out the number of years it would take Malawi to lose all its forests. Most students struggled to complete language practice questions. They also had problems with concord. The lecturer gave them an opportunity to complete the exercise after discussion of their problems. As individual students took turns to read out their answers, the rest of the students participated by asking for clarification, rephrasing answers provided where necessary and commenting on the answers.

Topic: Common Terminology Used in Describing Graphs

Students were first instructed to study a table, and then spend ten minutes completing the table by filling in words missing from the table. Words such as 'decline', 'deterioration', 'peak', 'rise', 'raise' and 'recovery' were frequently used in describing graphs (cf. 3.4.5). They also had to identify the part of speech to which the words belonged. The students led the discussion of the corrections of the exercises. Students had difficulty dealing with the nouns 'raise', 'recovery', 'fall', 'deterioration' and 'plunge', the past tenses of the verbs 'raise' and 'grow' and the verbs 'to level off' and 'to peak'. The students were instructed to complete a similar table on 'Adjectives and Adverbs' as homework.

Topic: Feedback on Test

The class was devoted to feedback on a language test. The test was made up of three questions which emanated from recently taught language aspects. The

focus in the test was on the impersonal scientific style of writing, using a dictionary to find meanings of words and the use of articles. The lecturer made use of an overhead projector. Students did not always know when to include an agent in the passive form, or whether verbs such as 'turn', 'change', 'shape', 'add' and 'use' were transitive or intransitive in the particular context. They also had problems with the meanings of particular words. 21% of the students failed the test.

Topic: Using a Graph to Write a Paragraph

The lecturer instructed students to study a graph on the birth rate in Britain between 1841 and 1981, and write a paragraph describing the data. They were also expected to suggest reasons for the trends. After completion of the exercise, four students were instructed to copy their paragraphs on the blackboard to trigger a discussion of the paragraphs. The lecturer then led a discussion of the paragraphs by the class. On the whole, students' mistakes centred around incorrect tense usage, the use of general and specific statements in a paragraph, and differentiating among word classes such as nouns ('reduction', 'decline'), adjectives ('steady', 'gradual'), verbs ('decline', 'limit') and adverbs ('steadily', 'gradually').

Topic: Key Words Used to Describe 'Structure, Function and Content'

The goal of the lecture was to teach students some key words for describing structure, function and content in science because scientific texts are very often concerned with describing how something is put together, how it operates and what it is made of. This is especially true of biology texts. The lecturer asked students to construct sentences using the key words and phrases 'consist(s) of', 'is composed of', 'contain(s)', 'constitute(s)', 'comprise(s)', 'include(s)', 'is made of', 'is made up of', 'constituent(s)', 'component(s)', 'composition' and 'content(s)'. Nearly all the students could use 'contain' and 'content' correctly. Most of the

students did not know how to use the rest of the key words and phrases. The students compared their usage with examples in their manual. The errors triggered a discussion of the corrections.

Topic: Listening Comprehension and Note-taking Practice

About 180 UNIFY students attended this lecture in one big hall. The lecturer read out a listening comprehension passage 'The Preservation of Food' once, while students took notes. Several students arrived late for the lecture and, as a result, missed out on the introduction and some of the core information. At the end of the reading session, the lecturer instructed students to bring the notes they took to the following lecture for correction.

Topic: Corrections of the Note-taking Practice

Students brought the notes they took during the previous lecture to class. They were then given an exercise that required them to use their notes to fill in the missing words in a passage derived from the original one. The lecturer then led a discussion of the note-taking practice. He wrote the correct spelling of a number of words on the blackboard. He also clarified that the meanings and forms of a number of words, such as 'moisture' and 'warmth', and 'bacteria' and 'bacterium', as well as subject-verb agreement.

Evaluation

Formal instruction in grammar played an important role in these lectures. The question that arises is whether formal instruction benefits second language acquisition. Research evidence generally indicates that this is the case. For example, Ellis (1994: 659) says that formal instruction results in increased accuracy and accelerates progress through developmental sequences. Its effects are, at least in some cases, durable. But he points out that formal instruction is

best seen as facilitating natural development rather than offering an alternative mode of learning. Grammar teaching should involve not only key grammatical forms such as verb forms and tense, voice and nominalisation, but it should incorporate functions as well.

The lectures focused on reading to a large extent. Students were often merely instructed to read a passage and then answer questions on it. Instruction in reading strategies did not seem to be given. This can assist students in improving their reading comprehension skills.

The teaching of vocabulary occupied a central position in these lectures, but vocabulary instruction did not appear to be very successful. Students were not engaged in actively finding meanings of unfamiliar words contained in text. Vocabulary teaching should be incorporated into reading classes and grammar teaching, and the relationship between meaning and form should be taught in context. Thus, the reading comprehension passages contained in the study notes together with the reference materials should be used as a basis for vocabulary teaching.

Writing practice was at sentence level only; in none of the lectures were students required to write any sustained writing pieces.

Listening was practised in a group of about 180 students by the lecturer reading out a very long passage while students took down notes. The class was too large for this type of exercise, there was no sound system, and the lecture could not be regarded as successful.

No tutorial sessions took place, and no group or pair work was done in the classes. The lecturer dominated the lectures.

7.2.5 Evaluation of Materials

Twenty-one criteria were used to evaluate the ESS materials (cf. Appendix E). The criteria were adapted from Cronje's (1993) materials' evaluation instrument. The scale is based on a 5-point Likert scale. In the analysis below a score of 1 means that the materials fully meet the criterion and 5 indicates that they do not.

The ESS materials are made up of 4 study notes, as well as reference and assessment materials. The aim of this section is to report on the evaluation of these.

The criteria that the researcher used for this evaluation were the following:

Materials allow for activities in which there is interaction between lecturer and students

The materials allow for activities in which there is interaction among learners

Materials are visually pleasing and attractive

Materials teach aspects of grammar

Materials take cognisance of the interests of the learner

Materials contain a variety of topics

Materials contain problem-solving activities

Materials are challenging to learner

Materials contribute to the broadening of the mind

Meaningful exercises form an integral part of the materials

The four language skills are integrated in the materials

Materials contain exercises that are graded

A variety of styles are used in the reading passages

The materials take into account the language proficiency of the learner

Materials are presented thematically

Listening exercises are included in the materials

The order in which the materials are presented facilitates learning
Language is presented in a situational context
Authentic materials are used where appropriate
Materials are presented in sufficient quantity so as to facilitate learning
Materials include self-assessment exercises

Study Manuals

Criterion 1: Materials allow for activities in which there is interaction between lecturer and students

The materials do not allow for many activities in which there is interaction between lecturer and students. Most exercises require students to carry out what the materials instruct them to do. There are few open-ended exercises where students can reveal themselves as persons to the lecturer.

Rating - 5

Criterion 2: Materials allow for activities in which there is interaction among learners

The materials rarely allow for activities in which there is interaction among learners. Instead, they nearly always focus on individual student activities. Instances where interaction is invited are in the *Singular and Plural* unit, which instructs students to discuss what makes complete verbs either singular or plural, and why the underlined verbs are singular or plural. In addition, the *Basic Note-taking Tools and Skills* section of the Writing Module 2 requires students to discuss "the following points ...". On the whole, the materials allow extremely limited interaction among learners.

Rating - 4

Criterion 3: Materials are visually pleasing and attractive

The materials contain various pictures, tables, symbols, lists and graphs, and thus generally satisfy this criterion. The use of colour could make them more attractive.

Rating – 2

Criterion 4: Materials teach aspects of grammar

Topics such as *Singular and Plural*, *The Use of the Passive in Science*, *Modality*, and *Word Classes - Nouns* are included in the Grammar and Word Classes Module. These are practised in the Writing Modules 1 and 2, and the UNIFY Student Reading Comprehension Book. In keeping with the teaching of grammar in ESP, the materials focus on key aspects of grammar (refer Dudley-Evans & St John, 1998). However, there is no discussion of English tenses.

Rating - 3

Criterion 5: Materials take cognisance of the interests of the learner

Students in the course are primarily interested in the sciences. Listening comprehension passages such as *The Basic Forms of Matter*, *The Noble Gases*, *The Preservation of Food and Energy* are relevant to a science context. These passages are contained in the UNIFY Listening Comprehension and Mini-lectures booklet. The UNIFY science readings booklet contains reading comprehension passages. The materials therefore take cognisance of the interests of science foundation students who aim to follow a science career in the Faculty of Sciences, Health and Agriculture at UL.

Rating - 1

Criterion 6: Materials contain a variety of topics

Some of the topics covered include *Structure and Content*, *Cause and Effect*, *Quantity and Comparison*, *Sequence and Definitions*, *The World's Food and Pollution and Lung Cancer* are contained in the Grammar and Word Classes Module and the UNIFY Student Reading Comprehension Book respectively. The materials therefore contain a variety of topics.

Rating: 1

Criterion 7: Materials contain problem-solving activities

One exercise requires students to make sentences from a data given in a table and in another they have to identify metals from a table. Other exercises where students draw a line (graph) that reflects as accurately as possible the information given in sentences and where students use a diagram and notes to write two to three paragraphs about the desalination of sea water.

Rating - 3

Criterion 8: Materials are challenging to learner

The materials are challenging to the learner. This will depend on the student's level of proficiency. The comprehension passage *Greenhouse Gases and Global Warming Trends* in the Student Reading Comprehension Book contains two tables and three graphs which students have to read in order to understand the message. In an exercise in Writing Module 2, students are required to calculate volumes, surface areas and find ratios between surface areas and volumes for each box first, and then complete the sentences in the unit on *Relationships*.

Rating - 3

Criterion 9: Materials contribute to a broadening of the mind

Reading passages such as *Sick Miners Pay Full Price for Gold* and *Contraception for Elephants – A Viable Option* deal with national South African issues, whereas *The Motor Car and Pollution (an American setting)*, *Energy and Related Problems in Malawi* and *The Rise and Rise of the Pakistan People* focus on international issues. The various topics addressed in the UNIFY Student Reading Comprehension Book address both national and international issues which contribute to a broadening of student's mind.

Rating - 1

Criterion 10: Meaningful exercises form an integral part of the materials

On the whole, the exercises can be regarded as meaningful and relevant. In the editing exercise in the Grammar and Word Classes Module, students identify and label errors using symbols and abbreviations used when marking assignments. Students are instructed to complete the description of a Bunsen burner by inserting the correct forms of the verbs and students have to describe how a mixture of salt (NaCl) and sand is separated using a method illustrated in a diagram. In the ESS Writing Module 1, students write sentences comparing the lengths of the creatures given and students use techniques they have been shown to change sentences to note form in the Writing Module 2.

Rating – 2

Criterion 11: The four language skills are integrated into the materials

The basic skills of reading and writing are integrated in the materials. Reading passages contain writing tasks. Note-taking involves listening to passages that are read by the lecturer, and writing down essential information. Students develop the skill of speaking incidentally when they provide answers during lectures or when they ask for clarification or assistance from the lecturer.

Rating - 3

Criterion 12: Materials contain exercises that are graded

The first exercise in the first unit of the Grammar and Word Classes Module, which is on *Singular and Plural*, instructs students to underline the correct verbs, and the second one invites them to discuss why the verbs underlined are singular or plural. The last two exercises in this unit instruct them to choose correct verbs from the list given. Unit two introduces the *Impersonal Scientific Style – The Passive*. In the first exercise students say whether the verbs are active or passive, in the second they change sentences into the passive and in the exercises that follow they use the passive to describe processes and procedures in paragraphs. The materials therefore contain some exercises that are graded.

Rating - 2

Criterion 13: A variety of styles are used in the reading passages

Reading passages are mostly factual and descriptive and narrative pieces. The reading passages include topics such as *Energy and Related Problems in Malawi*, *The Motor Car and Pollution*, *Sick Miners pay Full Price for Gold*, *Wake*

up Call for World's Health, The Rise and Rise of Pakistan's People, Contraception for Elephants - A Viable Option?, Pollution and Lung Cancer, Lead Blights the Future of Africa's Children and Greenhouse Gases and the Global Warming Trend. The passages are in keeping with the science context.

Rating -1

Criterion 14: The materials take into account the language proficiency of the learner

Materials assume that students have some foundation in general English and from the outset focus on aspects of English specific to the subject area being covered. This refers to aspects such as the description of processes, the scientific style of writing, and laboratory report writing. In addition, vocabulary specific to the description of graphs and exercises on superlatives are science-based.

Rating - 2

Criterion 15: Materials are presented thematically

Themes that are contained in the Grammar and Word Classes Module are *Singular and Plural, The Impersonal Scientific Style - The Passive, Modality, Word Classes – Nouns, Guidelines for the Use of Articles, Linking Devices, Using the Dictionary to find Meanings and General and Specific Statements.* Writing Module 1 contains *Cause and Effect, Quantity and Comparison, Relationships and Describing Structure, Function and Content* while *Describing Graphs and Note-taking and Note-making* are in Writing Module 2. Most of these 'themes' are linguistic or writing topics, and are not themes as the term is generally understood.

Rating - 3

Criterion 16: Listening exercises are included the materials

Listening exercises are included in the materials. Examples of the exercises in the UNIFY Listening Comprehension and Mini-lectures Materials are *The Field Trip*, *Energy*, *The Noble Gases* and *The Preservation of Food*. All the passages are used as note-taking exercises.

Rating - 3

Criterion 17: The order in which the materials are presented facilitates learning

The order in which the materials are presented is intended to facilitate learning. The Grammar and Word Classes Module is taught first for purposes of laying the foundation for further learning. Students are supposed to use the information in units such as *Singular and Plural*, *Word Classes*, *Linking Devices* and *Specific and General Statements* as preparation for units such as *Cause and Effect* (using verbs and linking devices) and *Quantity and Comparison* (using word classes).

