DUAL LANGUAGE INSTRUCTION (ISIZULU-ENGLISH) OF ACADEMIC LITERACY AND COMMUNICATION SKILLS PILOT COURSE: IMPACT ON LANGUAGE ATTITUDES OF ENGINEERING STUDENTS

ISIFUNDO ESILIMI MBILI (ISIZULU-NESINGISI) SAMAKHONO OKUFUNDA NOKUXHUMANA: AMANDLA ASO KWIZIMOMQONDO YEZILIMI YABAFUNDI BEZOBUNJINIYELA

by

Sandiso Ngcobo

THESIS

Submitted in fulfillment of the requirements for the degree of Doctor of Philosophy in Linguistics in the Faculty of Humanities, Development and Social Sciences, in the School of languages, Literature and Linguistic at the University of KwaZulu-Natal, Howard Campus, Durban, South Africa.

Supervisor: Professor Heike Tappe

2011

DECLARATION: UKUZIBOPHEZELA

Durban, South Africa.

I, Sandiso Ngcobo, hereby declare that the thesis entitled:

DUAL LANGUAGE INSTRUCTION (ISIZULU-ENGLISH) OF ACADEMIC LITERACY AND COMMUNICATION SKILLS PILOT COURSE: IMPACT ON LANGUAGE ATTITUDES OF ENGINEERING STUDENTS

ISIFUNDO ESILIMI MBILI (ISIZULU-NESINGISI) SAMAKHONO OKUFUNDA NOKUXHUMANA: AMANDLA ASO KWIZIMOMQONDO YEZILIMI YABAFUNDI BEZOBUNJINIYELA

is as a result of my own investigation. I have acknowledged the sources used in this stuin the references. This work has not been submitted for any other degree or examination in any other university.				
S. Ngcobo				
18 March 2011				

ACKNOWLEDGEMENTS: AMAZWI OKUBONGA

I wish to extend my sincere gratitude to all those who in different ways made the compilation of this thesis possible:

Professor Heike Tappe, my supervisor, for her constructive criticism, support and words of encouragement.

South African Netherlands Research Programme on Alternatives in Development (SANPAD) for their assistance during my participation in their Research Capacity Initiative (RCI) programme.

The National Research Foundation (NRF) Thuthuka Grant and the Mangosuthu University of Technology for funding this study.

To

Zethu

and

MaNdawonde

ABSTRACT

The study was motivated by the 2002 Language Policy for Higher Education (LPHE) that was promulgated by the Department of Education (DoE) in response to its concerns over the alarmingly high failure, dropout and retention rates of particularly black South African students. The LPHE has identified English-medium instruction as the possible main factor in denying the majority of black students' access to and success in higher education. However, the LPHE is yet to be fully implemented in the country partly due to the fact that sociolinguistic studies among black-African-language speakers indicate that there is a strong preference for English over black African languages in all formal sectors of society, including academia. This preference for English is, in part, a result of the lack of development and the under-resourcing of black African languages in education. Also, black South Africans, while they desire quality mother tongue instruction (MTI), strongly wish to improve their English proficiency.

Following on these indications, this study developed and piloted dual language instruction (DLI) (isiZulu-English) teaching and learning course material on academic literacy and communication skills. The purpose of the study was to investigate the extent to which participation in the DLI pilot course might contribute towards 'attitude change' as regards the use of isiZulu as a teaching and learning resource alongside English in higher education. The investigation, which took place at Mangosuthu University of Technology (MUT) in the province of KwaZulu-Natal in South Africa, was undertaken among isiZulu-speaking students and their lecturers, all of whom were involved in an Academic Literacy and Communication Skills course for engineers at foundation level.

In order to collect data the study adopted an embedded mixed-method research approach in that while it mainly made use of three questionnaires that were administered to students there were also focus group interviews to supplement quantitative data. In addition, the data analyses were comparatively undertaken across different times of the study and between different groups of participants (students and lecturers). The purpose in the comparative analyses of all the data collected was to discover whether or not there were areas of convergence and/or divergence in the garnered opinions concerning attitudes to bi-/multilingual education.

The important finding of this study was that the majority of students indicated from the onset that they preferred to use their primary language as a learning resource while they also valued the role of English in education. This was taken as an indication of positive attitudes to bilingual education. As a result, the use of the DLI pilot course contributed to a minimal attitude change in that after its use there were a few students who for the first time acknowledged the positive role of isiZulu in education. The majority of lecturers also approved of the use and/or the role of L1 in education and indicated support for its use in content subjects. However, the longitudinal investigation of attitudes amongst students in their final year of study revealed a shift in attitude in that the majority identified English as the only language of education.

The thesis concluded by suggesting that it is attitudes based on personal experience rather than on preconceived ideas that should inform our decisions on language education policy implementation. It was then recommended that Higher education institutions that are in areas where the student population remains predominantly black in terms of demographics should lead in the implementation of multilingual education policies.

ISIFINGQO

Ucwaningo lwalomqulu lusekeleke kuyiNqubomgomo yoLimi eMfundweni ePhakeme we-2002 eyaphasiswa ngokusemthethweni ngumnyango wemfundo ngenxa yokungagculiseki ngamazinga aphansi okwazi ukufunda nokubhala, izinga eliphezulu lokungaphumeleli kanye nokulaxaza izifundo ezikhungweni zemfundo ephakeme ikakhulukazi kubafundi abamnyama. INqubomgomo yoLimi eMfundweni ePhakeme ibona ukufundiswa ngolimi lwesiNgisi njengembangela okuyiyonayona evimbela iningi labafundi abamnyama ukufinyelela noma ukuphumelela emfundweni. Ukuziphendulela zinselelo iNqubomgomo yoLimi eMfundweni ePhakeme iphakamisa ukuthuthukiswa nokusetshenziswa kwezilimi zesintu ekufundiseni. Kepha lolu hlelo alukaqaliswa ngokugcwele ezikhungweni zemfundo ephakeme. Imbangela yalokhu ukuthi ukucutshungulwa kwezimomqondo zabamnyama eNingizimu Afrikha okwenziwe yizazi ezibheka ukusebenza kolimi emphakathini, mayelana neqhaza lezilimi zomdabu njengezilimi zokufunda, kukhiphe imiphumela elandulayo futhi engahambisani nokuqokwa okucacile kwezilimi zesintu ngenxa yenkolelo yokuthi isiNgisi yilona ulimi olumandla ekuvuleni indlela eya empumelelweni. Izimomqondo zolimi eziphikayo zibangelwa, phakathi kokunye, ukushoda kokuthuthukiswa kanye nokwesweleka kwezinsiza ezilimini zesintu kanye nokulangezelela ukuqokwa kokufundiswa ngolimi lwebele oluhlinzeka ngemfundo esemgangathweni ibe ifinyelelisa eqophelweni eliphezulu lesiNgisi.

Kulandela lemibiko, lolucwaningo lusungula bese luvivinya uhlelo lokufundisa ngezilimi ezimbili (isiZulu neSingisi) isifundo samakhono okufunda kanye noku xhumana. Injongo yocwaningo ukuthola ukuthi ngabe isifundo sinomthelela ongakanani ekushintsheni isimomqondo mayelana neqhaza lolimi lwesiZulu uma lwethula ngokulekelelana nesiNgisi ezikhungweni zemfundo ephakeme. Lolu cwaningo,

olwenzelwa Mangosuthu University of Technology kwisifundazwe saKwaZulu-Natali eNingizimu Afrika, lubandakanya abafundi abakhuluma isiZulu kanye nothisha babo besifundo samakhono okuFunda kanye noku Xhumana esifundwa onjiniyela.

Ucwaningo lubandakanya izindlela ezithanda ukuxuba zokuqopa ulwazi kwazise ukuthi noma lugxile kakhulu ngokokubala lubuya lusekele lokhu ngenxoxiswano. Ngaphezu kwalokhu, ukuzama ukuthola ulwazi olujulile ngezinto ezicutshungulwayo ucwaningo luqhathanisa lucubungula ngokusebenzisa ulwazi oluqokelelwe ngokuhamba kwesikhathi luphinde luqhathanise imibono yabafundi neyothisha. Ngokuqhathanisa imininingwane eyehlukene ucwaningo luqonde ukuthola ukuthi bukhona yini ubufakazi obuphikisanayo noma obuvumelanayo ngezinto ezicutshungulwayo.

Imiphumela yocwaningo ebalulekile itshengisa zibekwa ukuthi abafundi bakhonze ukusebenzisa ulimi lwabo uma befunda, bebefuthi besikhonzile isiNgisi. Lokhu kuthathwa njenge nkomba enhle yokuthi bazosithokozela isifundo esilimi mbili. Ngaphezu kwalokhu, isifundo esilimi mbili sinomfakela okushintsheni imiqondo kwezezilimi kwazise ukuthi emva kokusisebenzisa abafundi abaningi kunabokuqala bayakweseka ukusetshenziswa kolimi lwesiZulu kwezemfundo abanye babo ebebeqala ngokungahambisani naloluhlelo. Iningi lothisha nalo luyalutusa uhlelo lokusebenziswa noma lweqhaza lolimi lokuqala kwezemfundo ephakeme baphinde baxhase nokusethenziswa kwesiZulu nakwezinye izifundo. Kodwake uhlelo lokucwaninga emva kokuhamba kwesikhathi kukhombise ukuthi uma abafundi sebesemaphethelweni ezifundo zabo baxhasa kakhulu ukusetshenziswa kwesiNgisi.

Lo mqulu uphetha ngokubeka umbono othi ukucwaninga kwezimomqondo ngezezilimi zokufunda kumele kuncike ocwaningeni oluhlola imibono ehambisana nalokho abahlolwayo abizibonele bona kwenzeka kunokuba bamane babuzwe nje ukuthi

bacabangani ukunikeza ulwazi olunzulu ngezinqumo ezingathathwa ukuthula inqubo mgomo yezenfundo. Izikhungo zemfundo ephakeme ezisezindaweni zabantulayo futhi kube kunesizwe esimpisholo kumele kube yizo eziqalisa loluhlelo lokufundisa ngezilimi zabampisholo.

CONTENTS: OKUQUKETHWE

Abstra	ct	iv-v
Isifingqo		vi-viii
Abbreviations		xiv
Chapt	er 1: Introduction	1
1. Ove	rview	1-10
1.1	Problem statement	11
1.2	Aims of the research	11-12
1.3	Research questions	12
1.4	Contribution of the study	12-14
1.5	Key concepts in the study	14-16
1.6	Structure of the thesis	16
Chapt	er 2: Language attitudes	17
2.	Introduction	17
2.1	The nature of language attitudes	17-19
2.2	The structure of attitudes	19-22
2.3	Language attitudes and motivation	23-25
2.4	Language attitudes research methods	26-27
2.4.1	Research paradigms	28
2.4.1.1	Positivist or quantitative paradigm	28-29
2.4.1.2	Interpretivist or qualitative paradigm	29-30
2.4.1.3	Mixed method paradigm	30-34
2.4.2	Research site and participants	34-35
2.4.3	Research design	36

2.4.3	3.1 Questionnaires	36-38
2.4.3	3.2 Observations	38-39
2.4.3	3.3 Focus group interviews	39-40
2.4.3	3.4 Research variables	40-42
2.4.3	3.5 Research tools pre-test	42
2.5	Language attitudes in South African higher education	43-47
2.6	Summary	47
Cha	pter 3: Bilingual education and course design	48
3.	Introduction	48
3.1	Bilingual education	49
3.1.1	Definition	49-51
3.1.2	2 Transitional Bilingual Education versus	
	Maintenance Bilingual Education	51-52
3.1.3	The aims of Maintenance Bilingual Education	52-59
3.1.4 Basic Interpersonal Communication Skills and		
	Cognitive Academic Language Proficiency.	59-64
3.2	Dual language instruction	65
3.2.1	Defining the goals of the course	65-66
3.2.2	2 The instructional strategy	67-68
3.2.3	3 Task based language teaching	68-69
3.2.4	4 Tasks organisation	69-74
3.2.5	5 Grammar instruction	74-76
3.2.6	5 Syllabus/curriculum design	76-78
3.2.7	7 Summary	79

Chapter 4: Research methodology and course design		80
4.	Introduction	80
4.1	Research site	80-83
4.2	Research participants	83
4.3	Practitioner research	84
4.4	Data collection methods	84-86
4.4.1	Student questionnaires	86-88
4.4.2	Lecturer questionnaire	88-89
4.4.3	Focus group interviews	89-90
4.5	Procedure for data collection	90
4.5.1	Pilot study	90
4.5.2	Administration of the questionnaire	90-91
4.5.3	Conducting focus group interviews	91
4.6	Dual language instruction course design	92
4.6.1	Course description	92-97
4.6.2	Curriculum	97-98
4.7	Summary	99
Chap	oter 5: Findings and analysis	100
5.	Introduction	100-101
5.1	Data analyses	101-102
5.2	Respondent demographics	102
5.2.1	Student demographics	102
5.2.1	.1 Age	102-103
5.2.1	.2 Gender	103
5.2.1	.3 Home languages	104

5.2.1.4	Racial composition of students at high school	104-105
5.2.1.5	Racial composition of teachers at high school	105
5.2.1.6	Location of students' high schools	105-106
5.2.1.7	High school Language of instruction	106-107
5.2.2	Lecturer demographics	107
5.2.2.1	Age	107
5.2.2.2	Gender	108
5.2.2.3	Proficiency in spoken isiZulu	108
5.2.2.4	First and home language(s)	109
5.2.2.5	Teaching experience	110
5.2.2.6	Highest qualification of lecturer respondents	110
5.3	Language attitudes	110-111
5.3.1	Students' preferred languages of learning	111-116
5.3.2	Students' attitudes towards the use of languages in education	116-130
5.3.3	Students' and lecturers' reflections on the DLI pilot course	130-143
5.3.4	Students' focus group interviews	144-151
5.4	Discussion of results	151-152
5.5	Summary	152
Chapte	er 6: Conclusions and recommendations	153
6.	Introduction	153
6.1	Summary of the main findings	153-157
6.2	Implications of the study	158-159
6.3	Limitations of the study	159-160
6.4	Recommendations for multilingual education policy implementation	n160-162
6.5	Summary	162-163

REFERENCES	164-181
APPENDICES	
Appendix 1 Student Questionnaire 1	182-185
Appendix 2 Student Questionnaire 2	186-189
Appendix 3 Student Questionnaire 3	190-192
Appendix 4 Lecturer Questionnaire 1	193-195
Appendix 5 Focus Group Interview Questions	196
Appendix 6 Focus Group Interview Transcript	197-208
Appendix 7 Dual Language Instruction Course material	209-283

ABBREVIATIONS: IZIFINYEZO

BICS Basic Interpersonal Communicative Skills

CALP Cognitive Academic Language Proficiency

CHE Council on Higher Education

DLI Dual language Instruction

DoE Department of Education

ECP Extended Curriculum Programme

ELL English Language Learner

ESL English Second Language

HEI Higher | Education Institutions

LPHE Language Policy for Higher Education

KZN KwaZulu-Natal

L1 First Language

L2 Second Language

MBE Maintenance Bilingual Education

MTI Mother Tongue Instruction

MUT Mangosuthu University of Technology

RSA Republic of South Africa

SLA Second Language Acquisition

TBLT Task Based Language Teaching

TBE Transitional Bilingual Education

USA United States of America

UKZN University of KwaZulu-Natal

CHAPTER ONE

INTRODUCTION

1. Overview

The aim of this study was to investigate the extent to which a dual language instruction (isiZulu-English) of the Academic Literacy and Communication Skills pilot course conducted at Mangosuthu University of Technology (MUT) in 2008 and in 2010 had an impact on language attitudes of engineering students and their lecturers towards the use of isiZulu at MUT. The study was motivated by the Language Policy for Higher Education (LPHE) that was promulgated by the Department of Education (DoE) in 2002. In the matter of language of instruction the LPHE identifies "the current position of English and Afrikaans as the dominant languages of instruction" (15.1) as "a barrier to access and success in higher education" (5.) because "the majority of [African] students entering higher education are not fully proficient in English and Afrikaans" (5.). For this reason, the LPHE encourages the "development, in the medium to long-term, of South African languages as mediums of instruction in higher education, alongside English and Afrikaans" (21.).

This concern about the medium of instruction has been supported by research (Scott, 2009; Macfarlane, 2007; Van Dyk, 2005; Pretorius, 2002; Butler and Van Dyk, 2004; and Dalvit and De Klerk 2005), all of which indicates that there is a low academic literacy in the language of learning (English) and a high dropout rate among black South Africans who appear to be inadequately equipped to cope with the demands of tertiary education. Scott (2009:20-23) refers to the first sector-wide study that was conducted by the DoE; the academic performance patterns of first-time-entering undergraduates of 2000 and 2001 were tracked for up to five years. The study found that only 30% of the monitored group graduated after five years of study, while 14% were still in the system, having repeated one or more years. Scott (2009: 21) asserts that the DoE study, as well as other data (citing Letseka and Maile, 2008), shows that many of the students who remain after

their first year of registration fail one or more courses, or pass only very marginally. While no student group, when racially grouped, is doing well, the most disturbing figure to emerge from the collective analysis was that the graduation rate for black students was below 35%. Furthermore, under 5% of blacks in the twenty to twenty-four age group were successful in public higher education. Scott argues that this is a clear indication that the majority of undergraduate students have a less-than-adequate grasp of their areas of study. Moreover, the notably poor performance among black students means that equity in higher education is key to the pursuit of social justice and stability and is also a necessary condition for national development (Scott, 2009: 22).