Rating - 2

Criterion 18: Language is presented in a situational context

Various topics and some exercises in the materials are contextualized. The context for some exercises in the Grammar and Word Classes Module is that of a science laboratory; students write a description of the structure and function of a Bunsen burner, write a paragraph to describe how a filter paper is prepared for use, and describe how a mixture of salt and sand is separated.

Rating - 3

Criterion 19: Authentic materials are used where appropriate

In the Grammar and Word Classes Module extracts from Physics, Chemistry and Biology textbooks are used. In the Students' Reading Comprehension Book the passage *Lead Blights the Future of Africa's Children* is an extract from *The New Scientist* magazine. In Writing Module 1, *Less Commonly Used Verbs* that are used to describe structure in science are extracts from a prescribed Biology textbook.

Rating - 1

Criterion 20: Materials are presented in sufficient quantity so as to facilitate learning

There are about 209 pages of materials for one academic year. Work sheets are contained in these guides. More exercises can be added, but the performance of students is likely to influence the tempo that a lecturer can maintain.

Rating - 3

Criterion 21: Materials include self-assessment exercises

The materials do not include self-assessment exercises. Assessment exercises together with answers in modules help students assess their progress. These exercises promote self-assessment and learning (cf. 4.3.11.3).

Rating – 5

The total score is 51/105, which is 48,5%. This means that there is room for improvement of the teaching and learning materials. This issue will be addressed in Chapter 9.

Reference Materials

The reference materials used in the course consist of:

Kirkpatrick, B. (compiler). 1994. The Oxford Paperback Thesaurus. Oxford: Oxford

University Press.

Longman Dictionary of Contemporary English. 1978. Harlow, Essex: Longman.

A Dictionary of Science. 1999. Oxford. Oxford University Press.

Swan. M. 1980. Practical English Usage. International Student's Edition. Oxford: Oxford University Press.

UNIFY Student Handbook. 2002. Sovenga: University of the North.

Practical English Usage contains information on key aspects of grammar such as verbs, voice, nouns and articles that are fundamental to language learning. The Longman dictionary is a good one and provides clear definitions of words as well as grammar and pronunciation data. The Thesaurus is a synonym-type thesaurus which is organised under headwords, parts of speech, homonyms, entries within groups, sub-entries and cross references. The Oxford Dictionary of Science contains information on science topics such as the solar system, a geological time scale, a simplified classification of the plant kingdom and a classification of the animal kingdom. The UNIFY student handbook addresses the following topics: *A Short History of UNIFY, The Structure of UNIFY, the Advisory System, Subject Outlines, Computers and Learning, Career Guidance, UNIFY Regulations and, After UNIFY, What Next?*

These materials can play a complementary role in supporting language learning, and seem to be quite sufficient in facilitating language learning.

Evaluation

Positive aspects regarding the study manuals are that they take cognisance of the interests of the learners, contain a variety of topics, a variety of styles is used in the reading passages and they contribute to the broadening of the mind. The reference materials complement the study guides. On the whole, the study materials can be regarded as good.

One shortcoming is that the materials do not allow for activities in which there is interaction among students (especially group and pair work), and between students and the lecturer. Speaking is also not included in the materials. According to Richards and Rodgers (2001: 21), interaction has been central to theories of second language learning and pedagogy since the 1980's. The notion of interactivity has also been linked to the teaching of reading and writing as well as listening and speaking skills. "Learners learn not only from what they read (or hear), they also learn from interaction with others from the process of carrying out tasks" (McGrath, 2002: 205). Students have dual roles – as listeners and as speakers. Spoken interaction refers to situations where both these skills are employed, where to say the right thing in an appropriate way requires good listening skills as well as speaking skills (Dudley-Evans and St John, 1998: 105).

It should also be pointed out that self-assessment exercises are not included. It also does not seem as if there is a sufficient quantity of exercises in all aspects that need to be taught.

7.2.6 Survey of Foundation/Bridging English Courses

Responses were received from nine tertiary institutions in South Africa that teach an English foundation or bridging English course (cf. Appendix F). In this section, the responses are reported.

7.2.6.1 The Nature of the Courses

Sixty percent of the respondents regarded their foundation courses as General English ones and 40% regarded their courses as subject-linked. The data indicate that courses catered for at-risk under-prepared foundation students (35.3%), all first entering students (29.4%) and students-at risk at different levels in the mainstream (23.5%). A small percentage of the courses (5.9%) focused on students without matriculation exemption.

Ninety percent of the courses lasted for one academic year. The remaining ones lasted longer than one academic year. The majority (70%) of the courses were compulsory but not credit-bearing (60%). Forty percent of the courses were located in a department, 30% were in an academic development unit, 20% in a faculty, and 10% in a school.

Of the lecturers who taught the courses, 70% were language specialists, 20% were language specialists who were also subject specialists, and 10% were both language specialists and subject specialists.

7.2.6.2 The Aims of the Courses

Half of the courses aimed to increase the number of students who succeeded in the mainstream. Thirty percent aimed at improving students' performance in the mainstream course, while 20% stated that their main aim was to develop students' language skills.

Respondents were asked to indicate four of the most important subsidiary aims of their courses, including the four language skills of listening, speaking, reading and writing. The survey shows that the most important subsidiary aims of the courses were the enhancement of students' performance in mainstream, the development of students' language skills of listening, speaking, reading and writing and the development of students' academic literacy (see Table 3).

Subsidiary Aim	Percentage
Enhance students' performance in mainstream	20
Increase the number of students who succeed in the mainstream	8.6
Educate students	5.7
Teach grammar	5.7
Develop students' language skills (listening, speaking, reading and writing)	20
Teach students the jargon and discourse of their mainstream subject(s)	14.3
Raise students awareness of the conceptual framework of their mainstream subject(s)	5.7
Develop students' academic literacy	20

Table 3: The Four Subsidiary Aims of the Courses

Thirty percent of the lecturers identified writing as a major problem area, whereas 20% identified reading, 20% identified concepts and another 20% identified grammar. Speaking was identified as a major problem by only 10%.

7.2.6.3 Time Devoted to Teaching

Lecturers were asked to indicate the time they devoted to teaching the four language skills, grammar, subject-related input and concepts (see Table 4). Teaching time was more or less equally devoted to teaching listening, speaking, grammar, concepts, reading, writing and subject-related input.

Language Aspect	Average %
Listening to lectures	21
Speaking	21
Reading	20
Writing	20
Grammar	21
Subject Related Input	20
Concepts	21

Table 4: Time Devoted to Teaching

7.2.6.4 Remedial and Developmental Teaching

Responses indicated that 80% of the lecturers spent more than half of their teaching time on remedial teaching. Sixty percent of the respondents spent 50% of their time on developmental teaching, and 40% spent between 65% to more than 90% on developmental work.

Tutorials

Seventy percent of the respondents divided students into small tutorial groups. They divided students as follows: 40% divided them into an average number of 5 students, 10% into an average of 15 students, and 20% into an average of 20

students. The survey revealed that only 40% of the lecturers held weekly tutorials.

Activities students engaged in were: grammar exercises and debates (19%), problem solving (16.7%), conversation and discussion (11.9%), speeches and role play (7.1%) and literary analysis (4.8%).

Language Practicals

Twenty percent of the respondents included language practicals in their courses. The greater part of these entailed practising summary writing (37.5%), grammar exercises (25%) and synthesising information (25%). The rest of the time was devoted to listening exercises (12.5%). A third of the courses did not include practical periods, while the rest did not respond to the question.

7.2.6.5 Listening skills

Listening skills are taught in 20% of the courses.

Response(s)	N = 34	%
Recognising how sentences relate to one another	4	11.8
Recognising information structure between paragraphs and in discourse	3	8.8
Separating main points from supporting details	4	11.8
Familiarisation with different accents	5	14.7
Inferring meaning	2	5.9
Recognising different sounds	3	8.8
Recognising body language used in conjunction with speech	6	17.6
Ignoring unclear sections	5	14.7
Activating prior knowledge	2	5.9
Listening in pairs/groups and pooling information later	0	0

Table 5: Skills Listening Practice Seeks to Develop

Table 5 shows the skills listening seek to develop. 17.6% of the courses sought to develop students' skills of recognising body language used in conjunction with speech. However, 14.7% of them wanted to familiarise students with different accents and another 14.7% sought to develop the skill of ignoring unclear sections. Equal percentages of lecturers (11.8% and 11.8%) aimed at developing the skill of recognising how sentences relate to one another and the skill of separating main points from supporting details. 8.8% of the lecturers equally

sought to develop the skill of recognizing information structure between paragraphs and in discourse, and developing the skill of recognising different sounds. Two equal percentages of the courses, that is 5.9%, sought to develop students' skills of inferring meaning and activating prior knowledge respectively.

7.2.6.6 Speaking

The data showed that 60% of the courses taught speaking specifically, while 20% taught the skill incidentally. The remaining 20% did not teach the skill.

Ten percent of the lecturers aimed to teach students how to argue a point in class, 20% aimed to involve them in the class and another 20% aimed to develop students' social skills. Some aimed to teach students how to formulate and ask questions.

Response(s)	N = 17	%
Negotiating meaning (how much and how specific information should be)	4	23.5
Management of interaction (choosing of subject and speaker)	2	11.8
Simplification such as formulaic expressions and fillers	1	5.9
Formation routine such as describing, comparing, arguing, narrating, instructing and explaining	5	29.4
Typical interaction routines such as party conversation	1	5.9
Compensation such as self-correction and rephrasing	4	23.5

Table 6: Minor Aims of Teaching Speaking

The minor aims of teaching speaking are indicated in Table 6. The aims are to develop students' skills in formation routine such as describing, comparing, arguing, narrating, instructing and explaining (29.4%), teaching how to negotiate meaning (how much and how specific information should be) (23.5%), to teach compensation such as self-correction and rephrasing (23.5%), management of interaction (choosing of subject and speaker) (11.8%), simplification such as formulaic expressions and fillers (5.9%) and typical interaction routines such as party conversation (5.9%).

Learner activities used for teaching speaking were prepared speeches (25%), impromptu speeches (25%), debates (18.8%), role-play (18.7%) and other activities (12.5%).

Pronunciation

Half of the courses included pronunciation. They made use of pronunciation drills (37.5%) and the study of phonetic script (12.5%). As far as the standard of pronunciation aimed at was concerned, the following preferences were expressed: the local native English norm (40%), an intelligible L2 norm (20%), Received Pronunciation (20%) and other standards of pronunciation (20%). Only 20% regarded these attempts as successful. Fossilization was given as a major reason for this lack of success. Students were only interested in effective communication.

7.2.6.7 Reading

Respondents were asked whether they differentiated between intensive and extensive reading. The survey revealed that the majority of the respondents (70%) distinguished between intensive and extensive reading.

According to the data, 28.6% of the lecturers aimed to equip students with various strategies for decoding an academic text, while equal percentages of 23.8 aimed to develop students' language awareness and their skills for accessing information, respectively. Nineteen percent aimed to equip students with skills for identifying, analysing and recording information, and 4.8% aimed to equip them with logical reading skills.

Response	N = 55	%
Activating and using prior knowledge	4	7.3
Predicting	5	9.1
Understanding sentence structure	1	1.8
Distinguishing main points from supporting details	8	14.5
Understanding discourse structure	3	5.5
Recognising logical connectors	4	7.3
Recognising references	4	7.3
Recognising key words	6	10.9
Understanding concepts	6	10.9
Understanding attitudes	2	3.6
Understanding nuances	1	1.8
Separating facts from opinions	7	12.7
Inferencing	4	7.3

Table 7: Subsidiary Aims of Intensive Reading

The respondents were asked to choose five subsidiary aims of intensive reading (See Table 7). Their responses in percentages are paired and then grouped as follows: 14.5 and 12.7 aimed to distinguish main points from supporting details and separate facts from opinions, 10.9 and 9.1 wanted students to be able to recognise key words and understand concepts, and be able to predict. 7.3 aimed to activate and use prior knowledge, 7.3 aimed to teach students to recognise logical connectors and 7.3 wanted students to recognise references and inferencing. 5.5, 3.6 and 1.8 aimed to teach students the understanding of

discourse structure, understanding of attitudes, understanding sentence structure and understanding nuances, respectively.

The data showed that all courses taught decoding of non-linear information.

Fifty percent of the respondents included the study of literature in their courses. For 10% of the lecturers the major aim of teaching literature was to improve language skills, for 20% it was to teach literature in order to develop literary appreciation, while 10% taught literature to improve reading skills and another 10% taught it to develop critical thinking.

The subsidiary aims of teaching literature were as follows: 40% of the courses taught literature to improve language skills, 30% aimed to develop literary appreciation and 20% wanted to improve reading skills. Another 30% taught it to develop critical thinking, 20% taught literature to serve as an introduction to the study of literature, 40% aimed to develop powers of judgement and 10% taught it to develop powers of expression.

Comprehension Exercises

Eighty percent of the courses included comprehension exercises in their courses. The number of exercises done during the course ranged from six to seventy-five, with an average of 29.

Other reading materials that were prescribed and read were magazines (23.8%), newspapers (23.8%), advertisements (14.3%) and passages (38.1%).

7.2.6.8 Writing

Writing was taught by almost all the courses (90%). Thirty-one percent of the respondents taught writing in order to teach students how to communicate

effectively in English, 23% aimed to teach grammar and another 23% aimed to give students practice in writing. While 7.6% of respondents aimed to get students to apply grammatical rules in context, another 7.6% taught writing for other reasons. 7.6% lecturers did not respond to the question.

The types of exercises given in the course, in descending order, were paragraphs and letters (29.5%), discursive/argumentative essays (17.8%), the writing of reports (6.6%), impressionistic writing (diaries, literary pieces) (6.6%), the writing of notices (5.4%), minutes and agenda (5.4%), précis/paraphrasing (3.5%), friendly letters, letters to the press and curriculum vitae (2.3%), and telegrams (1.6%).