The concern that the language of instruction might be contributing towards the academic issues in South Africa has further been confirmed by students themselves, as seen in a study conducted to determine their reasons for dropping out of university (Macfarlane, 2007). The study, jointly conducted by the Human Sciences Research Council (HSRC) and the Council on Higher Education (CHE), surveyed 3,328 students who had dropped out from seven different South African universities between 2000 and 2002. Macfarlane (2007) reports that the study found that even though finances, poor schooling and inadequate academic teaching and support were among the leading reasons cited by students for their dropping out, an alarming 77% of respondents cited difficulty with their institution's language of instruction as the main reason for their withdrawing from the university.

In the context of the site of the reported study, which is Mangosuthu University of Technology (MUT), the Progression Analysis of the 2003 to 2006 cycle indicates that the throughput rate was nil in some departments such as those of the Faculty of Engineering, the 'home' faculty of this study. One engineering department, which registered 111 students in the first semester of 2003, had a dropout rate of 82% (n=91) by 2005. Out of the remaining twenty students, only four graduated in the set time, while the remaining sixteen had to repeat failed subjects. Worse still, another engineering department enrolled eighty-two students who were due to finish their studies in 2006; not a single student graduated that year. Of the eighty-two students, fifty-six of them (68%) dropped

out, while the rest were held back due to failure. It is these very alarming statistics in the faculty of engineering that prompted this study to investigate these students' (Foundation or Pre-Tech) attitudes to educational alternatives that aim to assist many of them who arrive ill equipped with respect to their academic literacy and communication skills to cope with a tertiary education. Moreover, the focus on this group is in line with the National Commission on Higher Education (NCHE) Report (1996: 34), which stresses the fact that South Africa's output, particularly among blacks, in the natural sciences, engineering and technology is too low, and that more graduates are needed in these disciplines, which are referred to as the "intellectual engine of economic development".

It is however worth noting that the literacy problems among students taught in a second language (L2) is an international crisis. Short and Fitzsimmons (2007: 4) report that only 30% of United States of America (USA) secondary level L2 students read proficiently. An even more dramatic statistic reveals that, of those USA students who took the 2005 National Assessment for Educational Progress exam, only 4% of the English language learners (ELLs) received a reading score that could be classified as 'proficient' or 'advanced'. Bialystok (2002: 161) attributes the USA's literacy and linguistics issues to the weak English skills of its Hispanic students, who are schooled in socially and educationally poor conditions, which compromises their ability to learn effectively.

In the same vein, Scott (2009: 24, citing Slonimsky and Shalem, 2005 and Yeld, 2009) asserts that it is widely agreed within South Africa that an inadequate schooling system and poor socio-economic conditions are the primary causes behind students being under prepared for conventional forms of higher education. This view is also supported by Webb (2007: 2) when he describes the research undertaken by the South African Institute of Race Relations, which indicates that only 8% of black learners (84,741 out of 1,057,935) who started Grade 10 in 2004 passed the final Grade 12 examination in 2006 well enough to obtain entrance to a university. As a result, Scott points out that some universities argue that these factors are beyond their control and that dealing with the consequences is therefore not their responsibility. Scott (2009: 24) argues, however, that HEIs should participate in transforming the country; they should identify those factors

affecting student performance that are within their control and do whatever is reasonable to accommodate talented, yet disadvantaged, students. While it is acknowledge that most of the academic challenges facing the majority of black citizens are not entirely as a result of the use of English second language as the medium of instruction, this study that was undertaken within the field of linguistics however chose to focus on the language of instruction issue as an area of investigation.

In the light of the above concerns, the LPHE therefore requires that black African languages be developed at higher education institutions (HEIs) for use as languages of learning and teaching. As the first step towards achieving this goal, each HEI has to formulate and publish its own language policy that will promote multilingualism. In response to this policy directive, many HEIs in South Africa have since 2003 developed multilingual education policies. MUT's 2003 language policy recognises isiZulu, together with English and Afrikaans, as a regional language. Through the policy, MUT has committed itself to use and develop isiZulu in teaching, in assessments and in its learning materials.

Elsewhere, Kaschula (2005: 22) mentions that while the Senate of the University of Cape Town (UCT) has recommended the continued use of English as the main medium of instruction, the development of glossaries in isiXhosa and Afrikaans is being encouraged. In addition to this, the medical faculty of UCT has made it a graduation requirement that all doctors be proficient in English, Afrikaans and Xhosa. A draft language policy at the University of KwaZulu-Natal (UKZN) promotes bilingualism insofar as both students and staff are required to demonstrate a satisfactory level of competence in both isiZulu and English. The two languages are both to be used as languages of instruction. Moreover, all administrative documents, such as curricula, syllabi and contracts of employment, are to be published in both languages (Pillay, 2007: 62-63). Other universities have also taken steps to ensure greater language development as indicated in their websites (see www.nwu.ac.za, www.uct.ac.za and www.uj.ac.za.)

Despite these policy efforts and the academic issues behind them, this study was motivated by the concern that the LPHE lacks implementation, partly because previous sociolinguistic studies have generally indicated that many African-language-speaking stakeholders do not support the idea of using black African languages in education. This is largely because they view the use of black African languages in education as a means of disempowerment; they would rather learn English so as to enjoy the prestige and privileges associated with it as well as the benefits it affords one in the world of academia and in the economy (Webb, 1991; Bosch and De Klerk, 1996; Maartens, 1998; Dyers, 2000; Vesely, 2000; Barkhuizen, 2001; Chick and McKay, 2001; Ngcobo, 2001; Letsie, 2002; Moodley, 2003 and 2009; Rudwick, 2004; Dalvit and De Klerk, 2005; Makhode, 2005; Bangeni and Kapp, 2007; Verhoef and Venter, 2008). In this matter, a number of scholars contend that the lack of resources and development of black African languages by colonial and apartheid regimes is the reason why many speakers of these languages do not see much relevance to using them in education and they have the mindset that African languages are inferior to European ones (Finlayson and Madiba, 2002; Alexander, 2001; Butler and Van Dyk, 2004; Heugh, 2000; Kamwangamalu, 2003; Makua, 2004). Along this view, St Clair (1982: 164) and Verhoef (1998: 185) are in agreement that South Africans' present attitudes can only fully be understood when one is aware of their past encounters with multilingualism. Although the present study was inspired by the current language education policies that promulgate mother-tongue instruction (MTI), a brief discussion of the past language education policy can help to contextualise existing negative attitudes towards MTI as well as the lack of development of black African languages that prevents them from competing for legitimacy in education and society.

MTI can be traced back to the Bantu Education Act (No. 47 of 1953) that was established during the apartheid era. While the mother tongue principle was also applied to schools catering for Whites, Coloureds and Indians, the problem was that the academic curriculum and the funding of these different systems of education were not the same (Hartshorne, 1992). Unequal education was provided with the sole purpose of preventing African-language-speaking students from developing ambitions outside of their own communities (Hartshorne, 1995: 309-310). Kamwangamalu (1997, cited in

Kamwangamalu, 2003:230) views the inequality in education as the reason black pupils resisted MTI. According to Kamwangamalu, Blacks realised that it was one of the strategies being used by the apartheid government to deny them access to higher education and thus restrict their social and economic mobility. In addition, Heugh (2000) states that opposition to MTI was based on the fact that Bantu Education was perceived as a language policy that promulgated segregated education, separate development, unequal resources and an academically inferior curriculum, which has its repercussions even today as it resulted in the massive under education of the majority of the country's population. Therefore, there is also the possibility that the reason the present multilingual education policies are not finding favour is because they are being viewed with the same suspicion that people had towards the Bantu Education Act.

As a possible solution to address this linguistic challenge, Wildsmith-Cromarty (2003: 138) argues that:

One of the major goals of Applied Language Studies in the current South African context is to seriously challenge this trend [lack of resources and negative attitudes] by working towards the improvement of resources in the provision of materials for the learning and teaching of other official South African languages, and for appropriate and effective teacher training.

In the same vein, the objective of the current Applied Linguistics study was to make a contribution towards addressing the issue of language attitudes by developing a bilingual educational resource. This direction of the reported study was further prompted by the Ministerial Committee's recommendation that each HEI be required to identify a black African language of choice for initial development as a medium of instruction. Makhode (2005: 9) clarifies that the concept of *a medium of instruction* refers to the language that is to be used for teaching the basic curriculum of the education system. To speak of the basic curriculum suggests that courses such as academic literacy and communication skills, which affect particularly first-year English L2 students' academic performance and thus their retention and progression rates (Van Dyk, 2005; Weideman, 2006), could be the first to be considered in this endeavour rather than promoting a total overhaul of the

tertiary education system. It seems that the Ministerial Committee's recommendation is part of an effort to "persuade those who express negative attitudes about the rightness of the policy" to change their minds and to "remove the cause of disagreement", as suggested by Baker (2006b: 211, citing Lewis, 1981: 262).

In the international arena, as a possible approach on how a first language can be used in education while also providing instruction in English, Short and Fitzsimmons (2007: 6) assert that dual language or two-way bilingual programmes are the most successful programmes in the United States of America (USA) for developing bilingual students who can perform at grade level or above (citing Lindholm-Leary, 2006 and Thomas and Collier, 2002). Nationally, Ndhlovu (2008: 138-139, citing Mazrui and Mazrui, 1998: 115), outlines the concept of one's right to language to mean "[...] the right to use the language one is most proficient in, as well as the right of access to the languages of empowerment and socio-economic advancement." Ndhlovu argues that if, for political, economic or other reasons, a person is denied access to a language that is crucial to ensuring his upward social mobility, then that person's right to language will have been violated and they will have suffered a form of marginalisation. Therefore, while it is critical to use black African languages in education in an effort to ensure equal opportunities for all, it is, at the same time, equally important not to deny students access to the dominant languages of society, which are English and Afrikaans. It is for this reason that South Africa's new multilingual policies can be described as being truly democratic in that they promote the use of more than one language and simultaneously emphasise that this is a matter of *choice* for each individual. In other words, while the general status and the need for the development of black African languages has been acknowledged, it has not been done in a manner that would prevent Africans from acquiring and developing English proficiency, which many consider necessary for empowerment.

Therefore, an instructional approach that draws from an L1 as a resource in the presentation of information in L2 might be favourably received by African students. This consideration is informed by previous sociolinguistic studies that indicate that there is no

outright resistance among black South Africans towards the use of black African languages in education. Rather, as Koch and Burkett (2005: 1091) argue, South African research on the attitudes of African-language speakers towards mother tongue instruction (MTI) indicates a strong preference for a MTI programme that provides quality education and that at the same time contributes to one's English proficiency (citing De Klerk, 2002; Heugh, 2002; Markdata-Pansalb, 2000; Rudwick, 2004; Dalvit, 2004).

In a similar way, Schreiner and Hulme (2009: 71) note that post-secondary educators tend to focus on students' areas of weakness, assessing their abilities at entry level and then placing them in remedial courses. Although this deficit-remediation strategy is designed to promote student access, it may actually serve to undermine students' motivation, their effort and their investment in the learning process. Schreiner and Hulme suggest that an approach which focuses on students' strengths so as to address their weaknesses is more likely to have a positive effect on students' motivation, as it encourages them to build on what already lies within them. Schreiner and Hulme (2009: 72, citing Clifton and Harter, 2003) refer to this approach as the *strength-based philosophy*. It is perhaps in this regard that Webb (2004: 149) is of the view that "the use of the African languages as the media of instruction (MoI) will contribute towards more effective educational development, higher levels of knowledge acquisition among learners and better understanding and skills development".

It is however important to note, as Hornberger (2003: 450) points out, that mother tongue literacy as an alternative or complement to literacy in the national language (English) may have the following practical limitations: inadequate vocabulary to match L2 terminology, a shortage of educational materials, and problems surrounding the choice of L1 (in cases where there are many) for mother tongue literacy instruction. These are indeed some of the challenges faced by the present South Africa government in its endeavours to promote and develop the use of black African languages in education. For this reason, the pursuit of the use of black African languages as media of instruction in the South African context needs to consider these impeding factors.

On an optimistic note, it is encouraging to learn that since 1994, various attempts have been made – by various government departments, affiliated bodies and researchers – to address some of the practical limitations to mother tongue literacy. Wildsmith-Cromarty (2008: 148) indicates, for instance, that government efforts have included the provision of language service divisions, lexicography units, terminology services and language boards. The Project for the Study of Alternative Education in South Africa (PRAESA) was also established to investigate the feasibility of extending the use of black African languages in education. The objective of the study was to determine whether or not it would be advisable to initiate dual-medium (isiXhosa and English) education models in primary schools. Researchers such as Ramani, Kekana, Modiba and Joseph (2007: 207), argue that "African languages in their current form are sufficiently developed to be used for rational modern academic discourse in tertiary institutions." Ramani et al. (2007) state that the absence of specialist terms in black African languages can be compensated for through the use of well-documented practices of translators, such as transference, transliteration and omission. Ramani et al. indicate that their argument is based on their experiences of conceptualising and implementing a dual-medium undergraduate BA degree (in Sesotho sa Leboa and English) at the University of Limpopo in the School of Languages and Communication.

Additionally, some scholars and publishers have shown their commitment to transformation in education through the publishing of multilingual books. One example is Young, D.N., Van der Vlugt, J. and Qanya, S. 2005. *Understanding Concepts in Mathematics and Science. A Multilingual Learning and Teaching Resource Book in English, isiXhosa, isiZulu, Afrikaans*, printed by Maskew Miller Longman. Another example is a 2005 *Multilingual Glossary of Economics Terms* that is also published by Maskew Miller Longman in which eleven languages are used to explain the most important terms or concepts in Economics. In the introductory section of the glossary the publishers explain why they have provided a multilingual glossary in eleven official languages in South Africa:

Pearson Education is committed to making sure that all students have equal opportunities to understand their subjects and pass their examinations. We believe that in a multilingual country, language should not be the reason why some students struggle to learn and others do not.

Yet in spite of all these efforts, the multilingual education policies, the research and the institutional projects, there has not been any full-scale implementation of the LPHE in South Africa's HEIs.

The only higher education institution that has reportedly made some notable strides in language education policy implementation is the University of Limpopo which has a dual-medium Bachelor of Arts in Contemporary English and Multilingual Studies (BA CEMS) degree in which an African language, Northern Sotho, and English have since 2003 been used for both instruction and assessment. The degree has the highest pass rate of 92% in the university and the majority of the students have completed the degree in the stipulated three years of study. Despite this success rate the BA CEMS is reportedly also a site of contestation due to some academics' and students' negative attitudes to the use of an African language to teach university-level content (*Mail and Guardian*: Beyond matric, page 4, April 16 to 22, 2010). This would explain why, after so many years since its introduction, no other degrees have followed suit in this institution nor have any others in the country. Attitudes are therefore key to the success in multilingual education policy implementation.

According to Dalvit and De Klerk (2005, citing Alexander, 2001; Sweetman-Evans, 2001) one forum for advocating change is HEIs since the higher education community is believed to be the leader in transforming mindsets. The MUT has in this study consequently been selected as one particular HEI in which to advocate 'attitude change' among academics and students.

1.1 Problem statement

There is a high failure and drop-out rate among English second language students at tertiary level institutions in South Africa. In spite of a LPHE being in place that supports the use of black African languages in universities, the crucial role played by English in accessing knowledge and educational resources and the opportunities that it provides when entering the workplace militate against its implementation. Moreover, language attitude studies that have been conducted among university students and various stakeholders in education indicate that there is currently very little support for policies that promulgate the sole use of African languages in education.

1.2 Aims of the research

The **aim** of the study was to investigate the extent to which attitudes towards the role and/or use of isiZulu in higher education can be changed by presenting it alongside English in an Academic Literacy and Communication Skills course offered to foundation engineering students.

In taking this direction, the reported study has identified one of the major weaknesses of previous studies on language attitudes, as being the fact that they have not been conducted in tandem with a course that utilised a home language alongside English as a medium of instruction to enable the respondents to make an informed choice about the benefits of each. In an effort to canvass support from students and their lecturers of academic literacy and communication skills the present study develops bilingual teaching and learning materials in which isiZulu is used alongside English in the presentation of information. It is in the present study hypothesised that if participants in this DLI pilot course perceive the material to be effective in helping them to teach and to learn, then they might see value in MTI and show support for the development and use of black African languages in HEIs.

To investigate this hypothesis, language attitudes are surveyed pre- and postparticipation in the DLI pilot course. The main method of data collection is the use of questionnaires complemented by focus group interviews among students. Furthermore, the views of lecturers who teach the course are sought through a questionnaire that comprises of both closed and open questions.

1.3 Research question

To what extent can attitudes towards the role or use of isiZulu in higher education be changed by presenting it alongside English in an Academic Literacy and Communication Skills course offered to foundation engineering students?

1.4 Contribution of the study

The current study may potentially make several contributions towards language attitude research in South African higher education.

Firstly, the role of L1 and bilingual instruction in education has largely been investigated at primary school level and in countries where those who speak another language to the one used in educational institutions are in the minority (Christian, 1996; Snow, 1998; Alanis, 2000; Baker, 2001; Hoffman, 2001; Slavin and Cheung, 2003). In contrast, adult English second language (ESL) literacy is a relatively new field that has received scant attention from researchers (Condelli and Wrigley, 2005: 7). There is thus a need to investigate and discover what is the most effective and efficient approach to developing academic literacy and communication skills material in two languages for use among adult ESL students in a multilingual country such as South Africa where second language speakers of English are in the majority.