The responses revealed that 80% of the institutions gave students an opportunity to re-write and hand in revised drafts (40% did this always and 40% did it sometimes). This was not applicable to 20% of the respondents. Most institutions (60%) did not make use of peer feedback. Only 10% used it sometimes.

7.2.6.9 Registers and Language Varieties

Students were required to read and study various registers and language varieties in 70% of the courses. According to the responses, 30% of these entailed the language of conversation, 40% entailed the language of science, 10% dealt with the language of legal documents and 30% involved the language of commerce.

7.2.6.10 Study Skills

All courses included study skills. The skills that were mostly included were skimming, note-taking, proof-reading, and dictionary use.

7.2.6.11 Vocabulary

Ninety percent of the respondents taught vocabulary. Most (80%) stated that they taught vocabulary in association with reading and writing, 10% used a graded list of items, and the rest used others means.

7.2.6.12 Grammar and Usage

Only 20% of the courses did not have lectures on grammar and usage. Most taught grammar to improve the students' language skills, to provide academic training in a body of knowledge and to assist students to communicate accurately. 10% of the respondents stated that they taught grammar to assist students to communicate accurately.

The data showed that the four subsidiary aims of teaching grammar were to improve students' speaking skills (16.1%), to provide academic training in a body of knowledge (16.1%) and to raise students' language awareness (16.1%). These were followed by the aims of teaching grammar to aid the acquisition of writing skills (12.9%) and to aid the acquisition of reading skills (12.9%). Some of the respondents (9.7%) aimed to increase students' knowledge of English culture, 6.5% wanted to raise their awareness of the discourse structure of their mainstream subject(s) and another 6.5% had other unspecified aims. 3.2% taught grammar to improve students' listening skills.

Students were required to do practical grammar exercises in 60% of the courses

7.2.6.13 Methods of Providing Input

The most effective methods of providing input to students were through study guides (26.3%), lectures (26.3%) and seminars (26.3%). 15.8% of the lecturers gave tutorials while 5.3% regarded consultation as the most effective method.

7.2.6.14 Textbooks and Other Materials used by Students

Textbooks and other materials used by students included *Longman's Dictionary of Contemporary English*, *What Smart Students Know*, Grade 11 Business English N2 and Grade 12 Business English N3, first and second languages, the novels *Thirteen Cents*, *Atonement* and *Down the Second Avenue*, assorted workbooks and grammar books reserved in libraries and notes on English and Study skills compiled from various sources.

Additional Textbooks and Other Materials used by Lecturers

Additional textbooks and other materials used by lecturers are:

Byrne, D. 1976. *Teaching Oral English*. London: Longman.

Court, S. A. 1988. *Bridges to Communication: an English Language Course for Secondary and Tertiary Students*. Lexicon.

Murray, S. & Johanson, L. 1989. *Read to Learn. A Course in Reading for Academic Purposes*. London: Hodder & Stoughton.

R. Purkis.1991. *English Grammar: a Reference Book for Schools and Colleges*. 4th Edition. Pietermaritzburg: Shuter & Shooter.

Trimble, L. 1985. *English for Science and Technology: a Discourse Approach*. Cambridge: Cambridge University Press.

New Scientist Magazine.

Business English N2/ and Business English N3. Management Communication N4-N6.

English Handbook and Study Guide.
A Practical English Grammar Book.
Materials on language and learning skills.

7.2.6.15 Tests and Examinations

Sixty percent of the lecturers gave class tests throughout the year. A breakdown of the number of tests is given in Table 8.

First Semester	Second Semester	N (1 Year)
6	6	12
10	13	23
3	3	6
7	8	15
4	4	8
10	13	23

Table 8: The Number of Class Tests

The number of class tests ranged between 6 and 23.

All the institutions conducted formal examinations. Assessment was based on reading, writing, grammar, knowledge of a mainstream subject, listening and speaking.

The average pass rates were about 50% in 40% of the courses, about 65% in 20%, less than 40% in 10% of the courses and above 70% in 10% of the courses.

In 80% of the courses, the students' final marks were made up of the year mark and the examination mark, and in 20% of the courses only an examination mark

was determined. The ratios of the year mark to the examination mark were 60:40 for 80% of the courses and 40: 60 for 20%.

According to 10% of the respondents, students who were not proficient in English were a major problem because they did not understand the lecturers. These students also had difficulties understanding the information contained in their books as their reading levels were low. As a result, they could neither write paragraphs nor essays.

7.2.6.16 Changes to Courses

Half the respondents stated that the nature of their courses had been changed in the last five years. The changes involved shifting the focus towards study and reading skills and academic reading. The order in which certain grammar or syntax items was taught had changed. The duration of one course was lengthened from a semester to a year.

7.2.6.17 General

An interesting additional piece of information was that some lecturers made use of mind-maps as learning tools.

Evaluation

In terms of location, the survey revealed that foundation/bridging courses are spread across campuses in different institutions; they are in academic development units, departments, faculties and schools.

The majority of the courses were taught by language specialists. The courses were compulsory but not credit-bearing. Most courses cater for at-risk under-

prepared foundation students while a small percentage focused on students without exemption. The target situation for most of them was the mainstream.

Half of the courses aimed to increase the number of students who succeeded in the mainstream. Almost all the courses (90%) lasted for one academic year.

Writing was identified as a major problem area. The most important subsidiary aims of the courses were the enhancement of students' performance in mainstream, the development of students' language skills of listening, speaking, reading and writing and the development of academic literacy.

Although teaching time was devoted equally to the four skills, grammar and subject-related input, most of the lecturers spent more than half of their time on remedial teaching.

The percentage of lecturers who held tutorials was below 50%, only 20% taught listening and 60% speaking. 70% distinguished between intensive and extensive reading and only 5% included literature. 90% taught writing and 80% grammar.

All the courses taught decoding of non-linear information and study skills. Almost all the courses (90%) included vocabulary, equal percentages (80%) grammar and usage, and comprehension exercise (80%). Most course (70%) required students to read and study various registers and language varieties while half of the courses taught pronunciation.

The best methods of providing input were through lectures, study guides and seminars.

All the institutions conducted formal examinations; these were based on reading, writing, grammar, knowledge of a mainstream subject, listening and speaking.

Even though the majority of the students passed the courses, they merely scraped through the examinations because they scored around 50%.

Fifty percent of the courses had changed in the last five years.

7.3 CONCLUSION

This study revealed that institutions structured foundation language courses according to the specific needs of students. Students in these courses were generally ill-prepared for university study and basic remedial work needed to be done in the courses. Much of the teaching time was devoted to remedial and developmental teaching. These courses include either tutorial or practical work. The most popular methods of providing input in these courses were through lectures, study guides and seminars. The majority of the students passed the formal examinations. The courses also did not remain static: fifty percent of the other courses had changed in the previous five years or so.

The ESS course is a service course that prepared students for mainstream science courses. The lecturers were found to be well qualified and experienced. They employed lectures, study notes and reference materials to provide input. The study notes took cognisance of the interests of the learners, contained a variety of topics, a variety of styles were used in the reading passages and they contributed to the broadening of the mind. Reference materials complemented the study notes. Students benefited from taking the course in various ways; they benefited from classwork, homework and error correction. Taking the course was worthwhile and students felt they were better equipped to study the sciences with confidence.

It is also clear that there is room for improving the course. Improvements should involve including goals and objectives, the speaking skill, grammar teaching which should include a larger range of structures as well as functions, instruction

on reading strategies, as well as the inclusion of pair work and group work. The reading passages should be updated, sustained writing pieces should be included, and students should be taught how to use the study notes and reference materials. Listening should be practised in smaller groups throughout the year, and materials should allow for interaction. Self-assessment exercises need to be included in the materials and assessment methods other than written tests should be employed. Tutorials should be included in the course. Relevant computer software should be introduced as supplementary material. Projects could be introduced and more time should be spent on feedback on tests.

The next chapter provides a synthesis of this study.

CHAPTER 8

A SYNTHESIS: GUIDELINES FOR THE REVISION OF THE ESS COURSE

8.1 INTRODUCTION

This chapter synthesises the literature that was reviewed in Chapters 2, 3, 4, 5 and 6, together with results of the empirical study in Chapter 7. The aim in this chapter is to arrive at guidelines for the revision of the ESS course.

8.2 ESS IN CONTEXT

The overarching aim of the UNIFY programme is to increase the quantity and quality of students from disadvantaged groups entering science-based faculties at UL, Turfloop campus (2.1). However, the academic performance of students is inevitably influenced by their background and competence in the language of learning and teaching, which is English (2.2). The UNIFY programme includes ESS in its curriculum, as well as Biology, Chemistry, Mathematics and Physics (2.2). After a number of years of implementation, it has become necessary to evaluate and revise the course. Course design is an ongoing process, and it always aims at developing and improving a course.

The home background of the majority of UNIFY students have not prepared them to succeed at university (2.3.1.2). Poor educational facilities as well as the quality of education at school results in students with a fairly low ability in terms of academic literacy and language proficiency. Some students in the course do not qualify for admission into the Faculty of Sciences, Health and Agriculture and others have no matriculation exemption, and have to follow the one-year foundation programme.

Given the quality of the students, a great deal of remediation is required not just in terms of academic and English proficiency, but also in terms of students' initiation into the university culture, where they have to deal with academic study. This is especially so in the sciences because these disciplines are often neglected at school.

In order for foundation students to progress, they need a curriculum of the highest quality and lecturers with the skills and convictions to teach effectively (2.2).

8.3 COURSE DESIGN

The revision of the ESS course is premised on a synthesis of Schlepegrell's (1991: 19) discussion of course design, Graves' (1996: 5) discussion of guidelines and principles of course design, and parameters for an integrated approach to an ESP course (Dudley-Evans & St John, 1998: 145).

Even though the multilevel classroom is the norm in ESP, the skill levels of students have to be known in order to provide an effective programme (4.3.3). The UNIFY English Selection Test (UEST) forms part of the battery of tests used for selection of students (2.3.3). But there is no diagnosis of students' ability in English Literacy and Study Skills. Instead, there is an ESS editing exercise which is intended to gauge the proficiency level of the students at the beginning of the year (4.3.3). This is inadequate, and a comprehensive diagnostic test seems necessary.

Goal-setting for a course emanates from a diagnosis of student needs and the establishment of the levels required. It was not necessary to conduct a full needs analysis for the revision of the current course, which is a component of the foundation programme that teaches Biology, Chemistry, Mathematics and Physics. As pointed out, it is geared towards preparing science students for

mainstream courses. Foundation learners' needs were determined and reviewed over a number of years (cf. Zaaiman, 1998; Jansen et al., 2005), and the basic course requirements are well-known. A diagnostic test can provide information regarding the strengths and weaknesses of a particular intake, and this information can be used to address students' deficiencies during the course.

The first step in the construction of any language course is to define objectives on the basis of the diagnosis of learner deficiencies and what they will be required to do in their subject classes (4.3.4). Goals and objectives are important, but the present course documentation does not include these.

The course is an intensive pre-study (i.e. foundation) course in an English-medium institution. Students are given language improvement and study skills sessions for a year before they begin mainstream subject courses (4.3.5). The revised course will start with a diagnostic test, have contact sessions (lectures), and include tutorials and practicals.

The course will have a narrow focus and, as a result, concentrate on a number of units in the form of themes (4.3.6). The course will be fixed, but should be flexible enough for lecturers to adapt the course should this be required (4.3.8). Much ESP work is based on the notion of a 'common-core' of language and skills that belong to all academic disciplines. Consequently, teaching will reflect the underlying concepts, be related to science content and include activities of the broad discipline (4.2). The content will thus be offered in thematic units subsuming a number of topics for lectures. It will cover the four basic skills, and include relevant linguistic content in the form of vocabulary, grammar, functions, as well as tasks for learners to complete (4.3.9).

In-house materials and published textbooks in the students' specialist study situation are appropriate materials for the course (4.3.10.1; 4.3.10.2; 4.3.10.3).

The present course uses written tests and an examination to assess students. A mixture of assessment methods such as assignments, oral tests and projects, which allow students a range of processes through which to demonstrate their respective strengths and weaknesses, is necessary. Informal peer review of student work can also be employed. The greater the diversity in the methods of assessment, the fairer assessment is to learners (4.3.1; 4.3.11).

8.4 CONTENT

Students need to be taught generic language and academic skills, with the ultimate aim of enabling them to learn independently, think critically, being able to plan and organise information, solve problems, communicate effectively orally and in writing, working with others and in teams, as well as being able to collect, analyse and organise ideas and information. These skills should be transferable to the students' current or future learning contexts (3.2).

Study strategies such as goal-setting, focused reading, revision, reciting, self-evaluation and examination techniques are of vital importance (3.3). A student should use his time efficiently in his studies (3.2). (The course itself should also make effective use of time).

The reading process is an interaction between a reader's prior knowledge and the information encoded in the text. The background knowledge a reader possesses entails text content and text structure. Students need comprehensible input to acquire grammatical structures, vocabulary and greater schematic knowledge. This will contribute to overcoming the reading and comprehension difficulties that students experience (3.4.1).

Reading strategies that students should be taught include reading for gist, identifying the topic, reading for general understanding, reading for specific information, reading for detailed information, analysing text structure and

constructing text meaning (3.4.1.2). Students should be taught how to read for specific details, to read in order to understand everything they read in detail and how to analyse text structure. Students should be taught how to pick out the topic of a written text very quickly with the help of their own schemata. This ability allows them to process the text more effectively as it progresses. The lecturer should use the students' literacy knowledge and experience with the primary language as a reading strategy.