Secondly, sociolinguistic studies conducted among various stakeholders in South African education have shown that attitudes towards the use of African languages in instruction are, in general, negative or mixed. However, some of the previous sociolinguistic studies of various stakeholders' language attitudes have tended to investigate the stakeholders in separation from one other. In other words, the focus has mostly been either exclusively on parents (De Klerk, 2002a; Mhlanga, 1995; Webb, 1996), exclusively on educators (De Klerk, 2002b; Ngcobo, 2001), or exclusively on students (Bekker, 2002; Dalvit and De Klerk, 2005; Dyers, 2002; Dalvit, 2004; Zungu, 1998). In cases where there are exceptions that combined, for example, teachers and students, this has been done at school level (Moodley, 2003) and a few at university level that combined all staff members with all students (Moodley, 2009). It is possibly because of this research gap that Mehisto and Asser (2007, citing Baetens and Beardsmore, 2002: 22) emphasise the need for researchers to coordinate their efforts and to also broaden their studies so as to include essential stakeholders in their investigations. With this advice in mind, the current study is significant in that it investigates together the attitudes of particularly language lecturers and their students of academic literacy and communication skills, an area which has largely been neglected. Yet Zeng and Murphy (2007: 1) argue that language teachers' attitudes towards new teaching approaches are important because:

Teachers' experiences or memories of their days as students may include a repertoire of teaching strategies, assumptions about how students learn and a bias toward certain types of instructional materials.

Moreover, the position occupied by language lecturers in education can sometimes make their attitudes more important than those of the parents or the community in general (Larsen-Freeman and Long, 1991). The suggestion is that if English lecturers believe English is the only language that should be used in the English language class, this will then inform their teaching practices. They might, among other things, discourage their students from using their first language as a learning resource and also not support any policy endeavours that suggest otherwise. A potential consequence of this is that students will be influenced by their lecturers' attitudes towards home languages and so consider maintenance of their home language and culture as unimportant. As students leave their

tertiary institutions to join the country's workforce and adult community, they could then potentially perpetuate this linguistic marginalisation. But if, on the other hand, English lecturers see value in and support the use of the students' L1 in the production of teaching materials the implementation of multilingual education policies would be encouraged. The English lecturers' use of teaching materials that draw from MTI might also influence students positively towards the role of the L1 in education. This assumption remains, however, to be investigated.

Thirdly, previous studies on language attitudes among academics and students (e.g. Moodley, 2009) have not provided their respondents with any practical experience of MTI before eliciting their attitudes. Therefore, the previous results have been purely based on beliefs rather than on knowledge gained from experience. The main contribution of the current study is that it is conducted in tandem with the use of dual language instruction (DLI) course material developed by the researcher.

Lastly, the study is the first one of its kind at MUT in that it uses an African language in its teaching and learning material for a pilot course in academic literacy and communication skills to engineering students. Hence its findings could be of value not only to other ESL instructors in the Department of Communication but also to lecturers of content subjects in other departments on campus. The study could further be of value to colleagues from other HEIs involved in the design of multilingual instructional materials and multilingual education policy implementation.

1.5 Key concepts in the study

This study investigates the impact of the use of a first language alongside English, in what is termed a dual language instruction pilot course in academic literacy and communication skills, on language attitudes of students and their lecturers. There is thus a need to explain a number of key concepts that are relevant to this thesis.

1.5.1 Language Attitudes

The operational definition of the concept *attitude* adopted in the current research is that it is "a feeling, reaction or emotional disposition" (Batibo, 2005: 97) that can either be favourable or unfavourable (Ajzen, 1988, in Baker 1992: 11) towards "a language or towards a feature of language, or towards language use, or towards language as a group marker" (Cooper and Fishman, 1974: 6). The definition is appropriate for a study that investigates attitudes towards the use of isiZulu in higher education.

1.5.2 Dual language instruction (DLI)

The terms bilingual education and dual language education are often used interchangeably to refer to programmes or courses that provide instruction in, and through "two languages" (Christian, 1996: 66; Goldenberg, 2008: 11). Similarly, the teaching and learning material that is developed and piloted as part of this study uses two languages (isiZulu and English) and is consequently called a dual language instruction (DLI) pilot course. The course is piloted among engineering students in a bridging programme that is interchangeably referred to as Extended Curriculum Programme (ECP), Foundation and Pre-Tech students throughout this thesis.

1.5.3 Academic literacy

Academic literacy is understood to mean a variety or register that "is used in higher education instruction and in readings characterised by specific linguistic features that are associated with academic disciplines" (Helmberger, 2006: 66). It may include communication skills that students need in order to be able to interact with others in a range of formal and informal situations that could be academic, vocational or social in nature (Ager, 2001; August and Hakuta, 1997; 2001; Weideman, 2003; Wong-Fillmore and Snow, 2000). Hence, the present study develops and pilots a course in academic literacy and communication skills with specific focus on engineering discipline.

1.5.4 Mother tongue

The terms *mother tongue* or *first language* (L1) are used interchangeably to mean a primary language, that is, the language of the immediate environment of the participants that is used most often in everyday life, rather than the language of the mother or father (Webb, 2004:150; Fasold, 1997:267). IsiZulu is viewed as a primary language that is well suited as a language of education at MUT since it is the predominant African language in this tertiary institution, in KwaZulu-Natal (81%) and also in the country (23,8%) (Statistics South Africa, 2003).

1.6 Structure of the thesis

The thesis comprises seven chapters. The present chapter (1) describes the background information, research problems, aims and objectives, research questions, contribution, chapter breakdown and key concepts. Literature pertinent to the study is outlined in Chapters 2 and 3. Chapter 2 explores theories on language attitudes while chapter 3 focuses on bilingual education theories, and the development of dual language instructional (DLI) materials. Chapter 4 discusses the research methodology and the DLI course design of the present study. The results are presented in Chapter 5. Chapter 6 presents a summary of major findings, the study's limitations, the recommendations, the implications and the conclusions. The reference list and a full set of appendices conclude the thesis.

CHAPTER TWO

LANGUAGE ATTITUDES

2. Introduction

The research paradigm adopted in this thesis is *educational sociolinguistics*, a subfield of sociolinguistics that examines the relationship between language and education (Mesthrie, Swann, Deumert and Leap, 2000: 354). The specific relationship the study seeks to investigate is that between language attitudes and bilingual education. Language attitudes, in this instance, pertain to the participants' views on the use of a first language (L1) (isiZulu) alongside a second language (L2) (English) within an educational approach known as dual language instruction (DLI) in a higher education environment. This chapter presents a review of literature on the nature of language attitudes. The different theories on language attitudes in education are reviewed while bilingual education is discussed in the next chapter.

The chapter is organised into three sections, firstly, it deals with the nature of language attitudes within the context of the broader concept of *attitudes* research as understood within the mentalist versus behaviourist theoretical framework. Secondly, multiple and unitary views of the structure of attitudes and the related language attitudes are explored in relation to notions of instrumental and integrative motivation in second language learning. Thirdly, language attitudes in the South African context are discussed.

2.1 The nature of language attitudes

According to Romaine (1995: 288), *attitude* is a general concept that can be derived from a person's answer to a specific question and has its history in the fields of linguistics, education and social psychology. In a case where the question of the study has to do with language, the concept *language attitude* is used (Smit, 1996: 31). The lack of a clear definition of the concept *attitude* has in turn led to a high number of diverse definitions

that "often reflect the differing theoretical or research interests of the particular studies from which they stem" (Agheyisi and Fishman, 1970: 137). For this reason, it is common for researchers to settle for operational definitions that suit their particular research (Smit, 1996: 25). One of the ways that has been used to understand the nature of language attitudes is to define them in terms of the two theoretical approaches which are the *mentalist* and the *behaviourist* view.

The *mentalist* definition of the concept *attitude* is that it refers to "a feeling, reaction or emotional disposition towards an idea, concept or phenomenon" (Batibo, 2005: 97) that can either be favourable or unfavourable (Ajzen, 1988, in Baker 1992: 11; Edwards, 1994: 97) or both positive and negative (Baker, 1988: 112), in which "we must depend on the person's reports of what their attitudes are" (Fasold, 1984: 147). This is what the investigation of attitudes generally aims to establish from its respondents, that is, how the respondents report their reactions towards an idea or object, such as, the use of language in education.

Specifically regarding *language attitude* research this can entail "attitudes towards a language or towards a feature of language, or towards language use, or towards language as a group marker" (Cooper and Fishman, 1974: 6) and these attitudes are "organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1954: 45 in Agheyisi and Fishman, 1970: 138). This broad definition suggests that the investigation of *language attitudes* can for instance; seek to establish the participants' expressed reaction towards the idea of using a particular language in education. The participants' reaction is likely to be based on their experience, whether positive or negative, of the idea under investigation. The essential meaning of this definition is that *attitudes* are what people report to be their reaction to a specific question about language(s). In this sense, the reaction can provide some understanding, rather than the absolute truth, on how people as a group feel about the language in question.

In contrast, the *behaviourist* defines *attitude* as overt behaviour or people's response to specific social situations or stimuli (Allport, 1954:45 in Agheyisi and Fishman, 1970: 138; Fasold, 1984: 147). The behaviourist definition is restrictive in that it suggests that by merely observing people's behaviour, a researcher can be in a position to report on their language attitudes. This can, for instance, imply that if the researcher observes the use of more than one language in an educational context, they can conclude that the students and the lecturers in that context have positive attitudes towards multilingual education. This might however not necessarily be the case, as there could be other unknown reasons that influence this behaviour. For instance, it has been observed that in many settings where English language teachers and students share a common language and culture, there is a tendency to either mix languages (commonly known as codeswitching) or simply teach English through the native language in order to overcome communicative difficulties (Poole, 2005: 52, cites Adendorff, 1998; Vavrus, 2002; Yu, 2001). However, investigations into attitudes have revealed that:

[...] not everyone acknowledges the value of CS [code switching] as a resource that fulfills a variety of social and pedagogical functions: a few hold intensely negative attitudes toward CS and denigrate it; others feel that it serves its purpose in informal arenas but should be proscribed from formal domains such as school; [...]. (Moodley, 2003: 344)

Therefore, attitudes can be defined from either a mentalist or a behaviourist perspective. However, each of the definitions has its own strengths and weaknesses.

2.2 The structure of attitudes

A further distinction between the *mentalist* and the *behaviourist* theoretical approach is to be found in the different views held about the structure of attitudes. Scholars such as Agheyisi and Fishman (1970: 139, citing Rokeach, 1968), Baker (1992: 12-13), Deprez and Persoons (1987:125), Fasold (1984:148) and Triandis (1971: 142) view the mentalist structure of attitudes as consisting of three components: the *affective*, the *cognitive* and the *conative/behavioural*. In contrast, proponents of the behaviourist approach view

attitudes as a unitary component that only has *affect* (Agheyisi and Fishman, 1970: 139, citing Fishbein 1965, 1967).

The mentalist approach explains that the *affective* component refers to a person's positive or negative feelings towards a subject or object, such as a language use (Baker, 1992; Triandis, 1971). A respondent could therefore be asked to indicate if they agree or disagree with a statement regarding the usefulness of first language instruction within an education system when their experience has been in a second language, such as English. Affective is therefore based on experience. The *cognitive* component is concerned with those thoughts and beliefs that would cause a person to rank different languages in accordance with their perceived significance when it comes to different social situations (Baker, 1992; Triandis, 1971). For instance, black African languages are often associated with cultural identity by those who would have experienced them in this way and as such, are thought to be best suited for social use when among people who speak the same language (Rudwick, 2004). In contrast, English is often seen as being a common national and international language, helpful for economic and educational advancement (De Klerk, 2002b; De Wet, 2002). Lastly, the behavioural component refers to how respondents' feelings determine their actions toward certain languages (Baker, 1992; Triandis, 1971). In other words, if, for instance, a person claims to think positively about a language, then it could be reasonably expected that the same person would be in support of its use, development and maintenance within society. It is then necessary for a mentalist investigation into communities' feelings and thoughts about languages to investigate those actions that individuals would be prepared to support. Therefore, attempts to encourage attitude change might need to take all three components of attitudes into account.

As Triandis (1971:142) suggests, one of the ways by which attitudes can be changed is:

[...by] first changing the cognitive component (e.g. with new information), the affective component (e.g. by pleasant or unpleasant experiences in the presence of the attitude object) or the behavioural component (e.g. by norm or behavioural changes).

This suggests that if subjects are given new information and have positive experiences connected to it they are then likely to begin perceiving the subject in question in a new, positive light. Ultimately, they might indicate support for behaviour directed at the promotion of that subject. However, as indicated above, things do not always occur this smoothly in reality. There can be contradictions between what people think they believe and the manner in which they sometimes behave. That is why it can be necessary to follow up the responses to survey questionnaires with individual or group interviews to establish clarity on areas that appear to be contradictory or confusing.

For instance, Ngcobo's (2001: 17) mentalist approach to the investigation of language attitudes found that black African educators expressed negative feelings (affective component) towards the use of English in black primary schools. However, later in the same questionnaire, when they were asked to indicate the kind of school to which they sent their children, it was found that they sent them to English-medium schools (the behavioural component), where the teaching of black African languages was either substandard or non-existent. Subsequent interviews indicated that their behaviour was motivated by the quality of education of these schools, and the desire to expose their children to an environment that might assist them in developing fluency in English. Their desire for their children to be fluent in English was motivated by their perception of English as the language of success in the business environment, and was not necessarily an indication of any emotional attachment to English. The results of Ngcobo's (2001) study enable an understanding of two things about the investigation of attitudes. Firstly, the mentalist approach cannot accurately predict behaviour as there could be a contrast between expressed views and behaviour in other contexts. Secondly, behaviour is also not an accurate indication of attitudes, as there could be other factors at play that influence such behaviour. Therefore, mixing mentalist and behaviourist research methodologies has the potential, despite its own challenges, to lead to a deeper understanding of the sociolinguistic issues under investigation.

Alternatively, the behaviourist to whom attitude is a unitary component (affect) makes a distinction between attitude and belief. According to Agheyisi and Fishman (1970: 139,

citing Fishbein, 1965, 1967), beliefs consist of only the *affective* component, while attitudes comprise of both *cognitive* and *conative* components. This is explained to mean that people with the same beliefs can hold different attitudes, and people with the same attitudes can have different beliefs. Clearly, this indicates that the relationship between attitudes and beliefs is complex; this makes it difficult for the researcher to determine if there is a relationship between expressed attitudes and held beliefs. What this distinction at least achieves, is to inform researchers to exercise caution before trying to equate the two.

To sum up, attitudes can generally be defined using the mentalist and behaviourist theoretical framework. Linked to these two frameworks is the structure of attitudes that can either be viewed as composed of multiple or unitary components. Following the foregoing discussion, the operational definition of the present study is mentalist as the study aims to investigate the respondents' reactions about language use and their attitudes are explored as comprised of multiple components. In this case, the study examines the extent to which individuals agree or disagree with the use and/or role of a language in education. The study provides the respondents with some experience with different languages in education to assess the impact this experience might have on attitude change. The respondents are then asked to indicate if they would support certain behavior regarding language use in education.

Having reviewed the divergent theories on attitudes, the mentalist and the behaviourist, it is necessary to also review literature relating to research methods that can be considered in the investigation of attitudes.

2.3 Language attitudes and motivation

Language attitudes and attitude change can further be understood in terms of the rationales that motivate individuals to support the development or the learning of one language over another or more than one language. The two concepts used by Gardner and Lambert (1972, in Baker 1992) to highlight the phenomenon of motivations underlying the reasons for learning of a language are: instrumental and integrative. Baker (1992: 32) maintains that instrumental motives include utilitarian reasons such as vocation, status, achievement, personal success or basic security, and survival. contrast, integrative motives are mostly based on social and interpersonal reasons: speakers want to learn a language so that they can interact with speakers of that language (Baker, 1992: 32; Romaine, 1995: 43-44). Gardner (1985) argues that integrative motives lead to better success in language learning than do instrumental motives. For instance, community members' reasons for learning a second language while maintaining their first language could be that they foresee there being long-term value in being bi-/multilingual. The individuals may therefore have decided that in order to communicate successfully in their future career and within a bi-multilingual society in general, they will need knowledge of more than one language. Alternatively, if one language (e.g. English) is considered to be of greater usefulness than is another (e.g. isiZulu), people may choose to only develop L2 without maintaining their own L1 to the point that they become monolingual. This is the case in Africa, where African parents that can afford to send their children as early as possible to schools where English is the only language used, do so. As a result, these African children grow up to be monolingual since they end up speaking only English (Ndimande-Hlongwa, 2009: 93; and Igboanusi, 2008: 724, cites Adegbija, 2004; Babajide, 2001; Oyetade, 2001).

Romaine (1995: 314), however, states that a number of surveys point to there being some difficulty in applying Gardner and Lambert's dichotomy to actual circumstances. Romaine attributes this to the fact that it is not always easy to discern one particular type of motive behind a person's wanting to learn a new language. This holds true in the multilingual context of South Africa in that the decision to learn English could be based

upon a mixture of both integrative and instrumental reasons or upon just one of the two reasons, depending on the persons' circumstances.

Romaine (citing Baker, 1988: 160-1) further cautions researchers against the danger of transferring findings from one bilingual context to another. For instance, in countries such as the United States of America (USA) and the United Kingdom (UK) where English speakers are in the majority, the integrative reasons for learning English are stronger than in South Africa where English-speaking people are demographically in the minority. Similarly, studies conducted within different contexts in South Africa have produced conflicting results concerning the issue of motives as it applies to language acquisition. While most studies indicate that English development is favoured for instrumental reasons, there is also a growing body of research that points to the fact that black African languages are preferred as languages of future career use (De Klerk, 2002a; and Mhlanga, 1995). This suggests that the categorisation of motives can be problematic.

Having reviewed previous studies, Weger-Guntharp (2008:14-18) argues that, while the most commonly researched motives towards learning another language are integrative and instrumental, there are many other motivations that have since been studied within a variety of contexts. For instance, Weger-Guntharp reports that Kimura et al. (2001) discovered an intrinsic-instrumental-integrative motive as well as an extrinsicinstrumental motive. Yashima (2000, cited in Weger-Guntharp) describes other motives as being: a vague sense of necessity, the need to work in the international community, being international-minded, and an interest in American/British music. A study by Lamb (2004, cited in Weger-Guntharp) on why many Chinese citizens were learning English, found that coded motives were not easily divided into integrative and instrumental categories. Of more relevance here is Chen et al. (2005, cited in Weger-Guntharp) argument for what they term the *Chinese imperative*. This refers to the strong internal desire of learners to perform well academically as a marker of their Chinese identity. In the South African context, Rudwick's (2004: 165) study indicates that isiZulu speakers of the young, urban generation express pride in their own language and are keen to maintain it, as they consider it to form part of their identity. At the same time, isiZulu speakers

acknowledge the prestige afforded by English in relation to work and one's social positioning. Rudwick argues that her data strongly supports the claim that many African-language speakers have a love-hate relationship with the English language (citing De Klerk and Gough, 2002: 370). She further states that her results suggest that there exists little indication that learners identify with English other than perceiving it as an instrument for obtaining academic and economic success.

Weger-Guntharp (2008:14-18) further points out that an instrumental motivation can also contribute towards achievement in learning a language. Weger-Guntharp refers to a study by Dornyei (1990) in which it was found that instrumental motivation was an important factor for language learning achievement, but only as regards an intermediate level of proficiency. Weger-Guntharp further suggests that an instrumental motivation may not be perceived by Lebanese learners of English as a motivating factor for exerting more effort and developing high expectancy in English because they are less likely to use English in their daily lives (citing Shaaban and Ghaith, 2000: 636). Similarly, this suggests that black South Africans who anticipate working among other black Africans (where they are all likely to use an African language more than English in their everyday communications) might not see much value in developing a high level of English proficiency.

To sum up, the foregoing discussion presents the rationales that people might have for attitudes towards a language or variety as very complex. While the integrative and instrumental motivations for learning a language are commonly used to measure attitudes there are however many other motivations that have since been uncovered. For this reason, researchers need to be careful when making generalisations about their findings since there could be a wide complex variety of reasons that people might have for holding certain attitudes. Next, the review of language attitudes research methods is undertaken.

2.4 Language attitudes research methods

Language attitudes can further be understood in terms of research methodology and measurement techniques. Three categories of research methodology are relevant for a study of language attitudes: the analysis of the societal treatment of language, the indirect measurement of language attitudes and the direct measurement of language attitudes (Ryan, Giles and Hewstone, 1988; Ryan, Giles and Sebastian 1982; Garrett, Coupland and Williams, 2003).

Firstly, the use of the societal treatment of language as a research method can involve the analysis of content that is available in the form of language policies, government and business documents, literature, newspapers and, broadcasting media. This research method includes participant-observation, ethnographic studies and case studies (Ryan et al. 1982: 1068; Ryan et al. 1988: 7; Garrett et al. 2003: 15). The analysis of written documents can be undertaken as a study on its own or be part of a study that combines it with another research method. For instance, the analysis of policy documentation could form the primary sources of the investigation while review of the relevant literature could form part of secondary sources that provide the theoretical framework of the study. In addition, the study could adopt the participant-observation or another methodology as means of data collection.

Secondly, in the indirect measurement approach, the participants are not aware that their language attitudes are being investigated. This can involve the respondents' evaluation of 'speakers' on various qualities (e.g. intelligence, education, status) in a tape-recording in which they are not aware that the same bilingual or bidialectical speaker reads a text in different ways. Since the speaker does not change, it is assumed that the judgement made by the respondents is based solely on personal qualities. The measurement tool used is known as the matched-guise technique (MGT) (Ryan et al. 1982: 1069; Ryan et al. 1988: 8; Garrett et al. 2003: 53).

Lastly, the direct measurement of attitudes entails the investigation of language attitudes through the use of explicit questions in the form of survey questionnaires and/or interviews. The questions can include self-reports regarding language use, language preference, desirability of bilingualism and bilingual education, and opinions on shifting or maintaining language policies (Ryan et al. 1982: 1068; Ryan et al. 1988: 7; Garrett et al. 2003:15). Furthermore, direct measurement can include longitudinal studies of attitudes which facilitate tracking changes in a construct over time (George, 2000: 213). George (2000: 213, citing Willett, 1994: 671) argues that measuring change over time is important in educational research because "education is intended to foster learning, to bring about changes in attitudes, achievement, and values". In the same vein, Bangeni and Kapp (2007) criticize measuring attitudes at a single point in time by arguing that attitudes are not stable. Bangeni and Kapp's (2007) longitudinal study of attitudes suggests that a shift can take place in attitudes during a course of students' enrolment at university.

Erickson (1986) asserts that the direct measurement approach is an important consideration in empirical research because:

Those studied, especially those studied as focal research subject, need to be (a) as informed as possible of the purposes and activities of research that will occur, and of any burdens (additional work load) or risks that may be entailed for them by being studied. Focal research subjects also need to be (b) protected as much as possible from risks (Erickson (1986: 141).

This is because social research can intrude into people's lives and privacy when it probes their feelings and attitudes. People participating in a study therefore need to be made aware of what the study entails and their rights in choosing whether to participate or not. This information can be provided on the cover page of the questionnaire or be explained to the respondents. Research conducted by Ladegaard (2000) indicates that the direct measurement of attitudes, if appropriately used, is a better predictor of actual linguistic behavior than the indirect approach. However, views on the validity of direct methods research results vary among scholars (Smit, 1996: 45), as illustrated in the next discussion on research paradigms.

2.4.1 Research paradigms

The choice in different research methods and measurement techniques can be informed by an understanding of different theoretical assumptions that represent fundamental differences in assumptions about social science research. Hence, this section reviews different theoretical assumptions about social science research by which a study can proceed in order to answer its research questions. Bassey (1990: 41, in Burton and Bartlett 2009: 18) terms a set of research ideas a 'paradigm' which is defined as "a network of coherent ideas about the nature of the world and of the functions of researchers." Furthermore, within each paradigm there is "a general consensus on the research methods that are appropriate" (Burton and Bartlett 2009: 18). In the following section three research paradigms and their associated research methods are discussed: positivist or quantitative paradigm, the interpretivist or qualitative paradigm and the mixed method paradigm.

2.4.1.1 Positivist or quantitative paradigm

Positivism is based on the premise that for quantitative research, "knowledge about the social world can be obtained objectively" (Thomas, 2009: 74). To achieve this, the positivist will conduct experiments, "producing findings that are unaffected by the opinions and hopes of the researcher" (Burton and Bartlett 2009: 19). This often involves having two identical groups; a control group to which nothing is done and the experimental group which is subjected to some changes in conditions. In so doing, the aim is to identify differences between the two groups that are as a result of changes in variables that are being studied. However, in cases where it is not possible to have two identical groups, the same group can be subjected to some changes in condition and examined at different times.

The data collection approach favoured in the positivist paradigm by many applied researchers is the quantitative research method (Neuman, 1997: 63). This is defined as a social inquiry that relies on numerical measurements to conduct a comparative statistical

analysis of different variables using a prepared questionnaire with specific items to which subjects must respond by choosing from a predetermined set of scaled responses so as to determine if the predictive generalisations of one's theory hold true (Bless and Higson-Smith, 2000; Creswell, 1994; Denzin and Lincoln, 1998; Henning, 2004; Neuman, 1997). In particular reference to quantitative sociolinguistics, it is a "paradigm in which researchers want to gather data on language use from which its general rules can be induced" (Cameron, Fraser, Harvey, Rampton and Richardson, 1992: 201). The rationale behind the use of quantitative research is that linguistic variables can often be counted or quantified (Wray, Trott and Bloomer, 1998:79). In the process of measuring the ways that variables varied and in drawing conclusions, researchers should however try to be "as objective and neutral as possible" (Thomas, 2009: 74-75).

2.4.1.2 Interpretivist or qualitative paradigm

In contrast to the positivist or quantitative paradigm, the interpretivist or qualitative paradigm is based on the principle that there is no one objective reality that exists outside of the respondents' explanations, but there are different versions of events (Burton and Bartlett, 2009: 21). For instance, students, teachers and parents might have different views on what happens in education and will act according to how they interpret events. The role of a researcher within the interpretivist paradigm is to seek to 'understand' these actions using 'naturalistic' forms of data collection, such as "making use of individual accounts and biographies and often including detailed descriptions to give a 'feeling' for the environment' (Burton and Bartlett, 2009: 21).

Individual accounts can be obtained by providing participants with an open-ended way of presenting their views, which they do in their own words (Creswell, 1994: 4; Denzel and Lincoln, 1998: 8; Henning, van Rensburg, and Smit, 2007: 5). The most common methods of data collection in the interpretivist or qualitative paradigm are interviews and observations (Neuman, 1997; Punch, 2009). In this sense, a researcher who adopts the qualitative approach is interested in the "qualities of the phenomenon" (Henning, 2004:

3) as perceived and understood by the participants of a particular situation or event (Burton and Bartlett, 2009: 22). Researchers should "interpret the expressed views and behaviour" as participants in their "research situation" (Thomas (2009: 75). However, Thomas cautions that the researcher's level of involvement does not absolve them "from the imperative to approach the question in a fair and balanced way" (2009: 75). This requires that the researchers should at least recognise and acknowledge that their position might affect their interpretation of findings in a subjective way.

2.4.1.3 Mixed-method paradigm

Johnson and Onwuegbuzie (2004: 17) broadly define mixed-method research as:

[T]he class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study.

The definition indicates that there are few limits to what can qualify a study as mixed in its approach. The definition includes the simple use of different languages which suggests that a study that uses a questionnaire composed of more than one language qualifies as mixed research. However, Johnson and Onwuegbuzie (2004: 20) further clarifies that there are two different instances according to which a study can be described as mixed; *mixed-model* designs and *mixed-method* designs.

On the one hand, mixed-model designs are constructed by mixing qualitative and quantitative approaches within and across the stages of research. In this respect McDonough and McDonough (1997: 220) indicate that the kind of social science research that uses both qualitative and quantitative data collection and analysis strategies may be linked to evaluation studies with implications for education policymaking. The researcher can, for instance, mix the two approaches to evaluate, using different methods, how the participants in a particular society react to a new policy. Such an approach can

provide significant data that can have implications for the success or failure of the implementation of the policy in question.

On the other hand, Johnson and Onwuegbuzie (2004: 20) explain that mixed-method designs require the researcher to make two primary decisions:

- (a) whether to operate largely within one dominant paradigm or not, and
- (b) whether to conduct the phases concurrently or sequentially.

In (a), the assumption is that the researcher can conduct the study within one paradigm, e.g. quantitative, using mainly questionnaires. In addition to this, the researcher can gather another set of data, e.g. focus group interviews, which is associated with the qualitative paradigm. Punch (2009: 296) refers to this approach as embedded mixed design because "one data set plays a supportive secondary role in a study based primarily on the other data type." In such circumstances, statistical information can be compared with qualitative information obtained from the same group of subjects to assess if there is consistency in their responses.

The assumption made in (b) is that the researcher can use quantitative and qualitative methodology at different stages of the research process or concurrently. For instance, the initial stage might be quantitative and the second stage qualitative. In this two-phase mixed-method approach, the second set of data is used to build upon the initial set (Punch, 2009: 296).

Various scholars agree that mixed research provides the researcher with a more reliable understanding of the phenomenon under examination rather than relying on one source of data (Burton and Bartlett, 2009; Patton, 1987; Cohen and Manion, 1994; Guba and Lincoln, 1994; McDonough and McDonough, 1997; Creswell, 1998; Drew and Demack, 1998; Terre Blanche and Kelly, 1999; Condelli and Wrigley, 2005). For instance, Burton and Bartlett (2009: 26) argue that several methods can produce a "thorough and rigorous piece of research" when different methods complement each other.

However, McDonough and McDonough (1997: 220) caution that a mixed-method approach is not without controversy. One of the purposes of mixed-methods research that is controversial is *triangulation*. Kelly (1999: 430) defines triangulation as the process of "seeking convergence and corroboration of results from different methods and designs in studying the same phenomenon." Yet, Thomas (2009: 111) indicates that opinions differ on the need for triangulation as some researchers believe that "a piece of interpretive research has value and completeness in itself." Other concerns with triangulation have to do with misunderstanding its purpose. To clarify potential misconceptions in the purpose of mixed research methodology, Hammersley (2008: 23-28) puts forward four meanings to the term triangulation.

The first meaning is *triangulation as validity checking*, whereby "the validity of an interpretation that is based on a single source of data is subjected to verification with at least one further source that is of a strategically different type" (2008: 23). Hammersley points out that this technique does not necessarily involve combining quantitative and qualitative approaches as it may include data obtained through the same method but gathered from different sources. Hammersley (2008: 23) indicates that comparing data in this way is not entirely incorrect, particularly if the findings from different sources are the same. However, Hammersley cautions that researchers need to guard against a situation whereby both sources of data are simply biased in the same direction. The key in this case is that the same questions that are, for instance, used to interview different respondents are not biased.

The second interpretation of triangulation, as pointed out by Hammersley (2008: 25, citing Cicourel, 1994), is termed *indefinite triangulation*. Indefinite triangulation occurs when the researcher collects accounts of the same event from several different groups of participants. To illustrate this point, Hammersley refers to Cicourel's research (1994) on school classrooms that compares the teacher's account of the lesson before and after it was presented with the account given by the schoolchildren. It was found that the accounts were different as the children viewed the lesson from their own perspective as learners, which cannot be expected to match that of the teacher as the facilitator.

Therefore, in cases where different groups of respondents are not positioned in the same manner on the issue under investigation, their differences of opinion might sometimes not be considered as significant to research findings. In such cases, the researcher might need to clarify that the divergence in opinion is to be expected from the different groups of participants because of their different positions on the issue under investigation.

The third term used by Hammersley (2008: 27) is *triangulation as seeking* complementary information. He explains that this term refers to the use of different research methods, such as combining statistical responses with observations of participants, so as to find converging evidence (citing Erzberger and Kelle, 2003: 461). Hammersley (2008: 27) finds this way of thinking problematic as it is not easy to tell which source of data will provide the most reliable kinds of complementary data. Instead, he is of the opinion that the rationale behind mixing of methods should be to identify the strengths and weaknesses of different research methods and the value in combining them.

Lastly, Hammersley (2008: 27-8, citing Flick, 1992, 1998 and 2004 and Sale et al., 2002) refers to *triangulation as epistemological dialogue or juxtaposition* to argue that triangulation was first conceptualised as a strategy for validating results obtained by way of individual research methods. However, the focus has shifted "increasingly towards further enriching and completing knowledge and towards the (always limited) epistemological potentials of the individual method." The concern raised by Flick (1992, in Hammersley, 2008: 27) regarding this rationale for triangulation is that different methods do not simply provide varying kinds of information about the same object. Instead, different methods constitute the world in different ways. For this reason, combining them may lead neither to validation nor to an increasingly complete picture (Flick 1992, in Hammersley, 2008: 28). Moreover, Hammersley (2008: 28) has concerns about the meaning and legitimacy of the findings that emerge when the combination of data sources involves conflicting epistemological assumptions. The two research options Hammersley (2008: 28) recommends are: to keep within the confines of a single epistemological paradigm or to set up some form of dialogue between the differing

epistemological positions. This means that the use of another research method should clearly be explained as intended to enrich the main data collection method, rather than to claim to establish reality through the use of data obtained from two conflicting epistemological assumptions.

Hammersley (2008: 28) concludes his reasoning about the different interpretations of triangulation by stressing that he is not suggesting that triangulation should be totally rejected. His aim is to help researchers recognise the limits to what any particular type of data can provide. Hammersley (2008: 28) cautions researchers not to use triangulation to claim that their findings present complete reality. Particularly in social sciences, Thomas (2009: 19) argues that one can never "get conclusive evidence of something being the case." Instead, the goal of mixing methods should rather be to expand one's understanding (Johnson and Onwuegbuzie, 2004: 19, citing Onwuegbuzie and Leech 2004).

2.4.2 Research site and participants

A study that investigates a single group of participants in a particular educational context, such as students and lecturers of a particular class or educational institution, is called a case study (Stake 1994, 1995 in McDonough and McDonough, 1997: 205). When the researchers define their target population (here referred to as participants) they specify "the unit being sampled, the geographical location, and the temporal boundaries of populations" (Neuman, 1997: 203). Thomas (2009: 115) cautions against claiming to study a particular case in order to generalise on it. Rather, Thomas argues that in studying a particular case a researcher is aiming "to understand it in itself" (2009: 115).