The well-known SQ3R reading strategy can be used for reading comprehension passages. A student should form a first impression of a text and its structure by looking at the title, index, structure of the text, headings and subheadings, then formulate questions according to the W-method (who, what, when, where, why). He can then indicate core words and contents by designing mind maps, diagrams and drawings to concretise content, summarise the text in his own words to test text comprehension.

Students can work together cooperatively in pairs or in small groups to solve problems (Reutzel, 2003: 255). Role-play can be used to encourage general oral fluency or train students for specific situations, especially where they are studying ESP; students simulate a real-life encounter as if they were doing it in real world (Harmer, 2004: 274).

Students should work to a time-table throughout their study and revise all aspects of their work regularly; they should try not only to keep abreast of their work but also to master it. They should review recent examination papers and test themselves by writing answers to questions in the time that will be allowed in an examination (Barass, 1982: 192).

Students should master the academic style of writing, which involves communicating what the writer wants to say to the reader in a lucid and direct manner. This style of writing is appropriate for tertiary level writing and is largely

dependent on each disciplinary convention. Science materials frequently present data by means of diagrams, charts, tables, graphs and so on. Students should be given the opportunity to practise interpreting graphs, tables and charts. Their own use of these devices can do much to make their work more attractive, interesting and informative (3.4.2).

Science students should learn to describe processes they observe in the laboratory during experiments and write reports about experiments they have performed. Communicating findings and observations in a report is an integral part of the course (3.4.2.4).

A process approach to writing seems the most appropriate one for this course. Process writing involves planning and drafting, which are facilitated by the lecturer. The process approach emphasises the idea of writing as problem-solving; it focuses on thinking and process. There are four stages that writers go through in producing a piece of writing: prewriting; composing/drafting; revising and editing. The process is cyclical because writers may return to pre-writing activities after doing some editing or revising (4.3.2.3).

A 'scaffolded' approach will be adopted to assist learners in writing. The concept of scaffolding can be applied to the academic writing process by providing flexible support to the learners throughout the writing of their essays (Cotterall & Cohen, 2003, 158).

Writing tasks which require students to pay attention to organisation will be devised. The purpose of the piece of writing can be linked to the forms that are needed to convey the message. For instance, linking words such as 'first', 'then', 'next' and 'lastly' can be used by students to sequence stages and steps in a process (3.4.2).

Note-taking is an adjunct to the receptive skills of listening or reading, but is also a lead-in to the productive skills of speaking or writing (3.4.3). There are two

types of notes that students can use: linear and patterned. In linear note-taking, students will use headings and subheadings which break up the text, note key words, use numbering and use different coloured pens to differentiate the relative importance of information. They will also review notes and underline important information to ensure that they remember what they read and to see how the various sections fit together. Patterned note-taking involves drawing up notes of the whole chapter or article, or summarising in 'explosion charts' or 'cross section' between main points (3.4.3.2).

In addition to the core reading and writing skills, students should also be taught relevant listening (including note taking) and speaking skills (especially oral presentations).

8.5 REFERENCE MATERIALS

Reference materials are essential because of the support they provide. Students should be taught how to use the prescribed texts and be encouraged to make use of the library for assignments or projects. They should be taught how to do a library search, how to use indexes and how to acknowledge sources (3.4.4).

8.6 TEACHING APPROACH

As students' previous experiences may be limited (2.3.2; 4.3.1), scaffolding should be provided, and students should be led step-by-step to complete teaching-learning activities where necessary. Scaffolding is a procedure which incorporates opportunities for talk about learning and it models effective learning activity (Cotterall & Cohen, 2003: 159). This approach promotes learner autonomy by focusing on an authentic task, making the expectations of the task explicit and providing flexible support for the learners as they approximate the target performance (Cotterall & Cohen, 2003: 158). In line with Applebee's (1986) five criteria for effective scaffolding, instructional tasks should allow students to

make their own contributions to the activity as it evolves, build upon the knowledge and skills they already possess, but be difficult enough to allow new learning to occur. Students should be encouraged to approach tasks systematically, and these should be performed jointly by the lecturer and students, implying that the role of the former will be more collaborative than evaluative. Students will eventually take greater responsibility for controlling the progress of the task as they become more competent (4.3.12).

Teaching and learning activities or tasks will provide a purpose for the use and learning of language other than simply learning language items for their own sake, because they have the potential to structure classroom interaction processes and generate negotiation, and stimulate internal processes of acquisition (Rubdy, 1998: 264).

The challenge for this task-based approach will be to choose and implement tasks in ways that will combine a focus on meaning with a focus on form (cf. Foster, 1999: 69). Sheen (2002: 303) states that it is assumed that classroom second language learning derives from general cognitive processes, and thus entails the learning of a skill - hence the skills-learning approach. This approach comprises providing understanding of the grammar by a variety of means, including pointing out differences between the L1 and the L2, exercises entailing using grammar in both comprehension and production, and providing frequent opportunities for communicative use of grammar to promote automatic, accurate use (e.g. in cloze exercises).

8.7 COURSE EVALUATION

The evaluation of the ESS course was designed to inform the researcher about the present course, and highlight current problems. The findings will assist with the revision of the course so that it will have a beneficial impact on future students (5.4.1; 5.4.2).

The evaluation process was based on a framework for the overall evaluation of the present course (5.5.1) and the following context inventory for determining critical issues of the present course (5.5.2) was used:

- Students are selected into the course according to pre-established criteria (2.3.3).
- Two lecturers offering the course have postgraduate qualifications and some experience of teaching English at matriculation level. They seem to have a positive attitude towards course evaluation.
- Instructional materials and resources are readily available.
- The attitudes of the students towards the language and culture being taught in the course is positive.
- The audience for the evaluation is the management of the university, UNIFY staff and students, former UNIFY students in the mainstream, mainstream lecturers in the Faculty of Sciences, Health and Agriculture and lecturers in foundation/bridging English courses in other tertiary institutions in South Africa.
- The following aspects were investigated: course outline, student feedback, lecturer feedback, class observation, course materials and courses at other institutions.

8.8 EMPIRICAL STUDY

Various methods were used in the empirical study in order to achieve some triangulation. The methods were: evaluation of documentation, interviews, questionnaires, observation, evaluation of materials and documentation. The course outline and teaching materials were evaluated, UNIFY students and lecturers were interviewed, former UNIFY students and lecturers in other foundation/bridging courses filled in questionnaires.

The empirical findings of this study can be summarised as follows:

8.8.1 Course Outline (cf. 7.2.1)

The present course outline involves writing, reading and note-taking skills, information presentation and interpretation, reference skills, computer literacy and computer assisted learning, and other skills.

Goals and objectives of the present course are not included in the outline. The module description is very similar to an entry in a university calendar. There is also no clear distinction between themes and topics, and outcomes are not integrated into the outline. Receptive and productive skills of reading and writing are presented as separate entities. The speaking skill is not included. Grammar topics are limited to five; common structures such as parts of speech as well as tenses are not included. Other pertinent writing topics are also not included. The outline does not give specific guidance to either the lecturer or the student. Pair work and group work are not accommodated, and tutorials and practicals are not included.

8.8.2 Interviews

Students (cf. 7.2.2.1)

UNIFY students indicated that they would like to be taught how to use the study guides, reference material and speaking skills. They felt that the questions in tests were more difficult than those in manuals. More time should be allocated to giving feedback on tests and to the course in general.

Lecturers (cf. 7.2.3)

The lecturers felt that the initial diagnostic test was inadequate, and that the reading comprehension passages were dated. The lecturers did not seem to have a clear conception of the distinction between themes and topics. They would like to introduce projects for assessment and relevant computer software as supplementary materials. Only written tests and examinations were used for formal assessment in the present course. The lecturers also wanted further integration of the course with other UNIFY sections.

8.8.3 Questionnaire – former students (cf. 7.2.2.2)

About a quarter of former UNIFY students thought that the materials were not useful in the mainstream. Another quarter found the writing exercises irrelevant because they did not prepare them for the mainstream environment. Some were frustrated by the teaching approach of some of the lecturers while others were frustrated by texts that were too long. Some of the students proposed additional materials on reading, writing and spelling. On the whole the students found the course workload too much.

8.8.4 Observation of Lectures (cf. 7.2.4)

Formal grammar dominated the lectures and students were not taught relevant functions. No instruction in reading strategies was given, and vocabulary teaching was not incorporated. There were no sustained writing pieces, and listening practice was rather impractically done in a large group. No tutorial sessions took place during the researcher's observation of lectures. Neither group work nor pair work was given, and the lecturer dominated the lectures.

8.8.5 Materials (cf. 7.2.5)

Linguistic or writing topics were used as themes in the manuals. They allowed extremely limited interaction among learners. Speaking and self-assessment exercises were not included in any of the manuals. Only written tests and examinations were used to assess students and the quality of term tests was much lower than that of the examination.

Various types of materials should be used for teaching-learning purposes (4.3.10). Lecturers should aim to expose students to a variety of materials in a bid to accommodate different types of learners and their interests in the course (4.3.1).

8.8.6 Survey of Other Courses (cf. 7.2.6)

In terms of location, foundation/bridging courses were spread across campuses in different institutions; they were in academic development units, departments, faculties and schools. The majority of the courses were taught by language specialists and were compulsory but not credit-bearing. The target situation for most of them was the mainstream subjects. Although teaching time was devoted equally to the four skills, the study of grammar and subject-related input, most of the courses spent more than half of their time on remedial teaching. The percentage of lecturers who held tutorials was below 50%; 20% taught listening and 60% speaking. Seventy percent distinguished between intensive and extensive reading and only 5% included literature. 90% taught writing and 80% grammar. The best methods of providing input were through lectures, study guides and seminars. All the institutions conducted formal examinations; these were based on reading, writing, listening, speaking, grammar, and knowledge of a mainstream subject. Although the majority of the students passed the courses, they merely scraped through the examinations because the average mark was reported as being around 50%.

8.9 GENERAL IMPLICATIONS FOR THE REVISION OF THE ESS COURSE

The implications for the revision of the ESS course are discussed in terms of aims or goals and objectives, location, content structure, core skills, teaching approach, materials and assessment.

8.9.1 Goals and Objectives

Goals or aims are general statements of the overall, long-term purposes of the course. Objectives express the specific ways in which the aims will be achieved. The goals of a course represent the destination while the objectives chart the course towards the destination. Setting goals and objectives provides a sense of direction and a coherent framework for the lecturer in planning his course (Richards & Rodgers, 2001: 163).

Both a general outcome and specific outcomes will be stated in the revised course outline. The course outcome indicates the long-term result of the course. This is normally expressed in abstract terms and often provides the rationale for teaching the programme (cf. Ngwenya, 2001: 233).

Specific outcomes are subcomponents of the general outcome. They indicate the desired results at specified stages of the course (Ngwenya, 2001: 234). They refer to what the learner arrives at when they have completed a task (Ellis, 2003: 8). The purpose of making specific outcomes explicit is to ensure accountable teaching and learning. Specific outcomes will be formulated for each unit of the course.

8.9.2 Location

A foundation/bridging course can be located in an academic development unit, a department, a faculty or school for purposes of attaining set objectives. This will

be determined by the university itself. ESS is located in the School of Physical and Mineral Sciences, which is in the Faculty of Sciences, Health and Agriculture.

8.9.3 Structure

The course will be arranged in terms of units of study, and each unit will be made up of a specific theme with its specific outcomes. The core skills, incorporating relevant linguistic content such as grammar and functions, will be expressed as teaching-learning activities that students will perform. Appropriate and relevant materials that can be used will also be indicated. The skills of listening, speaking, reading and writing will be integrated in the course content. Each lecture will focus on pertinent skills that will be in tandem with specific outcomes (cf. 4.3.9.2.6). Brinton et al. (1989: 26) argue that theme-based instruction lends itself well to four-skills courses because the theme selected will provide coherence and continuity across skill areas.

Listening and speaking (oral presentations in particular) should be taught and practised in small groups. Vocabulary teaching should also be incorporated into the course while instruction in reading strategies is especially important in order to improve students' reading comprehension skills. Students should be given tasks on sustained writing pieces, and they should be taught how to use the reference materials.

8.9.4 Teaching Approach

The lecturer should perform the role of facilitator and students should take an active part in all the lectures. Problem solving and discussion should feature in the course, and the lecturer should involve students in investigating and solving problems (cf. Jordan, 1997).

Group work and pair work complement each other. Group work allow students to perform a range of activities and tasks for which pair work is not sufficient or appropriate, and pair work promotes learner independence because it allows students to work and interact independently (Harmer, 2004: 116).

Tutorials and practicals will be included. These typically involve an integration of core skills and provide the necessary practice.

8.9.5 Materials

Materials that will facilitate language learning are the materials that are typically used in students' content courses. A rich variety of authentic material types can be used in the course. Most of the materials will typically be prescribed texts, lecturer-generated or authentic texts from sources such as *New Scientist*. It will be necessary to select new materials for the revised course. Computers should be used to support learning.

8.9.6 Assessment

Auerbach (1986: 414 - 415) states that continuous and ongoing assessment is one of the key features of the implementation of content-based instruction in ESL. Students will be pre-tested to determine the skills they lack and post-tested after instruction in those skills. A mixture of assessment methods such as written and oral reports, assignments, written and oral tests and examinations will be used to assess students (cf. 4.3.11). In addition to written tests and examinations, projects and oral assessment, self-assessment and peer-assessment should be introduced.

8.10 CONCLUSION

It is clear that the ESS course has to be revised, and that the revision should involve the following: specific outcomes should be stated, themes and topics should be formulated and provision for linguistic content to be incorporated be made. Teaching-learning activities should form the core component of the course. This implies that new materials should be selected or designed. Pair and group work should be factored into the teaching approach and assessment methods other than tests should be employed. This revision will pave the way for the lecturer to facilitate rather than dominate lectures.

CHAPTER 9

REVISION OF THE ESS COURSE

9.1 INTRODUCTION

This chapter provides an outline of the proposed revision of the ESS course. It is largely based on the synthesis in the previous chapter, and discusses approaches to the course, structure of the course, course outcomes, time allotment and the content in terms of skills, language aspects, materials, teaching-learning activities and assessment.

9.2 BASIC APPROACH TO THE COURSE

The basic approach to the course will be task-based and teaching-learning activities will form the core of the course. Learning will be 'scaffolded'; students will carry out instructional tasks that allow them to make their own contributions to an activity as it evolves (cf. 8.5).

9.3 STRUCTURE OF THE COURSE

The revised ESS course consists of 17 units, each of which is organised in terms of a theme such as Interpreting Visual Information. Each unit has its specific outcomes. Each lecture is specified in terms of a topic (such as Interpreting tables and graphs), and its core is a number of teaching-learning activities, which provide suggestions for lecturer and student tasks. Materials that can be used are also suggested. There is an assessment of student performance after each unit. Students should regularly be assigned homework, such as assignments exercises, and they should also complete a project.

Tutorials and practicals are included in the course. Tutorials consist mainly of discussions, and students practise the skills they have been taught during the practicals.

The following texts are suggested: A Dictionary of Contemporary English, a Science Dictionary, a thesaurus, and Swan's Practical English Usage.

Development of new materials: Evaluation indicated that materials can be improved (cf. 7.2.5). It is suggested that new materials be developed. The materials should contain passages from the sciences, cloze exercises, oral presentation exercises, model essays and model scientific reports.

It is suggested that the course be supplemented by programmes on computer such as Longman's *Focus on Grammar CD-ROM*, Oxford's *Basic English for Science* cassettes and Oxford's *Wordpower Phrasebuilder Genie* on CD-ROM. These programmes should be used throughout the course, and the lecturer should plan for these sessions by liaising with the UNIFY computer assistant in the computer laboratory.

Students will be divided into groups of about thirty students for lectures.

The lecturer is likely to focus on administrative matters during the first few sessions. These involve the diagnostic test, information on the UNIFY structure, ESS content, materials and assessment, and relevant rules and regulations.

9.4 AIM OF THE COURSE

The aim or general outcome of the revised course is formulated as follows:

The students' academic and general proficiency in English should improve and they should acquire language and study skills which will enhance their academic performance in Mathematics and the Sciences.

9.5 TIME ALLOTMENT

A lecture lasts 45 minutes, a practical 90 minutes and a tutorial 45 minutes.

9.6 THE REVISED ESS COURSE

The revised ESS course is now outlined.

Diagnostic test: All students write a diagnostic test at the beginning of the course. The test should be an intensive one aimed at determining students' linguistic needs, and it should test aspects such as the following: using reference materials, writing a report and an essay, reading comprehension, interpreting visual information, and listening and speaking skills. The results should be used to determine students' needs, and each lecturer should take the results of the test into account throughout the course.

UNIT 1

Theme: Using reference materials

Specific outcomes

Students should be able to:

- look up and comprehend meanings of words in a dictionary.
- use a dictionary to find the correct spelling of words.

- use a dictionary to establish the pronunciation of words.
- use a dictionary to build vocabulary.
- use a grammar book as a reference source.
- use textbooks as reference sources.

Lecture 1

Topic: Consulting a dictionary to find meanings of words

Materials: Dictionary of Contemporary English; Dictionary of Science.

Teaching-learning activities

- Lecturer uses the dictionary and demonstrates the information that a dictionary provides, and how students should look up meanings of words.
- Students consult their dictionaries to look up meanings of various academic and science words in class; also focusing on various meanings that a single word may have.
- Students make sentences with the each word; lecturer provides feedback.

Lecture 2

Topic: Using a dictionary to find the correct spelling of words

Materials: Dictionary of Contemporary English; Science Dictionary.

Teaching-learning activities

- Lecturer dictates a number of paragraphs to students.
- Students use their dictionaries to verify the spelling and meanings of words.
- Lecturer projects the dictated paragraphs on a transparency.
- Students correct their paragraphs; lecturer provides feedback.

Lectures 3 - 4

Topic: Using a dictionary to look up the pronunciation of words

Materials: Dictionary of Contemporary English.

Teaching-learning activities

- Lecturer explains and illustrates the English phonetic alphabet.

- Lecturer projects a number of words on the board.
- Students look up the pronunciation of the words, noting the phonetic script, and pronounce them.
- Students transcribe a new list of words into phonetic script.
- Lecturer provides the correct transcription.
- Lecturer illustrates the pronunciation of sentences in connected speech.
- Students transcribe a paragraph into phonetic script.
- Lecturer points out typical pronunciation errors of second-language learners.
- Students correct pronunciation errors in phonetic script; lecturer provides feedback.

Lecture 5

Topic: Using a dictionary to build vocabulary

Materials: Dictionary of Contemporary English and Dictionary of Science.

Teaching-learning activities

- Lecturer initiates a discussion on a topic such as *The Mining Industry in South Africa*.
- Students read a passage on the topic and underline any unfamiliar words.
- Students look up meanings of these words, write the meanings in their notebooks and construct sentences with them.
- Lecturer checks on meanings and sentences.
- Lecturer discusses methods of vocabulary building, such as keeping a record of new words.

Lecture 6

Topic: Using a grammar book as reference

Materials: Practical English Usage.

Teaching-learning activities

- Lecturer discusses and illustrates the grammar book as a reference source.

- Students search for specific information contained in the grammar book and use it to complete a grammar exercise.
- Students provide rules of grammar where appropriate.
- Students exchange the exercise and lecturer guides its marking.

Lecture 7

Topic: Using textbooks as reference

Materials: Biology, Chemistry and Physics textbooks.

Teaching-learning activities

- Students refer to the International System (SI) scientific units contained in their textbooks.
- Lecturer discusses and illustrates the SI scientific units such as Kj (kilojoule), m^3 (cubic metre), u (atomic mass/dalton) and Kcal (kilocalorie).
- Lecturer refers students to the Chemistry, Biology and Physics textbooks for more examples.
- Students complete a table on SI units.
- Lecturer discusses and illustrates the use of the table of contents and the index pages of a textbook.
- Students find topics in the index pages of a textbook and refer to the information in the text.
- Students write out main points of information in the text; lecturer provides feedback.

Lecture: 8

Topic: Using core concepts in Mathematics and the sciences

Materials: Biology, Chemistry and Physics textbooks, Mathematics manual, Dictionary of Contemporary English and Dictionary of Science.

Teaching-learning activities

- Lecturer asks students to explain a number of core concepts of their content subjects in their own words.

- Lecturer discusses and illustrates the concepts (e.g. *probability, proportion, relationships*, etc.) in Mathematics and the sciences.
- Students use the dictionaries to look up definitions of core concepts; lecturer provides feedback.
- Students construct sentences with the concepts to illustrate their meanings.
- Lecturer checks on sentences.

Assessment 1

Lecturer marks sentences on core concepts in Mathematics and the Sciences.

UNIT 2

Theme: Constructing sentences

Specific outcomes

Students should be able to:

- construct simple, compound and complex sentences accurately and fluently.
- correct poorly formed sentences.
- use correct grammar and punctuation.

Lecture 9

Topic: Constructing basic English sentences

Materials: Practical English Usage

Teaching-learning activities

- Lecturer discusses and illustrates the principles of basic sentence construction as well as simple, compound and complex sentences.
- Students classify a number of sentences as simple, compound or complex.

- Students construct various simple, compound and complex sentences of their own on a given topic.
- Lecturer provides feedback on sentences, paying particular attention to grammar and punctuation.
- Students construct paragraphs of their own, using a variety of sentence types.

Lecture 10

Topic: Editing

Materials: Dictionary of Contemporary English, Dictionary of Science, Practical English Usage and handouts of a paragraph containing typical grammar and punctuation errors.

Teaching-learning activities

Lecturer asks students to correct grammar and punctuation in the handout.

Students refer to relevant dictionaries and grammar resources.

Students and lecturer discuss the corrections, referring to the relevant rules of grammar and punctuation.

Lecture: 11

Topic: Correcting poorly formed sentences

Materials: Handout containing poorly formed (ambiguous, stylistically inappropriate) sentences and paragraph.

Teaching-learning activities

- Lecturer discusses poorly formed sentences and asks students to correct them, giving the reasons for the corrections.
- Students discuss their corrections in pairs; lecturer provides feedback.
- Students write a class test in which they are required to correct poorly formed sentences.

Practical 1

Students do a number of grammar exercises (e.g. on tenses, prepositions, adjectives and adverbs). These are revised and discussed.

Assessment 2

Students write a grammar test.

UNIT 3

Theme: Paragraphs

Specific outcomes

Students should be able to:

- identify the main idea and supporting details in a paragraph.
- write paragraphs with one main idea and supporting details.

Lecture: 12

Topic: Finding the main idea and supporting ideas

Materials: A reading passage from a science textbook or from *New Scientist*.

Teaching-learning activities

- Students read the passage; lecturer checks their comprehension.
- Lecturer asks students to identify the main idea in a paragraph; lecturer analyses one paragraph in the passage, identifying the main idea and the supporting ones.
- Students read the rest of the passage, underlining the main idea and supporting ones in each of the paragraphs.
- Students write paragraphs on a science topic as an assignment.

Assessment 3

Lecturer marks the students' written paragraphs out of 10 marks.

UNIT 4

Theme: Reading strategies

Specific outcomes

Students should be able to:

- use the SQ3R reading strategy when reading an academic text.
- skim and scan a text.
- identify and use discourse markers in a text.
- read a text fluently.
- summarise a text.

Lecture 13

Topic: The SQ3R reading strategy

Materials: A passage from an academic textbook.

Teaching-learning activities:

- Lecturer asks students to describe the strategy they employ when they read an academic text and provides feedback.
- Lecturer describes and illustrates the SQ3R reading strategy: Survey, Question, Read, Recite and Review.
- Students read the passage, following the strategy.
- Students provide feedback on their experiences.

Lecture 14

Topic: Skimming and scanning

Materials: Reading passages from a science academic textbook.

Teaching-learning activities

- Lecturer describes and illustrates the purpose and uses of skimming and scanning a text, noting the role of information content words (such as nouns and verbs) in the passage.
- Students skim a passage in order to find the gist or main points and write them down.
- Students place the main points in a two-column table, indicating the main point and the paragraph number in which it can be found.
- Students scan a passage in order to find specific information and list the information.
- Students hand in the tables and the lists they have drawn up; lecturer provides feedback.

Lecture 15

Topic: Identifying and using discourse markers in a text

Materials: Reading passages from an academic textbook.

Teaching-learning activities

- Lecturer discusses and illustrates the role of discourse markers/cohesive devices such as *in addition*, *however*, *nevertheless*, *moreover*, etc. in a text.
- Students identify markers and their function in a number of passages.
- Students do a cloze exercise in which they are required to fill in the appropriate markers.
- Students write a paragraph in which they use semantic markers.

Lecture 16

Topic: Fluent reading

Materials: A passage from a science textbook (on a topic such as *South Africa's Energy Capacity*).

Teaching-learning activities

- Students read the passage.
- Lecturer discusses and illustrates reading in terms of eye movement, reading word-for-word, reading groups of words, vocalising and sub-vocalisation.
- Students read the passage again focusing on eye movement, reading word-for-word, reading groups of words, vocalising and sub-vocalisation.
- Students do oral reading in groups to practise fluency.

Lecture 17

Topic: Summarising

Materials: A reading passage from an academic textbook and examples of mind maps on OHP transparencies.

Teaching-learning activities

- Lecturer revises the role of main ideas in a passage and projects the mind maps on OHP.
- Students read the passage and identify the main ideas in pairs.
- Students design mind maps on the passage.
- Students write down main points and construct a summary of the passage.
- Lecturer provides feedback.

Practical 2

Lecturer revises the SQ3R strategy. Students practise applying the SQ3R strategy when reading passages and answering comprehension questions.

Assessment 4

Lecturer marks students' comprehension answers.

UNIT 5

Theme: Interpreting visual information

Specific outcomes

Students should be able to:

- interpret a table and a graph, and write reports on each.
- interpret a diagram and a figure, and write reports on each.
- read and interpret a map.

Lecture 18

Topic: Interpreting tables and graphs

Materials: Tables and graphs.

Teaching-learning activities

- Students study a table and a graph in turns and discuss these in pairs.
- Lecturer initiates a discussion on the data in the table and the graph.
- Lecturer illustrates how tables and graphs can be interpreted, using definite and indefinite articles, phrases indicating cause and effect such as *depend on*, *results in* and *leads to*, and so on.
- Students write a report on the information in the table and the graph, and submit their reports as an assignment.

Lecture 19

Topic: Interpreting diagrams and figures

Materials: Various diagrams and figures contained in the Biology textbooks.

Teaching-learning activities

- Students study and discuss the data provided in the diagrams and figures in pairs.
- The class discusses the data; lecturer provides feedback.
- Lecturer demonstrates how diagrams and figures can be interpreted, using the simple present tense and revising indefinite and definite articles.
- Each student writes a report on a diagram and the figure, using the simple present tense and correct articles.
- Lecturer provides feedback in the form of a model answer; students compare their answers with the model.

Lecture 20

Topic: Reading and interpreting a map

Materials: Handout of a map of the university campus.

Teaching-learning activities

- Lecturer discusses and illustrates types of nouns and structural words, such as prepositions, in the context of reading a map.
- Lecturer asks students to interpret the map by giving directions to each other; students work in pairs.
- Lecturer guides students to use concrete nouns together with prepositions (*by the dam, from the main road, around the stadium, etc.*) as they interpret the map.
- Students write down the directions in paragraph form as a class test.