Key to selecting a sample is that it should be representative of the whole population under investigation to give credibility to its findings. In this regard, Thomas (2009: 102) recommends taking a *stratified sample*, as opposed to a *random sample*. Thomas (2009: 102) argues that a stratified sample "reflects in important ways the actual population"

studied rather than a sample that is just randomly taken. The decision in the type of sample can however be informed by the nature of the study. A study on a broad topic, such as language attitudes, would be well suited to a stratified sample that is in line with the specific group of community members under investigation.

Another important participant to describe in a social science study is the person doing the research. Burton and Bartlett (2009: 12) define the term 'practitioner research' as any research carried out by education professionals "into aspects of their work" "for a variety of reasons." The reasons can include research conducted as part of professional development and that which is seen to be in the interests of a particular educational institution or the whole education system. In such cases, the person doing research takes a central role in interpreting the data, and this position has the potential to affect "the nature of the observations and the interpretations" made (Thomas, 2009: 108). For this reason, Thomas (2009: 108) argues that:

Because of the importance of the nature of the relationship between the researcher and the research participants, the researcher's biography – including class, gender, ethnicity, ideas and commitments – needs to be made explicit.

This will be important in a study on an emotive topic such as that on language attitudes because the researcher's position can also impact on the interpretation of data. It is possibly for this reason that Thomas (2009: 110) emphasises that as the researcher you should unashamedly "accept your subjectivity" and provide a full discussion of your positionality in which you explain "why you are interested in this topic and what your personal circumstances are."

2.4.3 Research design

Research design is the basic "plan for the research" (Punch, 2009: 112; Thomas, 2009: 70) that amongst other things "concerns the tools and procedures to be used for collecting and analysing empirical materials" and a "logical rationale for answering the research questions" in a manner that has reliability and validity (Punch, 2009: 112).

Reliability refers to the extent to which a research measurement has both consistency over time and internal consistency (Punch, 2009: 244; Thomas, 2009: 104). Firstly, consistency over time means that a research instrument will give the same results on different occasions when it is administered to the same respondents. Secondly, internal consistency relates to the extent to which "multiple research items are consistent with each other" in that they are all working in the same direction (Punch, 2009: 244-245).

Validity is another important quality of a research instrument and means "the extent to which an instrument measures what it has claimed to measure" (Punch, 2009: 246). In other words, the instrument must measure what it claims to be able to do, and not claim to investigate something that it cannot. While these are two important qualities of a research instrument it should however be understood that in reality it is not always possible to attain the absolute truth and accuracy. Researchers can at least make an effort to ensure that their instruments achieve a reasonable amount of reliability and validity.

2.4.3.1 Questionnaire

Dornyei (2003: 6, citing Brown, 2001) defines a questionnaire as "any written instruments that present respondents with a series of questions or statenments to which they react either by writing out their answers or selecting from among existing answers." Burton and Bartlett (2009: 75) assert that a well designed questionnaire can provide "useful information on respondent's attitudes, values and habits." Cohen, Manion and Morrison (2001: 119) concur that surveys are conducive to gathering data that are aimed

at describing the nature of existing conditions. In addition, Romaine (1995: 302) notes that questionnaires have been used in various kinds of sociolinguistic research due to the fact that they are easy to distribute and collect, and the results can be more reliably compared and analysed than can data obtained from open-ended discussions. In measuring attitudes the Likert Scale that was devised by the psychologist Rensis Likert (1932) is usually used in questionnaires to allow respondents to indicate their levels of agreement to statements provided by the researcher (Thomas, 2009: 178). This scale uses a five-point range with answers from *strongly agree*, *agree*, *unsure/neutral*, *disagree*, to *strongly disagree*.

Burton and Bartlett (2009: 75) warn that it is sometimes "difficult to obtain in-depth personal responses" when using questionnaires because "both questions and answers will often remain superficial." Burton and Bartlett (2009) attribute this to the fact that statistical data gathered by the questionnaire will tell you what people think, for example on a policy, but, it will not allow the respondents to raise specific issues they might have with the policy. This can be addressed by using closed and open questions in a questionnaire. Frankfort-Nachmias and Nachmias (1992: 242-243) describe a closed question as a type of question that provides respondents with a set of answers and requires them to choose the one that represents their view most adequately. Wray, Trott and Bloomer (1998: 174) argue that this type of question limits respondents in that they have to choose from the provided options. They also argue that another drawback to closed questions is that "they can be so directive as to be patronising" (Wray et al. 1998: 174). Despite such criticisms, Wray et al. (1998: 174) indicate that it is sometimes necessary to use closed questions as they "remain a valued means of gathering data that can be easily processed and scored," particularly when dealing with large numbers of respondents.

In contrast to the closed question, an open question is not followed by any kind of specified choice. Instead, respondents' answers are written out and recorded in full (Frankfort-Nachmias and Nachmias, 1992: 243). Fasold (1984: 192) asserts that the main

advantage to open questions is that they give the respondent "maximum freedom to present her views."

However, there are two main drawbacks of questionnaires as a method of data collection. Firstly, when participants complete questionnaires they are engaged in what is known as the *method of self-report* (see e.g. Rosnow and Rosenthal, 1998: 103). This method requires participants to look within themselves and to identify their attitudes, feelings, perceptions and beliefs in response to set questions. These questionnaires provide subjective data, which can be controversial. The validity of self report data may be questioned as participants may provide answers that the respondents thought the researcher wanted rather than their honest opinions. As such, the findings may have very little connection to the respondents' actual behaviour (Neuman, 2007: 168). To address this shortcoming, observation can be a very useful means of gathering data on what is happening in classrooms and other learning situations, particularly on a study that deals with language of instruction and learning.

2.4.3.2 Observations

Observation as a research tool is supported by Hopkins (1993, cited in McDonough and McDonough, 1997) who describe observation as a 'pivotal activity' with a crucial role to play in classroom research, teachers' personal-professional growth, and school development as a whole. McDonough and McDonough (1997: 101) assert that "observation with its associated techniques is also often embedded in a larger-scale research plan as one method among others, when perhaps a variety of data sources is appropriate." This suggests that a researcher can, for instance, use questionnaires and supplement them with observations. The type of observation where the observer is involved in the activities of the group under investigation without disturbing their natural behaviour has come to be known as *participatory observation* (Henning, et al., 2007: 42; and Bless and Higson-Smith, 2000: 104). As McDonough and McDonough's (1997: 105) indicate however, "observing one's class is difficult, but not impossible, to reconcile with teaching it at the same time". In this regard, they recommend video- or audio-

recording for later analysis. These recording tools can however still interfere with the classroom activities as they have the potential to distract students' attention from the lessons. The other weakness that a practitioner researcher has to guard against is the question of objectivity (Bless and Higson-Smith, 2000: 104). Being directly involved in the investigation and students poses a danger that the researcher might not lose detachment from participants and events. There are also power implications in the use of observation and in the way it is conducted (Burton and Bartlett, 2009: 105). The presence of an observer who has a position of authority has the potential to affect the behaviour of the participants. At the same time, some colleagues might not welcome the idea of being observed by someone who is either at their level or above, they might see the presence of an observer as intrusion.

An alternative method is oral interviews as they have been widely used as survey research tools in applied linguistics (see e.g. Nunan, 1992: 149) and because they are believed to allow a degree of in-depth information gathering, of free response and flexibility that cannot be obtained through questionnaires and observations (Terre Blanche and Kelly, 1999: 128 and Seliger and Shogamy, 1990: 166). There is also a wide variety of forms of interviewing, such as individual, group, focus group and telephone surveys, to explore depending on the nature and objectives of their investigation (see Punch 2009: 144-152).

2.4.3.3 Focus group interviews

A focus group interview is defined as a discussion that is organised and facilitated by the researcher so as to allow for group interaction among people who share a similar type of experience or are similarly affected by a proposed change (Kelly, 1999; Gibbs, 1997). The main purpose of focus group research is to obtain responses that would not be feasible using one-on-one interviews or questionnaire surveys (Morgan and Kreuger, 1993: 102). Focus group interviews also have the potential to provide data on views shared by a broad community since they allow respondents to freely interrogate their

attitudes among themselves rather than with the researcher (Cohen and Manion, 1994; Kelly, 1999; and Thomas, 2009). The collected data can be useful if the researcher wants "to compare the group attitude with a set of individually assessed attitudes" (Thomas, 2009: 170).

In this approach, the researcher can facilitate the focus group by providing probing questions such as: "Any different opinions?" and "Do you all share the same view?" This line of questioning can allow an in-depth information gathering process since it can ensure that as many participants as possible contribute to the discussion. Asking these questions can be important in a situation where students might be reluctant to talk in using a second language in which they feel incompetent. In such a case, the researcher can also allow students to use a language shared by the group. As the discussion takes place, it is important that the facilitator records the deliberations in the form of note-taking or audio and video recording (Kelly, 1999).

One disadvantage of the focus group interview or any interview is that the reliability of its data can be affected by the subjectivity and bias(es) of the facilitator (Cohen and Manion, 1994; Mason and Bramble, 1997). The facilitator's opinions can influence the choice of questions and the manner in which they are asked. In addition, the perceptions of the facilitator can affect the way in which the collected data is interpreted and presented. This is possible if the subject under investigation has a political undertone to it, such as language education policy. It is for this reason that it is important for researchers to be upfront about their subjectivity (Thomas 2009).

2.4.3.4 Research variables

Linked to the research methods and techniques are the variables that can impact on attitudes of those studied. According to Baker (1992: 25), language attitudes can be influenced by many interacting variables, such as, age, gender, language background, type of school and language ability. This biographical information (e.g. age, gender,

home language, education) assists with analysing data since language attitudes are usually evaluated within the context of social circumstances (Lehman and Mehrens, 1979: 163). This implies that as part of data collection, the researcher should include demographic information on respondents. Alternatively, the analyses of collected data should be contextualised to the respondents' background rather than be generalised to a wider society.

Similarly, Saville-Troike (2003: 183) and Smit (1996: 8) agree that individuals seldom choose their language attitudes; instead, attitudes towards language are generally culturally determined, as they tend to reflect the structure of society. In other words, any results from an investigation into language attitudes should be understood to represent the respondents' beliefs, as they are determined by the specific social setting in which they live, because language can be viewed as a form of social identity (Fishman, 1989: 7). In such cases, Smit (1996: 10) refers to ethnic groups who use specific languages or varieties of languages as a form of ingroup marker as *ethnolinguistic groups*. It is for this reason "important that the particular nature of multilingual societies (such as South Africa) be taken into consideration when conducting language-attitude research" (Aziakpono and Bekker, 2010: 41, citing Smit 1996).

This view is indicated, for instance, in Rudwick's (2004: 166) study which interviewed isiZulu-speaking youths from the Umlazi Township near Durban, which revealed ambivalent attitudes towards the idea of mother-tongue instruction (MTI). Several of the school-going learners who chose isiZulu as their preferred medium of instruction also chose English as their favoured medium for general communications. This type of reaction can be understood better when linked to the South African environment in which the relationship between black African languages and English can be described as diglossic. The term diglossia refers to any situation in which two or more languages are allocated different social functions and contexts within a community (Saville-Troike, 2003: 45, quoting Fishman, 1972). In a similar way, Rudwick argues that her ambivalent findings are not necessarily invalid, rather, they highlight the paradoxical sociolinguistic reality of South Africa, where English is linked to social mobility and power, and black

African languages are considered valuable in terms of identity. At the same time, Rudwick (2004: 165) argues that her results undermine the commonly held belief that most black South Africans prefer English to all other languages. Rudwick draws our attention to the fact that there are enormous lifestyle differences between township residents and city-dwelling residents; researchers need to take a special note of the socio-economic, cultural and ethnolinguistic implications of where people live before making conclusions about their language attitudes. While the majority of a particular ethnic group might indicate similar attitudes towards their language as a form of identity, it is however possible to find that a few of their members do not feel that way for different reasons which are not relevant to this study and will not be explored here.

2.4.3.5 Research tools pre-test

According to Neuman (1997: 141) research tools should undergo a pre-test or pilot stage "before applying the final version in a hypothesis-testing situation" to improve reliability. This can be done by asking a small group of students to complete the questionnaire during its development stage which will allow the researcher to assess if the questions are understood as intended and make amendments where necessary. It is however still likely that during the data analysis, the researcher would find that there are shortcomings in the research tool or there was some misunderstanding on the part of the respondents.

Once the research tools are ready, the decision on how to administer survey questionnaires will depend on the size and location of respondents. If there are many respondents who are located across a wide area it might be necessary to obtain assistance with the collection. It is also possible to send questionnaires electronically. But it is advisable that "the researcher should stay in control of the data collection procedure, rather than leave it to others or to chance" (Punch, 2009: 250).

2.5 Language attitudes in South African education

A number of scholars consider it important to conduct an assessment of educational stakeholders' attitudes towards language where bilingual education, language education policies and planning are involved (Baker, 1992 and 2006a; Cummins, 2000; Heugh 2000; Lee, 1996; Luckett, 1995; LANGTAG, 1996; Mwaniki, 2004; Driekie and Monnapula-Mapasela, 2009). This is necessary because, as Driekie and Monnapula-Mapesela (2009: 5) observe, one of the impeding factors to any policy implementation is that the social issues at which the policy is aimed are often resistant to change due to a number of reasons ranging from a lack of buy-in by consumers and implementers of policy, to poor policy planning, and sometimes a lack of resources (financial and human). Driekie and Monnapula-Mapesela (2009: 6) point out that over 30 South African higher education policy initiatives have been promulgated since 1994, but many are based on the incorrect assumption that institutions and academics have enough capacity and support to implement these policies. This situation has created, and continues to create, among others, animosity and resistance to change. Therefore, one of the challenges that remain for the 2002 Language Policy for Higher Education (LPHE) implementation, over and above the lack of funding and resources, is ensuring support from various stakeholders in education to the use of African languages in education. In this regard, Igboanusi (2008: 725) emphasises that it is particularly the views of active participants in education programmes or courses, such as teachers and students, which need to be sought. Therefore, the investigation of attitudes in a context where there are new language education policies in education is a key issue particularly if there are indications that the policies might not be well supported. In such a situation, it is advisable to actively involve the stakeholders in education to experience programmes that are informed by the new policies.

In South Africa it has generally been indicated that many African-language-speaking stakeholders do not support the idea of using black African languages in higher education (Dyers, 2000; Moodley, 2009; Dalvit and De Klerk, 2005, citing Bekker, 2002 and De Klerk, 1996); Makhode, 2005; Bangeni and Kapp, 2007; Verhoef and Venter, 2008).

Makhode (2005: 4), for instance, reporting on behalf of the Ministerial Committee established to advise on the development of indigenous African languages as media of instruction in HEIs, found that there was a strong "preference for English instead of African languages in all the formal sectors of society, both in private and public". Moodley (2009: 181) also found that the majority of staff members and students at University of KwaZulu-Natal (UKZN) were unfavourably disposed towards the idea of the use of isiZulu alongside English, excepting isiZulu first language (L1) speakers from the Faculties of Education and Health Sciences.

The failure to implement language education policies and the negative attitudes of many academics and students towards them may be an indication of what Kamwangamalu (1997:75, in Pillay, 2007) describes as the tendency of the elite to resist any language planning attempts which seek to promote the language of the masses. Kamwangamalu claims that the elite do this in order to preserve the privileges they enjoy as speakers of "the language of rule". Pillay (2007: 30-31) states that the primary arguments usually used to promote the dominance of English are that it is purportedly the language of modernity, urbanity and upward social mobility. Pillay (citing Phillip, 1991:1) challenges such arguments, suggesting there are powerful forces at work which are at pains to create the impression that English serves all the world's citizens equally well. In reality, this is not the case, states Pillay (2007: 31), because the gap between the global 'haves' (many of whom are English speakers) and 'have nots' (often not English speakers) is widening.

At the same time, Carrington (1997: 87) asserts that while resistance to vernacular literacy can be high among the privileged classes, resistance to it can often also be high among the lower classes and the non-literate themselves, as they feel marginalised by a lack of competence in the dominant language, and therefore desire literacy in the dominant language over literacy in their own. In this respect, Watson (2007: 259) describes the difficulties and opposition faced by different post-colonial African governments when they try to develop their national languages in a world marked by increased globalisation. The attempt by Ghana, for instance, to develop a National

Functional Literacy Programme in the early 1990s for its local women was seen by many as an endeavour to restrict their access to international languages, such as English, that are used for broader communication (Watson 2007, citing Yates, 1995). A similar attempt failed in Namibia where a literacy programme was designed to help high school dropouts develop their local language skills as the government deemed these best suited to their needs and interests. Those participating in the policy's programme indicated that they did not wish to be 'fobbed off' with their own language, with which they were all too familiar, but wished rather to acquire a working knowledge of English. They felt that English would provide them with improved social and economic standing (Watson 2007, citing Papen, 2005).

Despite the availability of previous sociolinguistic studies which indicate negative attitudes towards the role of black African languages in education, the investigation of language attitudes needs to be further pursued based on the understanding that "attitudes do not necessarily remain constant over time" (Romaine, 1995: 314). As such, with the passage of time, research participants might well have differing attitudes from their predecessors, based on their exposure to the increased use of black African languages in the public domain, such as on television, in newspapers and during job interviews in certain government sectors. This assumption is based on the writings of Carrington (1997: 88), who analyses the case studies from the Netherlands Antilles and from Tanzania in order to discern what leads to the acceptance and success of vernacular literacy.