Assessment 5

Lecturer marks the report on the table and the graph.

UNIT 6

Theme: Text types

Specific outcomes

Students should be able to:

- write a description.
- follow instructions.
- construct a logical argument.
- distinguish between formal and informal language.
- use tenses, sequences markers, direct and indirect speech and passive voice accurately and fluently.

Lecture 21

Topic: Descriptions

Materials: A short descriptive passage and a diagram of a science process.

Teaching-learning activities

- Lecturer and students read the passage, and lecturer asks students to identify the descriptions in the passage.
- Students write a descriptive paragraph on a relevant topic.
- Lecturer hands out a diagrammatic representation of a process in science.
- Students describe the process in writing.

Lecture 22

Topic: Instructions

Materials: Any instructions, such as in past examination papers, instructions on leaflets of medication and Practical English Usage.

Teaching-learning activities

- Students read instructions in medication leaflets and examination papers.
- Lecturer discusses and illustrates instructions in terms of the imperative form of verbs and direct speech.

- Students do a cloze exercise in which they have to fill in the correct structures in the instructions.

Lecture 23

Topic: Argumentation

Materials: A discussion of a controversial topic, such as organ harvesting on tape, Dictionary of Contemporary English and Dictionary of Science.

Teaching-learning activities

- Students listen to the model argument on tape and note unfamiliar words.
- Students consult the dictionary to find meanings of the words.
- Lecturer illustrates prepositions pertinent to argumentation such as *argue with, about, over, for, against* and so on.
- Students listen to the model argument again and take notes in preparation for a debate on the topic.

Tutorial 1

Groups debate the topic (e.g. organ harvesting, stating arguments for and against it). Lecturer assesses students' oral performance.

Students write an essay on the topic.

Lecture 24

Topic: Formal and Informal Language

Materials: A recorded conversation of formal and informal language, and passages.

Teaching-learning activities

- Lecturer discusses and illustrates informal and formal language such as *juice* instead of *petrol* and *kid* instead of *child*.
- Students listen to an informal conversation first and then to a formal one.
- Lecturer jumbles examples of informal and informal language in a table.

- Students unscramble examples of formal and informal language contained in the table.

Assessment 6

Lecturer marks students' essays on the topic debated during the practical class.

UNIT 7

Theme: Functional types of writing

Specific outcomes

Students should be able to:

- define concepts and find definitions in a passage
- classify data
- describe a process
- identify cause and effect

Lecture 25

Topic: Defining

Materials: Pictures on transparencies, Dictionary of Contemporary English, Dictionary of Science, Thesaurus.

Teaching-learning activities

- Students read a passage (such as *Fluctuating prices of fuel*) and underline unfamiliar concepts.
- Lecturer discusses these concepts and illustrates how they can be defined.
- Students define the concepts in writing, making use of reference materials.
- Lecturer asks students to define a number of concepts frequently used in their other subject.

- Lecturer provides feedback, checking clarity, grammar and spelling.
- Students read a text, finding the definitions in it; lecturer provides feedback.

Lecture 26

Topic: Classifying

Materials: A list of words to classify; a classification chart.

Teaching-learning activities

- Students study a list of words (e.g. *lecturer, son, enthuse, old, sleep, intelligent, dream, sick, manager, happy, scientist, printer*) and classify them by ordering them into groups; lecturer provides feedback.
- Lecturer discusses principles of classifying data.
- Students study a classification chart.
- Students describe the chart in writing.
- Lecturer revises typical structures used in classification (e.g. There are three categories of words – verbs, nouns and adjectives. Verbs can be divided into transitive and intransitive, nouns can be classified into abstract, concrete or common.
- Students revise their writing.

Lecture 27

Topic: Describing processes

Materials: A passage that illustrates the interplay of cause and effect, comparison and contrast, general and specific statements.

Teaching-learning activities

- Lecturer illustrates a step-by-step sequence by referring to a flow diagram.
- Students read a passage which describes a process.
- Students design a flow diagram showing the process.
- Students write a paragraph which describes a flow diagram.
- Lecturer revises language used in such a description (e.g. *to begin with, initially, secondly, after this, lastly, finally, etc.*

- Students revise their paragraphs; lecturer provides feedback.
- Students write a description of a process, such as the production of a specific product.

Lecture 28

Topic: Identifying cause and effect

Materials: Science text.

Teaching-learning activities

- Students read a text (e.g. from *New Scientist*) that illustrates cause and effect.
- Students identify causes and effects from the passage; lecturer provides feedback.
- Students discuss cause and effect topic in groups, e.g. Does soft asphalt cause heatstroke?
- Lecturer discusses and illustrates the role of evidence and honesty in assigning cause and effect.
- Students do a cloze exercise requiring them to indicate causes and effects.

Assessment 7

Lecturer marks the cloze exercise on cause and effect.

UNIT 8

Theme: Argumentative essay writing

Specific outcomes

Students should be able to:

- arrange sentences into a coherent paragraph.
- structure a logical argument in an essay.

Lecture 29

Topic: Linking the main idea and supporting ideas in a paragraph

Materials: A model argumentative essay.

Teaching-learning activities

- Students read a paragraph from the essay.
- Lecturer revises and discusses the structure of paragraphs.
- Lecturer jumbles sentences of another paragraph of the model essay.
- Students arrange the sentences into a coherent paragraph; lecturer provides feedback.
- Lecturer revises the role of cohesive devices such as *so*, *furthermore* and *on the other hand*.
- Students do a cloze exercise on cohesive devices.

Lecture 30

Topic: Writing an argumentative essay

Materials: A model argumentative essay.

Teaching-learning activities

- Students read the model essay.
- Lecturer discusses the introduction, body and conclusion of an argumentative essay.
- Students and lecturer discuss an argumentative topic and collect ideas for an essay.
- Students write a first draft of their essays.
- Students work in pairs and comment on each others' essays, paying attention to structure, spelling, grammar and punctuation.
- Students write argumentative essays.

Assessment 8

Lecturer evaluates the students' written argumentative essays.

UNIT 9

Theme: Scientific reports

(in collaboration with Science lecturer)

Specific outcomes

Students should be able to:

- use the passive voice in a science report.
- record observations during an experiment.
- write a scientific report.

Lecture 31

Topic: Reading a scientific report

Materials: An example of a scientific report and *Practical English Usage*.

Teaching-learning activities

- Students read a scientific report.
- Lecturer draws students' attention to the structure of a science report, e.g. introduction, methods, results, analysis and discussion.
- Lecturer discusses and illustrates the use of the passive voice in a scientific report.
- Students study the passive in *Practical English Usage*.
- Students fill in passive voice forms and other grammatical structures in a cloze exercise based on a scientific report.

Lecture 32

Topic: Recording observations during an experiment

Materials: Notebooks.

Teaching-learning activities

- ESS lecturer collaborates with science lecturer for students to perform an experiment such as *Testing Turf dam water for turbidity* during a science practical.

- Students perform the experiment and record observations at various intervals and bring notes to the ESS class.
- Lecturer and students discuss the observations they made during the experiment.
- Students tabulate the observations as main points and specify the time intervals during the experiment.
- Pairs of students exchange their tables to ensure that their points are grammatically correct in terms of sequence markers, tense and other structures such as prepositions.
- Lecturer leads a discussion of the observations made.

Lecture 33

Topic: Writing a report

Materials: Students' notes on their observations during the experiment in the science class experiment.

Teaching-learning activities

- Lecturer revises the structure of a science report, and reminds students of the use of voice, tense and concord.
- Students use their notes to draft their own reports in terms of the following headings: introduction, method, results, analysis and discussion.
- Pairs of students edit each other's reports.
- Students write final versions of the reports for submission.

Assessment 9

Lecturer marks the written scientific report.

UNIT 10

Theme: Spoken and written language

Specific outcomes

Students should be able to:

- complete a conversational discourse chain.
- distinguish between formal and informal language in speech and writing.
- answer listening comprehension questions correctly .
- extract information from a lecture.
- take down notes from a lecture
- reconstruct notes into paragraphs

Lecture 34

Topic: Conversational discourse chain

Materials: Script of a dialogue and a discourse chart.

Teaching-learning activities

- Students read a dialogue which contains exponent of a number of functions.
- Students complete an exercise which requires them to fill in suitable exponents of functions such as *suggesting, agreeing, objecting, rejecting* and so on from the dialogue.
- Students make up a dialogue by using a discourse chart which indicates which functions they should use (e.g. *agree or reject a suggestion, make conditions or give a reason, calm someone down or try to persuade someone* and so on).
- Each student writes out his dialogues for submission.

Lecture 35

Topic: Formal and informal styles and spoken and written language

Materials: Formal and informal speeches on CD, a recording of a lecture, handouts of an informal speech, and Dictionary of Contemporary English.

Teaching-learning activities

- Students listen to a recording of a formal speech and an informal conversation.
- Lecturer elicits differences between formal and informal styles from students.
- Students identify situations where formal and informal language is appropriate.
- Students identify the differences between speech and writing; lecturer provides feedback.
- Students rewrite an informal speech in formal written English.

Assessment 10

The lecturer marks the formal piece of writing.

UNIT 11

Theme: Listening comprehension

Lecture 36

Topic: Answering listening comprehension questions

Materials: A short listening comprehension passage on CD, listening comprehension questions, Practical English Usage, Dictionary of Contemporary English and Dictionary of Science.

Teaching-learning activities

- Lecturer initiates a discussion on the recorded topic, and illustrates how listening comprehension should be tackled.
- Lecturer plays the listening comprehension passage.

- Students answer comprehension questions in writing.
- Students listen to the passage for the second time and revise their answers.
- Students use dictionaries and grammar book to check the language in their answers.
- Lecturer and students discuss the answers.

Lecture 37

Topic: Listening to a lecture

Materials: A recording of a lecture.

Teaching-learning activities:

- Lecturer introduces the topic of the lecture.
- Lecturer places a few key questions on the OHP.
- Students listen to the recording of part of a lecture.
- Students write down answers to the questions.
- Students listen to the recording for a second time and check their answers.
- Lecturer provides feedback.

Lecture 38

Topic: Taking notes

Materials: A recording of part of a lecture and a transcript of it.

Teaching-learning activities

- Lecturer first demonstrates linear and patterned note taking.
- Students listen to the lecture and take down main points in the form of linear and patterned notes.
- Lecturer provides feedback on the salient points in the lecture.
- Students revise their notes.

Lecture 39

Topic: Reconstructing notes

Materials: Students' notes and Practical English Usage.

Teaching-learning activities

- Lecturer describes and illustrates how notes can be reconstructed into a coherent text.
- Students bring the notes they took during one of the other science lectures to class.
- Each student expands their notes into sentences and a set of coherent paragraphs which form a lecture.
- Students work in pairs to check spelling, grammar, sentence construction and punctuation errors.

Assessment 11

Lecturer marks the reconstructed notes.

UNIT 12

Theme: Writing an academic assignment

Specific outcomes

Students should be able to:

- read on a topic that has been set as an assignment and make notes on it.
- brainstorm the topic.
- plan the structure of their assignment.
- write the introduction, body and conclusion.
- indicate references.
- write a bibliography.
- edit and revise a draft.

Practical 3

Lecturer discusses an assignment with students and guides them on how to find relevant materials in the library. Students search for books and journals on a given topic in the library. Students read relevant materials and make notes from them, adding the necessary references.

Lecture 40

Topic: Brainstorming and planning the assignment

Materials: Students' notes, Dictionary of Contemporary English and Dictionary of Science.

Teaching-learning activities

- Lecturer discusses the concept of brainstorming.
- Students use their notes and brainstorm their topics in groups of four.
- Students discuss outlines of their assignments in class.
- Lecturer illustrates cohesive links which students can use in the assignment.
- Lecturer demonstrates how the assignments should be planned.
- Students plan the structure and content of their assignments.
- Students review each other's planning in pairs.
- Students write a first draft of their assignments.
- Lecturer instructs students to keep a record of their sources.

Lecture 41

Topic: Indicating references

Materials: Students' draft assignments.

Teaching-learning Activities

- Lecturer discusses the importance of indicating references in assignments and provides examples of plagiarism.
- Lecturer illustrates different methods of acknowledging references used in the body of an essay such as the Numeric System and the Harvard

Method. Students use the Numeric System and the Harvard Method to acknowledge references used in the body of their assignments.

Lecture 42

Topic: Writing a bibliography and editing the final draft

Materials: Students' first drafts, Practical English Usage, Dictionary of Contemporary English, Dictionary of Science and a Thesaurus.

Teaching-learning activities

- Lecturer illustrates how a bibliography should be compiled and how articles, book and internet sources should be indicated.
- Students compile their bibliographies.
- Pairs of students swap their draft assignments.
- Students edit the draft assignments of their peers, using the grammar book and the dictionaries, and check the references and the bibliography.
- Students revise their drafts and prepare them for submission.

Assessment 12

Lecturer marks the assignments.

UNIT 13

Theme: Making an oral presentation

Specific outcomes

Students should be able to:

- make notes
- structure an oral presentation
- pronounce words
- use body gestures appropriately

- make a presentation

Lecture 43

Topic: Structuring an oral presentation

Materials: An oral presentation on video or DVD.

Teaching-learning activities

- Lecturer pre-arranges that students search for information in the library on a specific topic before the lecture, and bring the notes to the UNIFY computer laboratory.
- Lecturer illustrates how to structure a presentation on Power Point.
- Students structure their oral presentations on Power Point.
- Students watch a presentation on video or DVD.
- They prepare their own presentations by looking up the pronunciation of words in the dictionary.
- They rehearse their presentations in groups of four.

Practical 4

Students take turns in delivering their presentations orally.