Carrington (1997) notes that the awarding of official status to the language of Papiamentu in the Netherlands Antilles in 1985 happened long after the written use of the language had already been established through its use in several newspapers and in public notices and signs. Similarly, Tanzania's level of success with its Swahili literacy campaigns is partly due to the fact that the language had been going through the process of standardisation (for purposes of educational use) since the 1930s. It is in part owing to all these previous efforts that Swahili was recognised as the national language upon the country's independence in 1961. Carrington points out that Tanzania's success shows

that real status for a language is achieved when official action confirms the de facto situation, indicating that the significant objectives of official recognition are already in operation. In contrast, South Africa's new multilingual policies were neither preceded by efforts directed at developing black South African languages, nor were the languages already in use within the high domains of society. This helps to explain the challenges that the government currently faces in implementing its multilingual policies. What would help in this instance, therefore, is to further develop local African languages before the existing multilingual education policies are implemented.

The use of South African languages is, nevertheless, on the rise in South Africa as they are found, to a small degree, in public notices, signs and the websites of a number of universities (see <u>www.nwu.ac.za</u>, <u>www.uct.ac.za</u> and <u>www.uj.ac.za</u>). Among the general public, there is also a growing use of black African languages, particularly in the media. It is now common to see advertisements and public awareness campaigns presented in either English and a black African language, or a black African language on its own. Media houses (Independent Newspapers and Avusa Media) that previously published in English, are now using black African languages and are publishing newspapers (Isolezwe and Sunday Times) in, for instance, isiZulu. But this interest in the public use of black African languages is slow in reaching the lecture theatres. The only language that has managed, to a degree, to compete with English in the world of academia is Afrikaans. There are therefore a handful of parallel medium and dual medium universities (the University of Pretoria, the University Stellenbosch, the University of the Free State and the Potchefstroom campus of the North-West University) that use English and Afrikaans (Du Plessis, 2008: 318). According to Du Plessis (2008), the present situation, in which only L1 English and Afrikaans speakers have universities that cater for them with MTI, points to the need for appropriate models to be developed that would provide for a multilingual higher education system in South Africa. Should such an endeavour be successful, it would contribute to the creation of what the former Minister of Education, Kader Asmal, called African-language universities (*Cape Times*, 2002). Unfortunately, sentiments such as those expressed by Asmal are, according to Giliomee (2009), referring to the desire for an Afrikaans-only University of Stellenbosch, seen by many as

"nationalist, racist or exclusivist". Such sentiments indicate the emotional and controversial nature of language issues in South Africa. The measures needed to transform language education therefore require that careful consideration be given to the attitudes of the different language communities if new language policies are to be universally accepted, which is necessary for their success.

2.6 Summary

This chapter reviewed the current literature on the nature of attitudes, language attitudes and motivation, as well as language attitudes in South African Education. The section on language attitudes presents the reader with the two diverse theoretical orientations (mentalist and behaviourist) to the definition of the concept 'attitude'. The different forms of research methodology associated with the two different theoretical frameworks to the investigation of attitudes are discussed. The different structures of attitudes are further explored. The three components of attitudes (affective, cognitive and behavioural) that are in line with the mentalist research methodology are discussed. The affective component of the behaviourist theory is also discussed. Instrumental and integrative motivations are explored in order to indicate what types of reasons cause people to support the development of one language over another or more languages developed sequentially. Lastly, issues related to language attitudes in South African education are discussed.

CHAPTER 3

Bilingual Education

3. Introduction

This chapter examines literature in the area of bilingual education to provide the theoretical and methodological framework of this study that investigates attitudes to bilingual instruction material. This is done by clarifying opposing theoretical positions on the merits and demerits of bilingual education with particular reference to the development of dual language instruction (DLI) programmes or courses.

The chapter is divided into two sections; the first section provides a detailed review of bilingual education theory. This begins with an exploration of the two definitions of bilingual education: a literal one and a technical one. The technical definition is further examined in relation to two distinct ideologies that inform different bilingual programmes regarding the use of a first language (L1) alongside a second language (L2) these being: Transitional Bilingual Education (TBE) and Maintenance Bilingual Education (MBE). The discussion of TBE and MBE includes an examination of theories on subtractive and additive bilingual programmes or assimilation and enrichment bilingual programmes to indicate what kinds of programmes are linked to monolingualism and bi-/multilingualism. Then the distinction between two sets of language skills is made, these being: Basic Interpersonal Communicative Skills (BICS) and Cognitive Academic Language Proficiency (CALP).

The second section provides a discussion of the theoretical framework to design and develop a dual language instruction (DLI) course. Areas of focus in this section are: the goals of the DLI pilot course, the underlying teaching methodology, and the DLI course's syllabus design.

3.1. Bilingual Education

This section explores pertinent theories and research on bilingual education programmes. The aim is to gain greater insight into philosophies and approaches that facilitate the development of positive language attitudes and academic benefits.

3.1.1 Definition

A definition of the term *bilingual education* is necessary as it is the major field of research that informs the present study. However, finding a suitable definition is a challenge because, as Baker (2006b: 213) points out, the term *bilingual education* is "a simplistic label for a complex phenomenon that can mean different things in different contexts." This is further complicated by different definitions and models that "tell very little about the teaching and learning processes that occur in the classroom" (Gomez, Rodríguez, Irby, Galloway and Lara-Alecio, 2004: 37). An understanding of this concept is assisted by considering literal and technical definitions (Torres-Guzman, 2002: 1).

The literal definition of *bilingual education* refers to any educational programme that uses "two languages" in which some academic content is taught in the students' native or primary language (L1) in addition to a second language (L2) (Goldenberg, 2008: 11; Solis, 2001: 2; Torres-Guzman, 2002: 1). In the United States of America (USA), where extensive research exists in this field, most bilingual programmes use English, the majority language, together with other minority languages, such as Spanish (Freeman and Freeman, 2005). However, in countries where a previously colonial language (e.g. English, French or Portuguese) is a minority language but dominates in the economy, in academia and in politics, it is used in tandem with local African languages. In South Africa, for instance, bilingual programmes or courses usually consist of English and a majority African language of that region or educational institution, such as isiZulu (Shembe, 2003) or seSotho sa Leboa (Ramani, Modiba, Tlowane and Joseph, 2009).

According to Bamgbose (1991: 163) the size of the population speaking each language is an important factor in assigning roles, particularly in a multilingual society where there might be human and financial constraints in simultaneously developing and using many languages in education. For instance, in South Africa, isiZulu is a demographically significant language consisting of an estimated 10 million (23.8%) L1 speakers in a population of approximately 44.8 million citizens (Statistics South Africa, 2003). While the majority of isiZulu L1 speakers (81%) are located within the province of KwaZulu-Natal (KZN), isiZulu-speaking citizens can be found across the country. The widespread knowledge of isiZulu can, among a variety of factors, be attributed to the fact that isiXhosa, the second most demographically dominant language (17.6%), has much in common with isiZulu. Other South African languages that are in the same language group with isiZulu (the Nguni or Bantu language group) are isiSwati (2.7%) and isiNdebele (1.6%) (Statistics South Africa, 2003). In addition, Moodley (2005: 1) reports that isiZulu is taught at a French university in Paris, at the Michigan State University, the University of Pennsylvania, and the University of Cairo (citing Zungu, 1998: 46 and 2000: 2; and Daily News, 02/2002: 4). A further search on the Internet reveals that a number of other overseas universities have isiZulu courses in their African Languages departments or units. Despite the demographic dominance of isiZulu in South Africa and international interest in it, it is ironic to learn that in South Africa only a "few institutions include an African language as a training requirement for undergraduate and postgraduate study" (LPHE: 2002, section 11.4).

The technical definition of *bilingual education* refers to the ideology or philosophy that informs the extent to which the L1 is used alongside the L2 in a particular bilingual programme or course (Baker, 2006b; Solis, 2001; Cazabon and Nicoladis, 1998). The diverse opinions in this regard can be understood through the discussion of the two concepts that relate to two distinct philosophies concerning bilingual education: *Transitional Bilingual Education* and *Maintenance Bilingual Education* (Cummins, 2000; Lambert and Tucker, 1972). Linked to these two philosophies are the concepts of subtractive and additive bilingual programmes (Baker, 1993, 2001 and 2006b; Lambert

1974; Luckett, 1995) alternatively known as assimilation and enrichment respectively (Cummins, 2000, cites Fishman, 1976 and Hornberger, 1991).

3.1.2 Transitional Bilingual Education versus Maintenance Bilingual Education

Transitional Bilingual Education (TBE) is realised in programmes that use the learners' first language (L1) as a temporary vehicle for learning the second language (L2) (Gomez, et al. 2004: 37). Due to the temporary nature of the use of the L1 (aimed at developing one's L2), TBE often leads to subtractive bilingualism or assimilation (Baker, 1993, 2001 and 2006b; Ovando, Collier and Combs, 2003; Cummins, 1994). This means that as learners develop and strengthen their proficiency in their L2, they do so at the expense of their home language, which they sometimes lose completely.

Maintenance Bilingual Education (MBE), which is of greater interest here, refers to bilingual education programmes in which the first language continues to be maintained and the native culture to be valued, while the second language is developed (Cummins, 1994; Gomez, et al. 2004). MBE is associated with educational programmes that are known as "dual language programmes" or "two-way bilingual programmes" that are "often, but not always" composed of "both language minority and language majority" student populations studying together in one class or school (Torres-Guzman, 2002: 1-2). In cases where one language population is to be found in the same educational institution the commonly used term is "one-way developmental programme" although researchers tend "to use a variety of labels" (Torres-Guzman, 2002: 2-3). For example, in South Africa at the University of Limpopo, a dual-language degree in Contemporary English Language and Multilingual Studies is offered to seSotho sa Leboa students (Ramani, et al. 2009). There are also a few dual medium and parallel universities (the University of Pretoria, the University of Stellenbosch, the University of Free State and the Potchefstroom campus of the North-West University) that use English and Afrikaans throughout their institutions in which these two languages are either used intermittently (dual medium) or as separate streams of classes (parallel) to accommodate diverse African language speaking students (Giliomee, 2009).

Dual language programmes can vary in "how time is allocated for each language" (Freeman and Freeman, 2005: 24). The two numbers that are commonly used to represent the time distribution of languages are 50/50 and 90/10 (Freeman and Freeman, 2005: 24). For instance, the dual-language degree in Contemporary English Language and Multilingual Studies offered at the University of Limpopo is 50/50 since equal time is allocated for each of its two languages (six modules in seSotho sa Leboa and six modules in English) (Ramani et al. 2009).

3.1.3 The aims of maintenance bilingual education

Although MBE programmes can vary in a number of ways, their common aim is to develop positive language attitudes and bi-/multilingualism and academic literacy in both L1 and L2 (Baker, 2000; Cloud, Genesee, and Hamayan, 2000; Cummins, 2000; Hoffman, 2001; Schiffman, 2005; Torres-Guzman, 2002; Williams, 2007).

MBE programmes increase language awareness and thereby cultivate positive attitudes in learners towards their own language and culture, particularly in contexts where they have been made to feel ashamed of their heritage (Lee, 2002; Wong-Fillmore, 2002). For instance, in the USA where English is the dominant language in society most bilingual educational programmes view the minority children's L1 as a problem, one that should be eliminated. In Nigeria, Igboanusi (2008: 724, citing Adegbija, 2004; Babajide, 2001; Oyetade, 2001) indicates that attitudes towards English are highly positive because the language is important to secure good jobs and admission into the universities where it is the main medium of instruction. This has led to many parents preferring English as the only language of education for their children and has resulted in their children losing the ability to speak several Nigerian indigenous languages and a rise in monolinguals

(Igboanusi 2008). Ndimande-Hlongwa (2009: 93) observed a similar situation in South Africa when she states that:

[..a]bazali basafunza izingane zabo imfundisoze yokuthi ukwazi ulimi lwebele akubalulekile kunokukhipha ngamakhala isiNgisi nesiBhunu.

[..p]arents still mislead their children into believing that the knowledge of their mother-tongue is less important than fluency in English and Afrikaans [my translation].

Therefore, in situations where language attitudes are an issue MBE is viewed as a muchneeded contribution to sociolinguistic since "bilingual programmes rarely include
maintenance of the native language as a goal" (Hakuta, 1993: 129). This is because
bilingual education programmes, such as the MBE, that view the learners' L1 as a
resource have raised the status and the importance of languages other than English in
many communities across the USA (Gómez, Freeman and Freeman, 2005: 203). This
positive role of MBE to L1 maintenance is consistent with the concept of bilingual and
multilingual education in South Africa which is based on the philosophy that education
should add to students' linguistic repertoire in ways which would best guarantee both
academic and linguistic success (Heugh, 2002: 174).

However, Cohen (1984: 225, citing Cohen 1980 and Edwards 1981) is of a different view about the role of MBE programmes in developing positive attitudes towards native languages, and points out that "bilingual education programmes are frequently unpopular, not only with the English-speaking majority, but even with groups assumed to be beneficiaries of these programmes" in the USA. This is possibly because of the socioeconomic benefits associated with English (see Chapter 2, 2.5, page 44-45). At the same time, Igboanusi (2008) and Cazabon and Nicoladis (1998) assert that very few studies have been carried out to measure attitudes on bilingual education. Yet the extent of support for and the opinion of speakers toward bilingual education within a country is a critical area worth investigating (Baker, 2006, in Igboanusi 2008: 725).

Research findings regarding the contribution of bilingual education to cognitive development have also been contradictory. Some studies have suggested that bilingual children suffer from academic retardation, have lower IQs and are socially maladjusted as compared with monolingual children (Keshavarz and Astaneh, 2004: 295, citing Printer and Keller, 1922; Saer, 1923; Anastasi and Cordova, 1953; Darcy, 1953). Keshavarz and Astaneh (2004: 296, citing Nayak, 1990) refer to a study which compared the acquisition of an artificial grammar by monolingual, bilingual and multilingual students, which found that although multilingual students performed better under certain conditions, they generally showed "no clear evidence that they were superior in language learning abilities."

Another critical issue identified by Rossell and Baker's (1996) analysis of 300 bilingual programmes that taught English is that only 75 of them based their bilingual education benefits on acceptable methodology. Even amongst the 75 studies, Rossell and Baker (1996) found that none of them was methodologically able to prove the impact of bilingual education on academic achievement and second language development. In carrying out their research, Rossell and Baker (1996: 14) declared that there are four conditions that need to be met by a study on bilingual education:

- 1. The study must compare a treatment group to a similar control group.
- 2. If the assignment of students to treatment or control groups is not random, then it is necessary to control for differences between the treatment and control groups statistically.
- 3. Standardised tests in English should be the only basis to obtain scores.
- 4. Score differences between treatment and control groups should be determined by applying appropriate statistical tests.

However, it needs to be noted that other researchers, such as August and Hakuta (1997), Crawford (1997) and Cummins (2003) disagree with Rossell and Baker's (1996) definition of what constitutes acceptable standards in the investigation of bilingual education. For instance, Cummins (2003: 19) disagreement is principally based on the fact that Rossell and Baker (1996) fail to provide a "specific study" on which they base their argument regarding the best methodology for the investigation of bilingual

education. In addition, Tellez, Flinspach and Waxman (2002: 7) maintain that the political context underlying reviews of different bilingual programmes can often lead to biased and hostile approaches, citing the fact that Rossell and Baker published their work in a journal in which one of its editors (Sandra Stotsky, 1999) is well-known to be vehemently opposed to bilingual and multicultural education.

Researchers that are in favour of MBE include Paciotto (2009: 450), who asserts that longitudinal research focussing on the USA and on Canadian school contexts (citing Cummins, 2000; Ramirez, 1992; Thomas and Collier, 1997), along with other small scale studies in other parts of the world (citing Skutnabb-Kangas, 2004) have repeatedly demonstrated that forms of education striving for biliteracy development and extended use of L1 for instruction across the curriculum can foster high academic achievement in both L1 and L2. In addition, there are indications that MBE students can show an improvement in cognitive and academic development, in classroom participation, and in self-esteem (Baker, 1992; Cummins, 2000, 2001, 2002, 2005a and 2005b; Cook, 1999; Sanz, 2000; Shembe, 2003; Swain and Johnson, 1997; Swain and Lapkin, 1991).

Further support for MBE is found in a study by Thomas and Collier (2002) that compares the outcomes of different teaching programmes available in the USA. The study concludes that bilingual education and dual language programmes are the most effective ways of empowering English Academic Literacy (EAL) pupils to be successful students in the English mainstream. In the same vein, Goldenberg (2008: 14-15) discusses the review of five National Literacy Panel (NLP) research studies that involved assigning Spanish-speaking students to either English-only institutions, or to institutions that teach in both English and Spanish. Although the review was conducted by five independent researchers, they all reached the same conclusion concerning the positive effects of MBE. The researchers concluded that literacy and other skills transfer across languages and that English language learners (ELLs) in MBE programmes may become bilingual and biliterate. Examples of knowledge and skills that they indicate might transfer across languages are: phonological awareness (that words are made up of smaller constituent sounds), decoding (specific letters and sounds), reading comprehension and knowledge of

concepts. Goldenberg (2008: 42) notes that students do not always realise that what they know in their first language can be successfully applied to their second language. For this reason, Goldenberg recommends that it is essential that educators create this awareness in students by indicating similarities and differences between the two languages.