Assessment 13

Lecturer assesses students' presentations.

UNIT 14

Theme: A project report

Specific outcomes

Students should be able to:

- investigate a problematic issue
- present an oral report
- hand in a report for assessment

Lecture 44 - 45

Topic: Planning a project

Materials: Books, journals and newspapers in the library as well as the internet.

Teaching-learning activities

- Lecturer discusses the following project: Euthanasia is considered one of the most controversial issues today.
- Some define it as mercy-killing, others as assisted suicide, and some regard it as plain murder.
- Students' task is to find information on the topic and decide if euthanasia is compassion or murder.
- Students must work in groups of three, and each selects a role as a terminally ill patient, a family member or a doctor.
- Each student must take the perspective of the role selected, and formulate a proposal and defend his position.
- Students must each prepare an oral as well as a written report. (Adapted from www.nelliemuller.com/ESL-WebQuests.htm.)

Tutorial 2

Students present their arguments on euthanasia orally.

Assessment 14

Lecturer assesses the oral as well as the written project reports.

UNIT 15

Theme: Problem solving activities

Specific outcomes

Students should be able to:

- compare the specifications of two calculators
- decide between alternatives in shopping
- construct a table from a description
- describe a process using diagrams

Lecture 46

Topic: Comparing the specifications of two calculators

Materials: Specifications of two calculators and specification of students' calculators.

Teaching-learning activities

- Lecturer compares specifications of two calculators.
- Pairs of students decide on the best one.

Lecture 47

Topic: Deciding between alternatives in shopping

Materials: Shopping leaflets from different shops.

Teaching-learning activities

- Lecturer discusses how to decide between alternatives in shopping.
- Students scan through the shopping leaflets.
- Students decide on the cheapest basket of food.

Lecture 48

Topic: Constructing a table from a description

Materials: A description of the 2006 matriculation results.

Teaching-learning activities

- Lecturer illustrates how a table can be constructed from a description.
- Students read a description of the 2006 matriculation results.
- Students construct a table from the description.

Tutorial 3

- Students study diagrams depicting a process. Students write paragraphs in which they describe the process.

Assessment 15

Lecturer marks the tables constructed from the description of the 2006 matriculation results.

UNIT 16

Theme: Study and examination techniques

Specific outcomes

Students should be able to use:

- study techniques
- examination techniques

Lecture 49

Topic: Study techniques

Materials: Handout on study techniques.

Teaching-learning activities

- Students draw up study schedules.
- Lecturer illustrates how a schedule can be drawn up and students refine their study schedules accordingly.
- Lecturer provides students with information on study techniques such as reading and re-reading, highlighting, making and revising notes, reciting and testing oneself.

Lecture 50

Topic: Examination techniques

Materials: Past test and examination papers together with their marking guides, dictionaries and prescribed books.

Teaching-learning activities

- Lecturer discusses examination techniques in terms of objective (multiple-choice) type of questions which can take several forms, and subjective (essay type) questions.
- Lecturer analyses past examination papers with students, noting the questions that appear frequently.
- Students write a trial examination comprising objective and subjective questions.

Assessment 16

Lecturer marks the trial examination and gives students feedback on their performance.

UNIT 17

Theme: Revision

This unit is devoted to the revision of core aspects of the course.

Specific outcomes

Students should be able to:

- interpret a graph and write a report on it
- construct a coherent paragraph
- structure a scientific report
- edit a text and correct grammatical errors
- structure an argumentative essay
- answer questions on a comprehension text

Lecture 51

Topic: Interpretation of a graph and writing a report on the graph

Materials: Handout of a graph.

Teaching-learning Activities

- Lecturer revises how a graph should be interpreted, referring to the use of definite and indefinite articles and phrases indicating cause and effect.
- Lecturer and students discuss the interpretation of the graph.
- Students write reports on the graphs they have interpreted.
- Peers edit each other's graphs and check for grammatical accuracy.

Lecture 52

Topic: Revision of paragraph and report structure

Materials: A reading passage from a science textbook and a model report.

Teaching-learning Activities

- Lecturer revises the structure of paragraphs in terms of the main idea and supporting ideas.

- Students rearrange jumbled sentences from one of the paragraphs into a coherent paragraph.
- Lecturer uses the model report to revise report structure, focusing on method, results, analysis and conclusion.

Lecture 53

Topic: Editing

Materials: An essay containing a number of language errors on OHP.

Teaching-learning activities

- A student takes the role of lecturer and the rest of the students participate in correcting the errors in the essay; students identify and comment on the grammar errors.
- A second student deals with the structure of an essay, and revises aspects such as argumentation, the logical connection amongst paragraphs, introductions and conclusions.
- Lecturer winds up the discussion and summarises the most pertinent aspects, referring in particular to frequent errors that students make in grammar and writing.

Lecture 54

Topic: Reading comprehension

Materials: A reading comprehension test.

Teaching-learning activities

- Students read the passage and answer the comprehension questions without consulting dictionaries or other reference sources.
- Lecturer provides feedback and discusses the answers.

Examination: At the end of the course, students write an examination paper which assesses the following: Vocabulary and core concepts in Mathematics and the sciences, essay and report writing, reading comprehension, interpreting visual information, and completing cloze exercises.

Marking allocation: There are 54 assessments comprising 50% of the total mark and an examination mark constituting the other 50%.

9.7 CONCLUSION

The proposed ESS outline is intended to overcome shortcomings in the present course. It is essentially a task-based course which aims at an intensive teaching-learning programme that will ensure that students develop the essential language and study skills that will enable them to pursue their academic courses with success.

CONCLUSION AND RECOMMENDATIONS FOR FURTHER RESEARCH

10.1 INTRODUCTION

The aim in this chapter is to conclude the study and present recommendations for further research. Limitations of the study are also pointed out. The focus of this study has been on the evaluation of the ESS course, and a major revision of the course has been proposed.

10.2 LITERATURE REVIEW

The literature review involved an overview of the foundation year programme and the background of the students in the course. Since study skills form an important part of the ESS course, core aspects of these skills were discussed. Principles of course design were reviewed and various types of content that can be used were discussed. The content of a course such as ESS should always be related to the subjects students take in their mainstream subjects.

10.3 EVALUATION OF THE PRESENT COURSE

Course evaluation can be conducted at macro and micro levels, and both levels were investigated in this study.

Various sources were used to collect data. The course outline was analysed, and interviews were conducted with students in the course, former students, already in the mainstream, and the course lecturers. The course materials were investigated, and similar courses at other tertiary institutions were surveyed.

10.4 REDESIGNING THE COURSE

The proposed task-based approach responds to the plight of previously disadvantaged science students, and the course outcomes, content and the materials suggested are intended to address their needs. The listening and speaking skills included complement the macro-skills of reading and writing. The teaching-learning activities are intended to involve students actively in practising their language and study skills, such as taking notes and making oral presentations. The teaching and learning of vocabulary and core concepts in Mathematics and Science and the reading comprehension pieces are in line with the content of the students' science courses. The teaching and learning of study and examination techniques should assist students in coping with assessment practices. The course is a task-based one and is aimed at motivating students to do their best whilst at the same time enjoying the experience.

The central position which ESS occupies in the UNIFY curriculum should be maintained and sustained. ESS lecturers need to embrace continual course evaluation as one of the mechanisms that can ensure quality instruction and develop a sense of course ownership and accountability, forge personal academic growth and sustain the courses they teach.

It is hoped that this evaluation study will help elucidate language learning issues pertinent to the access, retention and success of previously disadvantaged science students – an issue that South Africa is currently grappling with.

10.5 LIMITATIONS OF THE STUDY

The results of the study are derived from and applicable to students at the University of Limpopo, Turfloop campus, and can therefore not be generalised to

other institutions. The revised course is constrained by the restrictions and regulations of the specific institution.

The proposed course outline needs to be field-tested before final conclusions regarding its adequacy can be reached.

10.6 RECOMMENDATIONS FOR FURTHER RESEARCH

Tracer studies on the performance of ESS students in the mainstream can be conducted. This will involve a case study of a few students from the foundation year until their completion of a science degree.

A comparison of assessment methods employed by the ESS section and those collectively employed by the Biology, Chemistry, Mathematics and Physics sections in UNIFY could be made.

As this study focused on the evaluation of the ESS course at one institution, English language foundation courses at other tertiary institutions could also be evaluated in future.

10.7 CONCLUSION

Evaluation of ESP courses remains a challenge to language lecturers, and its implementation requires vital support from various stakeholders within an institution. An evaluation implies a review of teaching-learning practices and spells out how courses should be planned, implemented, and improved. Course evaluation fosters communication among lecturing and administration staff, students and management. It keeps all stakeholders on their toes, but will pay dividends in the quality of the instruction given to students and enhance the reputation of an institution.

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APPENDIX A

Interviews with UNIFY Students

1. Do you think it is important to incorporate English and Study Skills (ESS) in the UNIFY curriculum?
2. How different is ESS from the English you learnt at matric?
3. Does the ESS syllabus address all your language needs?
4. Is/Are there any 'new' language aspects that you learnt from the course?
5. Is/Are there any teaching material(s) which you think should be excluded from the course and why?
6. Did you find ESS materials (study guides, etc.) easy or difficult? Why?
7. What do you think about the assessment practices in ESS?
8. Do you think that the time spent on the course was sufficient? Why?
9. Did you benefit from team teaching used in ESS? In what ways?
10. What would you regard as good aspects of the course?
11. What was the most frustrating aspect of the course?
12. If you were to improve the course how would you do it?
13. What convinces you that you are now better equipped to study the sciences with confidence?

Thank you for your contribution.

APPENDIX B

Questionnaire for Former UNIFY Students

Section A: Personal Information

Year in UNIFY _____
Group No. _____
ESS Final % _____
Matric English Symbol _____
Degree (e.g. B. Sc III) _____
Faculty _____
Gender _____

Section B

1. Give at least 3 skills that you find useful in the course you are taking now.

2. List 5 skills you acquired in ESS that you deem useful in your science studies.

3. Did class work form an essential part of ESS learning? Yes ___ or No ___

4. Do you regard homework as an essential part of learning ESS? Yes ___ or No ___

5. Did you benefit from error correction during ESS lessons? Yes ___ or No ___

Give a reason(s) for your answer to the previous question.

6. Did Feedback on marked tests enhance your learning of ESS?
(indicate with an X)

Yes____ or No ____

7. Do you find your ESS student materials still useful in the mainstream? Yes ____
or No ____

8. Mention the material(s) that you did not find useful

Give (a) reason(s) for finding the materials not useful.

9. What additional materials would you propose?

10. Give a reason(s) for your answer in 9 above

11. Was learning ESS worthwhile? Yes ____ or No ____

12. What was the best aspect about ESS?

13. What was the worst aspect regarding ESS?

14. Did the course enhance your performance in the sciences? Yes ____ or No ____

Thank you for your time

APPENDIX C

Interview with ESS Lecturers

A. Personal Information

What is your first language?

What is/are your second language(s)?

When did you join the ESS section?

What is your highest qualification?

B. Students' Characteristics

- What are the common characteristics of ESS learners?
- What do you regard as the students' language needs?

C. Aim(s) of the Course

- What are the main aims of the ESS course?
- Are there any additional aims that you would like to include?

D. Initial Assessment

- How do you determine the proficiency level of the students at the beginning of the course?

E. Language Teaching Approach

- What is the language teaching approach which guides teaching-learning activities in the ESS course?
- Why do you prefer this approach?

F. Content

- Give any themes that are included in the ESS curriculum.
- Mention some of the topics that are included under these themes mentioned above.

G. Materials

- Mention both student and teacher material used in ESS
- What do you think is the significance of each material in the ESS context?
- Is there a need for further development of materials?

H. Assessment

- What assessment instruments does ESS employ?
- How often are these instruments used?
- If you were to propose additional assessment instruments, what would you include?

I. Evaluation

- Are ESS teaching-learning activities evaluated?
- How is this done?

J. Improvements to the Course

Do you have any ideas or suggestions on how the course can be improved?

Thank you for your contribution.

APPENDIX D

Observation Scheme

Topic/Unit: _____
Theme: _____
UNIFY Group: _____
Duration of lesson: _____

Instructions: Use the key provided on the next page to choose and encircle a number that best describes what you observe in class:

1. Goal(s)

Clearly stated	0	1	2	3	4
Proficiency goals	0	1	2	3	4
Cognitive goals	0	1	2	3	4
Affective goals	0	1	2	3	4
Transfer goals	0	1	2	3	4

2. Language problems addressed

Concept learning	0	1	2	3	4
Skill learning	0	1	2	3	4
Misconceptions	0	1	2	3	4
Grammar	0	1	2	3	4
Spelling	0	1	2	3	4

3. Content

Vocabulary	0	1	2	3	4
Grammar	0	1	2	3	4
Notional-functional	0	1	2	3	4
Situations	0	1	2	3	4
Topic-based	0	1	2	3	4
Skills-based	0	1	2	3	4
Task-based	0	1	2	3	4

4. Teaching approach

Lesson starts where learner is	0	1	2	3	4
Approach in keeping with learner's needs	0	1	2	3	4
Comprehension checks done	0	1	2	3	4

Use of audio visual aids	0	1	2	3	4
Lecturer facilitation	0	1	2	3	4
Learner participation	0	1	2	3	4

5. Teaching Materials

Appropriacy	0	1	2	3	4
Authenticity	0	1	2	3	4
Produced in-house	0	1	2	3	4

6. Featuring Learning Styles

Auditory	0	1	2	3	4
Visual	0	1	2	3	4
Tactile	0	1	2	3	4

7. Assessment

Class work	0	1	2	3	4
Homework	0	1	2	3	4
Peer-assessment	0	1	2	3	4
Self-assessment	0	1	2	3	4
Class test	0	1	2	3	4

8. Evaluation

Time management	0	1	2	3	4
Set object met	0	1	2	3	4

Key

- 0 – none
- 1 – marginal
- 2 – considerable
- 3 – good
- 4 – excellent

APPENDIX E

Materials' Evaluation Framework

This evaluation sheet focuses on criteria that can be used for materials selection. The criteria are numbered from 1 to 21. Encircle a number (to your right hand) that best describes your materials.

1 Materials allow for activities in which there is interaction between lecturer and student	1 Fully	2	3	4 Don't
2 Materials allow for activities in which there is interaction among learners	1 Fully	2	3	4 Don't
3 Materials are visually pleasing and attractive	1 Fully	2	3	4 Aren't
4 Materials teach aspects of grammar	1 Fully	2	3	4 Don't
5 Materials take cognizance of the interests of the learner	1 Fully	2	3	4 Don't
6 Materials contain a variety of topics	1 Fully	2	3	4 Don't
7 Materials contain problem-solving activities	1 Fully	2	3	4 Don't
8 Materials are challenging to learner	1 Fully	2	3	4 Aren't
9 Materials contribute to a broadening of the mind	1 Fully	2	3	4 Don't
10 Meaningful exercises form an integral	1 Fully	2	3	4 Don't

part of the materials

11	1	2	3	4
The four language skills are integrated in the materials	Fully			Aren't
12	1	2	3	4
Exercises are graded	Fully			Aren't
13	1	2	3	4
A variety of styles are used in the reading passages	Fully			Aren't
14	1	2	3	4
The materials take into account the language proficiency of the learner	Fully			Don't
15	1	2	3	4
Materials are presented thematically	Fully			Aren't
16	1	2	3	4
Listening exercises are included in the materials	Fully			Aren't
17	1	2	3	4
The order in which the materials are presented facilitates learning	Fully			Doesn't
18	1	2	3	4
Language is presented in a situational context	Fully			It isn't
19	1	2	3	4
Authentic materials are used where appropriate	Fully			Aren't
20	1	2	3	4
Materials are presented in sufficient quantity so as to facilitate learning	Fully			Aren't
21	1	2	3	4
Materials include self-assessment exercises	Fully			Don't

APPENDIX F

SURVEY OF THE FOUNDATION/BRIDGING ENGLISH COURSES AT TERTIARY INSTITUTIONS IN SOUTH AFRICA

Name of Institution _____
 Name of Course _____
 When was the course started? _____
 Name of Lecturer _____
 Tel. No. _____ Fax No. _____
 e-mail _____

Do you offer any Foundation/Bridging English course or its equivalent in your institution?

Yes		No	

If so, please answer questions that follow:

1. Would you regard your foundation/bridging course as general or subject-linked? In other words, is your course aimed at a general group or is it designed for a specific group such as science, commerce etc. students in the course?

General English		Subject-linked English	

2. Is the English course a general academic purposes one or is it integrated into a specific programme (such as a foundation programme for science or commerce students)?

English for academic purposes		Programme-specific	

3. The course caters for: (tick **TWO** only)

Under-prepared foundation students	
Students for a specific course	
Students-at-risk at different levels in the mainstream	

All first entering students	
Students without exemption	

Other (please specify)

4. How long is the course?

One term	
One semester	
One academic year	
More than one academic year	

5. Is the course credit-bearing?

Yes		No	

6. Is the course compulsory for the students who take it?

Yes		No	

Other (specify)

If the course is not compulsory, what motivates students to take the course?

7. Where is the course located?

In a faculty	
In a department	
In a school	
In an academic development unit	
In a combination of the above	

Other (specify)

8. Who teaches the English course? Tick **TWO** only

Language specialists	
Both a language and a subject specialist	
Language specialists who are also subject specialists	

Senior students	

9. What is the major aim of your Foundation English course? Tick **ONE** only.
To

Improve students' performance in the mainstream course	
Develop students' language skills	
Develop students' academic literacy	
Increase the number of students who succeed in the mainstream	
Prepare students for language demands that will be made on them later in life	
Educate students	

Other (please specify)

10. What are the most important subsidiary, specific aims of your course?
Tick **FOUR** only. To

Enhance students' performance in mainstream	
Increase the number of students who succeed in the mainstream	
Educate students	
Teach grammar	
Develop students' language skills (listening, speaking, reading and writing)	
Teach students the jargon and discourse of their mainstream subject(s)	
Raise students awareness of the conceptual framework of their mainstream subject(s)	
Develop students' academic literacy	

Others (please specify)

11. What would you say are the students' **TWO** major problem areas?

Listening	
Speaking	
Reading	
Writing	
Concepts	
Grammar	
Spelling/punctuation	

Other (please specify)

12. By means of the numbers 1 (least) 2, 3, 4 and 5 (most) indicate the time that is devoted in the course to the teaching of the following:

Listening to lectures	
Speaking	
Reading	
Writing	
Grammar	
Subject-related input	
Concepts	

Other (please specify)

13. What proportion of the time spent teaching English involves remedial instruction, i.e. re-teaching points which have not been learned well at school?

10%	
15%	
20%	
25%	
33%	
50%	
50%+	

14. What proportion of teaching time is spent on developmental teaching, i.e. building on what students have already learnt?

10%	
15%	
20%	
25%	
33%	
50%	
65%	
75%	
90%	
90%+	

15.1 Are students sometimes divided into small, tutorial groups?

Yes		No	

15.2 If so, what is the average number of students in such a group? Tick **ONE**

5	
10	
15	
20	

Other (please specify)

15.3 How many tutorials are there per student per week? Tick **ONE**

1	
2	
3	

Other (please specify)

15.4 What are the activities in these groups?

Problem solving	
Speeches	
Grammar exercises	
Debates	
Conversation	

Literary analysis	
Discussion	
Role-playing	

Other (please specify)

16.1 Are language practicals (in the language laboratory) included in the course?

Yes		No	

16.2 If so, what do these practicals entail?

Drills on pronunciation	
Grammar exercises	
Listening exercises	
Synthesising information	
Writing summaries	

Other (please specify)

16.3 How many practical periods are there per week?

17.1 Are listening skills specifically taught?

Yes		No		Incidentally	

17.2 Which skills does your teaching of listening seek to develop?

Recognising how sentences relate to one another	
Recognising information structure between paragraphs and in discourse	
Separating main points from supporting details	
Familiarisation with different accents	
Inferring meaning	
Recognising different sounds	
Recognising body language used in conjunction with speech	
Ignoring unclear sections	
Activating prior knowledge	
Listening in pairs/groups and pooling	

information later	

Other (please specify)

18.1 Is speaking taught specifically in the course?

Yes		No		Incidentally	

18.2 What is the major aim of teaching speaking in your course? Tick **ONE** only.

To teach students how to argue a point in class	
To involve students	
To develop students' broad social skills	
To teach students how to formulate and ask questions in class	

Other (please specify)

18.3 What are the **minor** aims of teaching speaking in your course? To develop students' skills in

Negotiating meaning (how much and how specific information should be)	
Management of interaction (choosing of subject and speaker)	
Simplification such as formulaic expressions and fillers	
Formation routine such as describing, comparing, arguing, narrating, instructing and explaining	
Typical interaction routines such as party conversation	
Compensation such as self-correction and rephrasing	

Other (please specify)

18.4 If speaking skills are taught in your course, what learner activities are used?

Prepared speech	
Impromptu speech	
Debates	
Role-playing	

Other (please specify)

19.1 Do you attempt to improve the students' pronunciation?

Yes		No	

19.1.1 If so, how is this done? By means of:

A study of phonetics	
Phonetic script	
Pronunciation drills	
A study of mother-tongue interference	

Other (please specify)

19.1.2 If pronunciation is taught in your course, which standard of pronunciation is aimed at?

Local native English norm	
An intelligible L2 norm	
Received Pronunciation	
Standard American norm	

Other (please specify)

19.1.3 Do you regard these attempts as successful on the whole?

Yes		Doubtful		No		Not applicable	

Give a reason

20.1 Do you distinguish between intensive and extensive reading in your course?

Yes		No	

20.2 If so, what is the major aim of intensive reading? Choose **ONE**.

Equipping students with various strategies for decoding an academic text	
Equipping students with skills for identifying, analysing and recording information	
Equipping students with the skills for logical reading	
Developing students' language awareness	
Developing students skills for accessing information	

20.3 If so, what are the subsidiary aims of intensive reading? Choose **FIVE** only.

Activating and using prior knowledge	
Predicting	
Understanding sentence structure	
Distinguishing main points from supporting details	
Understanding discourse structure	
Recognising logical connectors	
Recognising references	
Recognising key words	
Understanding concepts	
Understanding attitudes	
Understanding nuances	
Separating facts from opinions	
Inferencing	

Other (please specify)

20.4 If you make a distinction between intensive and extensive reading, what does the latter entail?

20.5 Do you teach speed-reading directly?

Yes		No	

21. Do you teach decoding of non-linear information (e.g. graphs, tables, cartoons, pictures, etc.)?

Yes		No	

22.1 Is the study of literature included in your course?

Yes		No	

22.2 If so, what is the major aim of literature in your course? Tick **ONE** only.
To

Improve language skills	
Develop literary appreciation	
Improve reading skills	
Develop critical thinking	
Expand cultural knowledge	

Other (please specify)

22.3 What are the subsidiary aims of literature in your course? Tick **FOUR** only. To

Improve language skills	
Develop literary appreciation	
Improve reading skills	
Develop critical thinking	
Serve as an introduction to the study of literature	
Develop powers of judgement	
Develop powers of expression	
Expand cultural knowledge	
Offer a good pastime	

Other (please specify)

23.1 Do you teach writing in your English course?

Yes		No	

23.2 If so, what is the major aim of teaching writing? Choose **ONE** only. To

Communicate effectively in English	
Teach grammar	
Apply grammar rules in context	
Give students practice in writing	

Other (please specify)

23.3 If so, indicate the types of writing exercises and the average number of exercises you give in a course.

<i>Type of exercise</i>	<i>Number per year</i>
Paragraphs	
Narrative/descriptive essays	
Discursive/argumentative essays	
Impressionistic writing (diaries, literary writings)	
Friendly letters	
Formal letters	
Letters to the press	
Reports	
Notices	
Minutes	
Agenda	
Curriculum vitae	
Telegrams	
Précis/paraphrase	

Others (please specify) and give the average number

23.4 After getting feedback on their first drafts, are students given the opportunity to re-write and hand in revised drafts?

Always		Sometimes		Never	

23.5 Do students ever receive feedback on their writing from their peers?

Always		Sometimes		Never	

24.1 Are comprehension exercises included in your course?

Yes		No	

24.2 If so, what is the average number of comprehension exercises done during the course? _____

24.3 Are students required to read and study various 'registers'/language variations?

Yes		No	

24.4 If so, which 'registers' are studied?

The language of conversation	
The language of science	
The language of legal documents	
The language of commerce	

Others (please specify)

24.5 Other reading material prescribed and read. Tick the relevant ones.

Magazines	
Newspapers	
Advertisements	
Passages	

Other (please specify)

25.1 Are study skills (e.g. skimming and note-taking) practised?

Yes		No	

25.2 If so, which study skills are practised? Tick where applicable

Skimming	
Note-taking	
Proof-reading	
Use of dictionary	

Others (please specify)

26.1 Is vocabulary taught?

Yes		No	

26.2 If so, how is vocabulary taught? Tick the relevant ones.

In association with reading and writing	
By means of a graded list of items	
A combination of the above	

Others (please specify)

27.1 Are there any lectures on grammar and usage?

Yes		No	

27.2 If so, what is the major aim of this study of grammar? (Tick **ONE** only)
To:

Improve the students' language skills	
Provide academic training in a body of knowledge	
Increase the students' knowledge of English	
Assist students to communicate accurately	
Aid the study of literature	

Other (please specify)

27.3 What are the subsidiary aims of the study of grammar in your course?
Tick **FOUR** only. To:

Raise students' awareness of the discourse structure of their mainstream subject(s)	
Improve students' listening skills	
Improve students' speaking skills	
Provide academic training in a body of knowledge	

Increase students' knowledge of English culture	
Aid the study of literature	
Aid the acquisition of writing skills	
Aid the acquisition of reading skills	
Study grammar for its own sake	
Raise students' language awareness	

Others (please specify)

27.4 Are students required to do practical grammar exercises?

Yes		No	

28. Which methods of providing input to students do you regard as the most effective? Tick the relevant methods.

Study guides	
Lectures	
Seminars	
Tutorials	
Consultations	

Others (please specify)

29.1 Please mention the textbooks and other materials used by students as sources for the course.

29.2 Please mention additional textbooks and other materials used by lecturers as sources for the course.

30. Has the nature of your course changed in the last five years?

Yes		No	

If so, please specify the changes

31. How many in-class tests do students write in your course?

First semester	
Second semester	

31.1 Do students write any examinations in your language course?

Yes		No	

31.2 On which areas of the course is assessment based? Tick the relevant ones.

Listening	
Speaking	
Reading	
Writing	
Grammar	
Knowledge of a mainstream subject	

Others (please specify)

31.3 If your students are examined in your language course, what is their average pass rate?

Less than 40%	
About 50%	
About 65%	
Above 70%	

31.4 Is a student's final mark composed of the year mark (which he or she obtains through assignments, tests, projects, etc.) and the examination mark, or just the examination mark? Tick **ONE** only.

Year mark and exam marks	
Exam mark only	

What is the ratio of the year mark to the examination mark? Tick **ONE** only.

60:40	
40:60	
50:50	

Other (please specify)

32. What would you regard as the major problems regarding the course?

33. Would you like to add anything about your course that has not been covered by this questionnaire?

Thank you for your co-operation