McCarthy (2003: 149) reviews the research from diverse fields so as to measure the extent of the benefits associated with maintaining L1 in education. McCarthy observes that research from the fields of education, linguistics, anthropology and cognitive psychology indicates that students who receive constant, consistent and cumulative academic support in their native language perform significantly better on academic tasks than do those who are taught in their L2. To illustrate this point, McCarthy refers to a study by Ramirez (1992) that followed over two thousand native Spanish-speaking elementary students for four years. The study found that students who received 40% or more of their instruction in Spanish throughout their elementary school education performed significantly better when tested on English reading, oral English and mathematics than did students in English-only and early-exit bilingual programmes. This suggests that it might be too late to start with mother tongue instruction at university level if students were not provided with this support throughout their primary education.

Brock-Utne (2010: 03) contributes to the argument against the model of teaching which is carried out in the mother tongue for the first three years and then changed to one of the imperial languages (e.g. English, French or Portuguese) in Africa by stating that it does not contribute to good learning results. In carrying her argument forward Brock-Utne (2010:03) cites examples from previous studies conducted in Nigeria (Bamgbose, 2005) and Ethiopia (Mekonnen, 2005 and 2009) that indicate "how much better children did in school when they were able to study in a familiar African language for more than two or three years." Brock-Utne (2010: 03) concludes the argument by recommending that mother tongue or another familiar African language should be used "at least all through primary school, preferably also in secondary school and beyond."

Furthermore, Cook (1999: 189) argues that teaching a language is made more effective when attention is paid to the students' L1 rather than concentrating primarily on cultivating competence in their L2. Cook develops this argument by noting that Second Language Acquisition (SLA) research in the 1960s borrowed from L1 acquisition research because of the assumption that learners have unique language systems with distinctive features of their own (citing Cook, 1969; Corder, 1967). Cook explains that this assumption formed one aspect of the well-known *interlanguage* hypothesis (citing Selinker, 1972). Cook maintains that this approach is in contrast to SLA research, which has fallen into what Bley-Vroman (1983) calls *comparative fallacy*, where the words *succeed* and *fail* are frequently associated with the phrase *native speaker*. Cook (citing Ellis, 1994: 15) asserts that:

The success and failure of L2 learners are often measured against the native speaker's language use in statements such as the following: "learners often failed initially to produce correct sentences and instead displayed language that was markedly deviant from target language norms."

While Cook (1999) does not totally dismiss the native-speaker approach as inappropriate, he does however argue that native speakers' language proficiency should not be the measure of L2 speakers' acquisition level. Cook backs up his reasons by making reference to the term *multicompetence*, which was coined with reference to the compound state of a mind that possesses knowledge of two or more languages (citing Cook, 1991). Cook (1999: 189) explains that multicompetence refers to and covers the overall language knowledge of a bi- or multilingual person. For this reason, Cook states that during language processing, multicompetent language users have their L1 constantly available to them as a resource to make sense of L2. Hamers and Lambert (1972, in Cook 1999) found that L2 users are faster and more accurate in language-switching tasks than they are in monolingual conditions. A study by Cook (1998, in Cook, 1999) found that L2 users tend to switch from one language to another for their own private purposes; 61% prefer the L1 over the L2 for working out sums, and 60% prefer it for praying, whereas 61% use the L2 for keeping their diary, and 44% use it for remembering phone numbers.

The significant role of L1 in education is further supported by Brock-Utne and Holmarsdottir (2004: 73-79) who note that their research indicates that when teachers (and lecturers) realise that their students do not understand what is taught due to the use of an unfamiliar (even foreign) language, the teachers perform what is known as code-switching (the switch in language that takes place between sentences), and translations. This practice has, according to Brock-Utne and Holmarsdottir (2004), been observed in Tanzania, South Africa (cites Heugh 2000; Desai 2001) and in many other countries (cites Saville-Troike, 1982; Myers-Scotton, 1993; Ndayipfukamiye, 1993). To illustrate, Brock-Utne and Holmarsdottir (2004: 78) cite an observation that was made by Desai (2001: 331) in a class in South Africa. They state that:

[...it] was apparent that, except for the English classes, the teachers used mainly isiXhosa to convey information to the learners, but referred them to the English in their textbooks when appropriate.

In addition, Brock-Utne and Holmarsdottir (2004: 79) refer to translations during a reading comprehension task in their study in South Africa. The results of this show that the students who received instructions as well as the story and questions in isiXhosa had an average score of 7.9 (N=38) and 7.4(N=35) out of a possible 11. However, for groups that received instructions, the questions and the story in English only, they had average scores of 3.3 (N=38), 5.1 (N=39) and 4.1 (N=47), respectively out of a possible 11. While these studies were conducted at school level, they however show that L1 is an important everyday resource that is worth exploring throughout education. At the same time this does not suggest that learners who are only exposed to the L2 generally do not succeed. Rather, Dicker (1993) points out that empirical evidence indicates that it is mostly middle-class children who benefit from programmes where L2 (English) is the sole language of instruction (citing Lambert and Tucker, 1972; Cohen, 1974 and Swain, 1978). This is possibly because their school and home environment is supportive of L2 development. Middle-class parents are more likely than poor parents to afford wellresourced schools and to provide additional learning facilities such as computers and books at home. Studies conducted in South Africa by van der Walt and Dreyer (1995: 307) and Calteaux (1996: 184) found that low socio-economic backgrounds of many African learners correlated with lack of reading materials to stimulate their language and reading skills, and this in turn proved to be a major impediment to their academic progress. On the other hand, Thomas and Collier's (1997) research on effective bilingual programmes across the USA found that well implemented programmes for English language learners can overcome the effects of poverty on student achievement.

3.1.4 Basic Interpersonal Communication Skills and Cognitive Academic Language Proficiency.

The debate about bilingual education needs to consider the distinction between two sets of language skills introduced by Cummins (1979, 1984, 2000, 2001 and 2003): *Basic Interpersonal Communication Skills* (BICS) and *Cognitive Academic Language Proficiency* (CALP). The discussion of this distinction is important to clarify that the use of a primary language in education does not automatically imply that all students will experience academic success. Rather, a particular level of language proficiency and associated skills enables students, whether L1 or L2 speakers, to experience success in their education (Cummins, 2000).

Cummins (2000: 55 and 2003: 322) defines BICS as being the conversational fluency or oral language skills as used on a day-to-day basis in social situations. Cummins asserts that it is comparatively easy to develop BICS in a second language, particularly if the learner is in an environment where the target language is spoken frequently. According to Cummins, this can be attributed to the idea that BICS are not cognitively demanding, because the meanings are often supported by a wide range of non-linguistic or paralinguistic cues. These cues include the use of prosody (pitch, stress, intonation) and paralinguistic features (gestures, expressions). Moreover, meaning may easily be negotiated in the course of interaction (Matjila and Pretorius, 2004:3).

In contrast to BICS, CALP entails the ability to use language in context-reduced communications, and includes those cognitively-demanding skills that are required for

formal academic learning (Cummins, 2003: 323). CALP reflects the registers of language acquired in school and which learners need to use effectively if they are to experience academic success. The four basic areas of academic skills that are required in education are: academic speaking, academic listening, academic reading and academic writing. Furthermore, there are academic vocabularies and subject-specific concepts that need to be mastered. Other essential academic skills include the ability to think critically, to argue, analyse, compare, classify, synthesise, generalise, evaluate and infer. Mastering such skills requires a great deal of time and support, particularly if they are being learned in one's L2 (Cummins, 2000).

Therefore, to enable students to interpret complex interdisciplinary content, task-oriented and contextual learning is recommended (Cummins, 1979). However, Cummins (1986: 18) is of the opinion that learners of a second language may need five to seven years to obtain sufficient CALP to be able to perform well on academic tasks. This is obviously much longer than the period of two years that learners generally need to develop BICS in a second language. For this reason, his discussion of the *interdependence hypothesis* and the *threshold hypothesis*, as elaborated below (Cummins 2000), suggests that it might be beneficial to first develop CALP in the learners' primary language (L1) before it is transferred to the second language.

The *interdependence hypothesis* is explained by Cummins (1998, 2000 and 2009) to mean that cognitive and literacy skills developed in the L1 can under certain circumstances assist in making the input in the L2 more comprehensible. It is argued that this can occur through transfer mechanisms in bilingual contexts, whereby skills developed in one language can be applied while using another. Cummins attributes this possibility to the idea that languages that are different might share some *Common Underlying Proficiency* (CUP) in terms of similarities in concepts and knowledge gained through learning and experience that can transfer across languages. A study that examined the issue of transfer (Jiang and Kuehn, 2001) supports Cummins' model of CUP and the interdependence hypothesis between L1 and L2 finding that late (adult) immigrant students who had higher L1 academic language proficiency generally made

better progress in L2 academic language development, as a result of previous L1 instruction, than did the early immigrant group (those who immigrated at a younger age). This suggests that in a situation where primary instruction has been in L2, such as in South Africa, adult students might experience problems when L1 is introduced at a later stage to teach them academic literacy. This is because the students will not have any background knowledge to draw from in their L1. The situation can further be made difficult by the fact that the available extensive literature on academic literacy has focussed on university students and hardly contains research on school children (Scarcella, 2003: 3). In a similar vein, Scott, Bell and McCallum (2009: 31, citing Miller-Guron and Lundberg, 2000) caution that students who experience difficulties mastering academic aspects of their first language are likely to struggle to acquire these skills in a second language. Therefore, the ability to transfer skills is dependent on certain factors, such as those mentioned above, being met between the two languages in question, rather than on indiscriminate processes that happen all the time.

Cummins' (1998, 2000 and 2009) threshold hypothesis claims that bilingual students need to have developed a certain level of proficiency or competence in both their first and second languages for them to experience cognitive and academic benefits. Cummins bases this view on his research that indicates that students learning in both L1 and L2 develop better cognitive and academic skills than students who only use a second language. Cummins illustrates this theory by distinguishing between the lower and the higher threshold levels of bilingual competence. In the lower threshold level of bilingual competence, the learner is more competent in one language than in the other. Alternatively, a learner having a higher threshold level of bilingual competence has equal competency in both languages. However, Cummins (2000) notes that the level of bilingual competency does not impact negatively on learners cognitive development, except when their knowledge of both languages is at a low level of competence. This can mean that even bilingual students with different levels of competence in their two languages of instruction might experience cognitive and academic benefits.

Although these theories were developed to be applied at primary school level, and for immigrants in countries where a second language such as English is the dominant everyday language, Cummins's hypotheses can be taken to suggest that tertiary students with problems in academic literacy skills (CALP) might benefit from developing this skill to the required level of language proficiency through the use of their L1 as a resource alongside their L2. However, this might prove to be a challenge if they also lack the basic conversational skills in L2 as a result of a weak educational system. This means that both language skills (BICS and CALP) should be addressed simultaneously.

Uribe (2008: 1) and Skourtou (2005: 3) report that lack of development in CALP is an issue that is a matter of concern in the USA, where English is the main language of communication. Uribe (2008: 1) indicates that many L2 learners still only make it into the "conversational English usage" category despite many years of schooling in English. They display striking deficiencies when it comes to reading and writing in academic contexts. This demonstrates that academic literacy skills are very difficult to attain despite exposure to conversational skills in a second language. At the same time Cummins' theories suggest that the common system of education found in South Africa that allows students to experience mother-tongue only up to grade 3 of primary schooling is inappropriate. For this reason, it might be beneficial if mother tongue instruction was carried out throughout schooling to enable students to develop the CALP they will need at tertiary level.

Cummins's BICS/CALP theories have received support from various scholars (Bell, 2001; Setati, 2002; Alexander, 2006; Heugh, 2000 and 2005; Zwiers, 2005) who argue that when L2 learners enter school, they bring with them a wealth of cognitive, social and linguistic skills that they developed in their L1. It is then to the advantage of the educational institutions to exploit these skills that learners possess in their L1 to make the learning of skills provided in L2 effective. For instance, Cummins and Swain (1986: 2) report that their study found that the use of L1 contributes to cognitive development. It should however be understood that this would happen in situations where L1 is well developed itself and used for academic functions. Zwiers (2005: 60) agrees that L1 support is essential in developing academic skills among L2 learners. This is because:

For English language learners, academic English is like a third language, their second language being the social English of the school, community, and media.

Cummins's BICS/CALP distinction is not, however, free from controversy. MacSwan and Rolstad (2003: 331-334), for instance, object to certain properties that Cummins associates with academic language on five issues. Firstly, CALP, as noted above, is said to be context reduced, implying that it involves the ability to make the meaning explicit by language alone rather than by a mixture of language, gestures and intonation. However, MacSwan and Rolstad argue that there is no evidence to support the claim that academics are better at explaining their craft than are the less schooled at explaining theirs. Moreover, they are not convinced that accompanying gestures are less useful to academics than they are to other people communicating in non-academic situations.

Secondly, MacSwan and Rolstad challenge Cummins's assertion that BICS and CALP follow "different developmental patterns" (2000: 62). MacSwan and Rolstad argue that if the sequential order of BICS and CALP in immigrant children were dependent upon individual experiences and situations, as Cummins (2000: 61) has asserted, then BICS would not normally precede CALP. Thirdly, MacSwan and Rolstad disagree with Cummins's definition of CALP as having specific, context-independent properties (from which academic advantages are derived); they would rather Cummins should identify cultural and linguistic differences which privilege certain children over others. MacSwan and Rolstad also take issue with Cummins's assertion that CALP is characterised by an expanded vocabulary and knowledge of complex grammatical structures (citing Cummins, 2000a: 63 and Cummins, 2000b: 35-6). MacSwan and Rolstad argue that a considerable amount of research has shown that there is no human language or language variety which does not have complex grammatical structures, mechanisms to create new words as the need arises, and the ability to make complex meanings explicit by means of language alone (citing Crystal, 1986 and Milroy and Milroy, 1991).

Finally, MacSwan and Rolstad (2003: 334) agree with Cummins that the language taught at school may differ in some respects from that used in other contexts, but they disagree that school has the effect of *improving* children's language. Rather, they argue that one's schooling may change one's language so as to be *different* but not necessarily more complex. MacSwan and Rolstad conclude their argument by stating that, in the absence of any relevant empirical evidence to show that academic language is more "complex" or "expanded" than non-academic language, they reject the view that school improves language or that the language of the educated classes is in any sense richer or more complex than the language of the unschooled (2003: 334). MacSwan and Rolstad's argument suggests that there is no new level of complexity to be achieved, as all natural languages have the same level of complexity.

3.2 Dual Language Instruction Course Development

This section explores theories that inform the development of a dual language instruction (DLI) course material on academic literacy and communication skills that views L1 as a resource rather than a problem. The discussion focuses on the goals, the teaching methodology, and the syllabus design of a dual language instruction course on academic literacy and communication skills. The section concludes with a reflection on the implications of this discussion on the development of the DLI course of the present study

3.2.1 Defining the Goals of the DLI pilot course

Weideman (2003: 57-8) asserts that, in order to develop an intervention strategy, one needs to define the concept as it pertains to the discipline in which it will take place. It is therefore useful at this stage to discuss the concepts that help to inform the goal underlying courses on academic literacy and communication skills. In this respect, Academic literacy is specifically understood to mean "a variety or register that is used in higher education instruction and in readings characterised by specific linguistic features that are associated with academic disciplines" (Helmberger, 2006: 66). More broadly defined, it includes linguistic components including: semantic and syntactic knowledge and the use of functional language (Price, 2007: 318), the ability to communicate effectively in social and academic settings, to comprehend and use the language of the content areas, such as mathematics and science, and to read, write and engage in substantive conversations (Ager, 2001; August and Hakuta, 1997; Gottlieb, 2005; Weideman, 2003; Wong-Fillmore and Snow, 2000). Scarcella (2003: 3) supports learning academic English because she considers it as "probably one of the surest, most reliable ways of attaining socio-economic success." Therefore, this suggests that a course on academic literacy should aim to provide students with specific and broad skills that they can apply to learning and communicating in both formal and informal contexts within and outside the classroom. In providing these skills, the focus should be on developing them in the language required for long-term success to completion of higher education and future employment. In the current case, the primary target language is

English because in South Africa – like in the majority of the countries of the world – it is the dominant language of academic discourse and of the economy.

Whilst endorsing the importance of academic literacy, Scarcella (2003: 5) shares the view held by many other scholars (cites Street, 1985, 1996; McKay and Weinstein-Shr, 1993; Valdez, 2000) namely, that it is equally important to "accept wider varieties of expression, to embrace multiple ways of communicating" (citing Zamel and Spack, 1998: xi). The reason provided by Scarcella for this argument is that it marginalises students when their language varieties are not accepted in academic situations. In such a situation, Weil (1986: 226, cited in Preece and Martin, 2010) notes that many students experience higher education as an "assault on the identity" as well as an attack on their confidence. Moreover, Scarcella (2003) is of the opinion that emphasising the importance of academic literacy can be counter-productive, as there are no widely accepted standards of academic discourse adhered to by all academics due to multiple dynamics and evolving literacies. Scarcella (2003: 5, citing Leki 1992) argues that what should happen instead is that academics who evaluate students' papers should "learn to read more broadly, with a more cosmopolitan, less parochial eye." Scarcella (2003:7, citing Delpit, 1995, 1997, 1998) concludes by recommending that educators should consider various instructional strategies that can assist in developing the required academic literacy skills, as those individuals who lack them may continue to be marginalised in academic settings that are designed to exclude them from participation in and transforming educated society. It may however not necessarily be the case that the set institutional academic standards are designed with the purpose to exclude certain students. It could be the case of students lacking the required academic standards due to a fault that is not theirs but because of the deficient schooling system that failed to prepare them. In such circumstances, academics have a challenge to come up with instructional strategies that might benefit students.

3.2.2 The instructional strategy

The instructional strategy consists of both the method of instruction and the course content. Genesee (1987: 176-9) and Torres-Guzman, (2002: 6) note that an approach in which L2 instruction is integrated with academic instruction is an effective way of creating an authentic context for language use and for teaching the language skills needed for educational purposes. Genesee (1987) argues that the primary basis of such an integrated approach to instruction is not language, as is the case in most L2 programmes; rather, language is secondary and, from the students' point of view, it is often incidental, as language is taught and learned to serve communication needs in the pursuit of academic goals (Genesee, 1987: 177). In the South African context, Ngwenya (2006: 23) argues that an integrated approach to education is necessary as an alternative to apartheid education as it [apartheid education]:

[... t]ended to leave many students' English competency grossly inadequate, through its emphasis on rote-learning such as parsing of words and sentences and memorization of facts for regurgitation in tests and examinations at the expense of understanding and critical thinking.

In addition to deciding on an instructional approach, Thomas and Collier (1997: 15-16) suggest three predictors of academic success in a bilingual programme that need to be taken into consideration in deciding on an instructional strategy:

- 1. Providing challenging academic instruction in both L1 and L2.
- 2. Using effective instructional strategies while teaching in two languages.
- 3. Creating an additive bilingual setting in which the language learner experiences supportive context for learning in two languages.

For points 1 and 2, this can mean selectively using L1 as a resource in areas where students might find it difficult to follow the L2 instruction, rather than using L1 indiscriminately in an L2 study material. In creating a supportive additive bilingual setting, teachers should be fluent in students' primary language to allow free interaction in both languages, and the instruction should build on students' personal and cultural experience (Cummins, 1998: 8). These three predictors would therefore need to be built

into the instructional approach to ensure that the participants view the material as contributing to academic success. If they develop this view, they might in turn regard the use of L1 in education favourably.

3.2.3 Task based language teaching

Genesee (1987: 177) points out that if L2 instruction is to be truly and naturally integrated with academic instruction, it should adopt a *task* instructional practice. In clarifying the term *task*, Nunan (2004: 4 and 2006: 3) first reviews a long list of various definitions (citing Long, 1995:89; Richards, Platt and Weber, 1986:289; Breen, 1987: 23; Skehan, 1998: Ellis, 2003: 16). Subsequently he categorises the different types of tasks into either target or pedagogical tasks before he provides his definition. Nunan (2006: 3) explains that target tasks imply the use of language in the world beyond the classroom, whereas, pedagogical tasks are those that occur in the classroom. While Nunan (2006: 6) acknowledges that the definitions he explores vary, he finds that they all emphasise the fact that tasks involve "communicative language use in which the user's attention is focussed on meaning rather than grammatical form." Nunan is however quick to explain that this does not in any way mean that form is not important. Thus, Nunan's (2006: 5) definition of task is:

A piece of classroom work that involves learners in comprehending, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form.

This definition is based on pedagogical tasks, as its key word is "classroom work". This is an appropriate understanding of the term "task" for students in a pre-university course studying in a context where their opportunities to use the target language are limited outside the classroom. The definition suggests that in adopting this understanding of tasks a course material developer may need to provide students with classroom activities that will enable them to develop the skills they require in their content subjects. These

are skills of listening, speaking, reading and writing that are required in the academic context.

Condelli and Wrigley (2005: 13) endorse the task based language teaching (TBLT) approach as they argue that it is one of the ways to bring real-world activities into the classroom, particularly for adult ESL learners. They state that TBLT focuses on real-world literacy activities that reflect the challenges that adult learners face in their daily lives and that it therefore goes beyond teaching language basics and structure. Torres-Guzman (2002: 6) also shares the view that classroom group activities that are hands-on are important for linguistic as well as social development. The approach to academic literacy and communication skills development adopted for this study is therefore the task-based language teaching (TBLT).

While TBLT appears to be a justifiable approach for adult ESL learners, particularly at university level, its effectiveness would depend on the manner in which the course is designed rather than a course consisting of a list of isolated tasks that do not promote learning (Nunn, 2006: 2). An approach that has the potential to contribute to effective learning that is recommended by Nunn (2006: 2) is to organise task-based activities into units in the form of written reports, spoken presentations and substantial small group conversations that lead to decision-making outcomes. The implication is that the course should be organised into units of speaking, listening, reading and writing. Within each unit, several specific skills can be explored in the form of tasks that students will perform based on the understanding of the goal of the course.

3.2.4 Task organisation

Having organised the tasks into identified units, the next important stage is "how the tasks specified in a task-based syllabus can be converted into actual lessons" (Ellis, 2006: 2). Ellis (2006: 2) indicates that while various designs have been proposed (citing Estaire and Zanon, 1994; Lee, 2000; Prabhu, 1987; Skehan, 1996; Willis, 1996) they all have

three principal phases in common that reflect the chronology of task-based lessons: 'pre-task', 'during task' and 'post-task'.

Firstly, Ellis (2006: 2-3) explains that the *pre-task* phase refers to the various activities that teachers and students can perform in preparation for the task ahead in ways that will promote language acquisition. Activities for the teacher that are suggested by Ellis (2006: 3) are to inform the students of what the lesson is about, what is it that they will be required to do and what the outcomes of the lesson are. This implies that the table of contents in a learning material should indicate areas to be covered in the course. In addition, each unit should clearly indicate the subject of the lesson. This can then be followed by a list of learning outcomes, specific outcomes and assessment criteria of each unit. Over-and-above this basic information, Ellis (2006: 3, citing Lee, 2000 and Dornyei 2001) emphasises that effort should be made to present the preparation stage in an interesting manner that will motivate learners to take part in the lesson. In such a case, Doyle (1983, in Genesee, 1987: 177) explains that the notion of *pre-task* focuses on three aspects of students' work:

- (1) the products students are to formulate,
- (2) the operations that are used to generate products, and
- (3) the resources available to students in generating any given product.

Of interest here are "the resources" which Genesee (1987: 180) refers to as the "students' linguistic, cognitive and social skills as well as their interests and needs." Within a dual language instruction course the linguistic needs can include the use of L1 in preparation for the execution of activities in L2. For instance, Cook (2001: 222) suggests that the teacher can present an advertisement for translation as a pre-task activity in an effort to interest learners. In addition, Torrez-Guzman (2002: 6-7) indicates that the students' interests can be activated by the:

- (1) Inclusion of original works from the worlds of their language groups so that the students see the authors as intellectual role models;
- (2) Acknowledgement of what students bring into the classroom-life experiences, cultural ways, and so forth as legitimate knowledge upon which to build;

and the

(3) Incorporation of homes and communities as knowledge resources for curricular development.

The list of South African black writers is too long to allow one to choose who to expose the students to (e.g. Mongane Wally Serote, Zakes Mda, Ezekiel Mphahlele, Njabulo Ndebele, Phaswane Mpe, Nobuhle Ndimande-Hlongwa and Sbusiso Nyembezi). Some writers are journalists who publish their work in English newspapers. For this reason, newspapers can provide up-to-date information that can be used in compiling classroom tasks on academic literacy and communication skills. Moreover, there are white South African writers who have published literature in English whilst also using a few African languages, such as Alan Paton's *Cry, the beloved country*, that provides a vast amount of information on black South Africans' political history, culture and community lives.

Exploiting the linguistic resources may also involve the students planning how they will execute activities that will enable them to develop L2 words, phrases and grammar that are essential to the task (Ellis, 2006: 5). Ellis (2006: 5, citing Newton 2001) suggests three ways in which teachers can target unfamiliar vocabulary:

- (1) Predicting (i.e. asking learners to brainstorm a list of words related to the task title or topic),
- (2) Cooperative dictionary search (i.e. allocating different learners words to look up in their dictionary), and
- (3) Words and definitions (i.e. learners match a list of words to their definitions).

However, Ellis (2003: 246) cautions against directing pre-task activities on specific aspects of language as learners may respond by treating the task they are asked to perform as an 'exercise' for practising the language features that have been taught. In light of these contradictory views, it can be left to the teacher to consider directing pre-task activities on language features on needs' bases. As Nunn (2006: 8, citing Lowe 2005: 12) indicates:

[..c]ontext rather than dogma should determine whether the task comes first and the language work second or vice versa. The L2 context where students are in a pre-university engineering programme may require a focus on vocabulary development. This is because the university vocabulary is demanding on its own over-and-above the scientific concepts that they need for success in their content subjects. Hunt and Beglar (2005: 24) support the importance of attending to unknown vocabulary because learners may simply ignore many of the unknown words or phrases that they encounter, when reading or listening for comprehension. This may in turn contribute to a failure in their studies.

Secondly, the *during task* phase "centres on the task itself and affords various instructional options, including whether students are required to operate under timepressure or not" (Ellis, 2006: 2). This phase affords the students the opportunity to first perform the task in pairs or small groups. Similarly, Wesche and Skehan (2002: 208), assert that the TBLT approach should be organised such that it has activities that allow interaction between students as they solve problems. It is at this stage that bilingual students may use their L1 as they negotiate meaning among themselves. In this manner, the students' L1 may become a useful resource to develop and perform skills targeted by the task at hand, which the lecturer and the study material would have explained in L2. As Poole (2005: 52, citing Adendorff, 1998; Vavrus, 2002; Yu, 2001) explains, in settings where English language teachers and students share a common language and culture, such as in South Africa, Tanzania and China, there is a tendency to either codeswitch or simply use the native language in order to overcome communicative difficulties. Therefore, tasks can be developed such that they encourage students to communicate among themselves. This has the potential to help bridge the gap between school and university, especially among foundation students.

Finally, the *post-task* phase "involves procedures for following-up on the task performance" (Ellis, 2006: 2). Ellis (2006: 15) indicates that there are three options that can be explored in this phase that have major pedagogic goals:

- (1) To provide an opportunity for a repeat performance of the task,
- (2) To encourage reflection on how the task was performed, and
- (3) To encourage attention to form, in particular to those forms that proved problematic to the learners when they performed the task.

With respect to these points, Ellis (2006: 15) explains that several studies (cites e.g. Bygate 1996 and 2001; Lynch and Maclean 2000) indicate that when learners repeat a task, their production improves in a number of ways (e.g. complexity increases, propositions are expressed more clearly, and they become more fluent). Ellis (2006, cites Skehan and Foster 1997) suggests that one of the interesting ways of making students repeat a task is to require them to perform in front of the class using L2 only. While Ellis (2006, cites Candlin 1987) acknowledges that this increases the communicative stress, he emphasises that L2 learners need experience in using L2 in front of an audience, particularly if their career involves making oral presentations in L2 as is the case with engineers. This is true of engineering students and professionals as they have to make a number of oral presentations in their content classes and in the field of work.

The task based language teaching (TBLT) approach as a unit of the syllabus design within the integrated approach to academic literacy and communication skills development appears to be appropriate in an adult L2 learning environment. In a bi-/multilingual setting the TBLT approach also allows students to interact in their L1 during student-student activities during the preparation of tasks that they are going to present in L2 in front of their lecturer.

Furthermore, students can be asked to reflect on the tasks by summarising their outcome and evaluating their own performance (Ellis, 2006: 15-16). Ellis (2006) explains that the task evaluations can be done by using simple questionnaires to help the course designer decide whether to use similar tasks in the future or not. In the case where the tasks integrate the use of L1 alongside L2 for the first time, this course evaluation by both students and teachers might be very important for the course designer. The designer might be able to identify which aspects of the course are successful and which aspects

need improvement. Ellis (2006: 16) explains that the focus on forms is needed to counter the danger that students might develop fluency at the expense of accuracy. This idea and various opposing views to it can be understood in the light of the discussion on grammar instruction that follows below.

3.2.5 Grammar instruction

Long (1991) and Long and Robinson (1998) make a distinction between two types of grammar instruction that need to be considered in developing a language course: 'focus on form' and 'focus on forms'. On the one hand, *focus on form* instruction refers to:

drawing students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication.(Long, 1991: 45-6)

The main assumption here is that communicative activities have the potential to enable students to develop proficiency in a second language. For this reason, more time and effort should be spent by teachers on creating real-life communicative situations on oral and written discourse during their course design. The course's tasks could engage students in job interviews, debates, public speaking and letter writing. In the process, if there are "perceived problems with comprehension or production" then the teacher or peers could pay attention to grammar instruction in a form of error correction; rather than having pre-planned grammar instruction (Long and Robinson, 1998: 23).

Alternatively, *focus on forms* instruction means that course designers concern themselves mostly with teaching specific L2 grammatical forms. Such an approach is evidently teacher-centred as teachers are required to spend a lot of time teaching grammatical rules, giving feedback and students making corrections. This may appear to contribute very little to L2 students' development and confidence in the communicative use of the target language (Long, 1991).

Research into these two approaches (focus on form and focus on forms) yields contradictory results. Poole's (2005: 49-50) extensive review of studies of focus on form instruction reveal a mixed picture of its ability to promote L2 grammatical instruction (cites Arteagoita, Fridman, and Doughty, 1995; Doughty and Verela, 1998; Jourdenais, Ota, Stauffer, Boyson, and Doughty, 1995; Williams and Evans, 1998; Van Patten and Oikkenon, 1996; Roberts, 1995; Williams, 1999; and Poole, 2003a). For instance, Roberts' (1995, in Poole 2005) study that analysed the effectiveness of error correction in beginner-level students of Japanese at the University of Hawaii showed that focussing on students' written grammatical errors was successful when errors were contextualised and understood by students. However, studies on the focus on form instruction by Williams (1999) and Poole (2003a), at United States universities, indicated that the majority of students (80-90%) attended to vocabulary rather than grammar. At the same time, Poole (2005: 50) notes that all studies supporting focus on form have taken place in well-funded educational institutions with small classrooms of between three and eight students. This is an indication that this approach might not work well in bigger or overcrowded classrooms. Poole (2005) indicates that in overcrowded classrooms such as those found in South Africa the tendency is for the teacher to use the native language "to clarify information and to encourage, provoke, and involve his students" (cites Adendorff, 1998: 383). In such situations where students may lack English proficiency a teacher may feel that for him "the grammar-translation method is the most acceptable" (Poole, 2005, cites Yu, 2002: 197).

Sheen (2003) agrees that intentional emphasis on certain forms within a communicative context offers a better hope of addressing advanced English language learners' grammatical needs than does focus on form. Indeed, Long (1991) and Long and Robinson (1998) clarify that *focus on form* and *focus on forms* are equally valuable and should therefore complement rather than exclude each other. In the same vein, Baleghizadeh (2010: 122) asserts that there is now much research to support that both negotiation of form and meaning arising from focus on grammar promote language acquisition (citing Ellis and He, 1999; De la Fluente, 2002; Mackey, 1999; Pica, 2002; and Loewen, 2005). In the light of these conflicting views it appears that a course

designer may take a proactive decision to teach certain linguistic forms communicatively (focus on forms); rather than to anticipate teaching them incidentally (focus on form). At the same time, the course designer may need to be open to teaching some grammar incidentally.

3.2.6 Syllabus/curriculum design

Freeman and Freeman (2005: 24) contend that "without an effective literacy curriculum, students will not reach high levels of academic competence in two languages." However, finding a clear definition of what is meant by the term *syllabus* or *curriculum* is difficult due to diverse understandings and preferences of each of these two terms. For instance, Far (2008) attempts to develop what he calls a contemporary definition of the term *syllabus* by reviewing several of the earlier definitions. According to Hutchinson and Waters (1987: 80, in Far, 2008) *syllabus* is "a statement of what is to be learnt" whereas according to Yalden (1987: 87, in Far, 2008) it as "a summary of the content to which learners will be exposed". Far's (2008) own definition focuses on a language teaching syllabus that he defines as the combination of subject matter (what to teach) and linguistic matter (how to teach).

In contrast, Nunan (2004: 4-6) prefers the term *curriculum* to *syllabus*, which he explains to refer to a particular course of study. Despite differences in terminology and definitions, Nunan (2004) and Far (2008) are in agreement in advocating an integrated approach to curriculum planning in which content, procedure and evaluation are all considered concurrently. Both these definitions that emphasise the combination of subject matter and linguistic matter are appropriate for an academic literacy and communication skills course.

On the question of what to teach and how to teach (that is raised by Far's 2008 definition) Torres-Guman (2002: 6) indicates that the skills of listening, speaking, reading and writing should be developed by providing a print-rich classroom environment for

bilingual students. At the same time, Torres-Guzman (2002: 6) emphasises that "equity requires that such environment be provided in both languages." This approach finds support from August (2006: 246), who argues that a weak English learner (L2), such as those studying at pre-university level, would be best served by a curriculum that focuses on strengthening their academic literacy and language skills using their mother tongue (L1). Similarly, Freeman and Freeman (2005: 25) and Pretorius (1995: 33, in Butler and Van Dyk, 2004) agree that there is considerable research to show that students who can, for instance read in one language (L1), can transfer the literacy skills and knowledge that they have developed in that language to reading in a second language (L2). This may be provided students have the appropriate vocabulary to read in the L2 for them to be able to transfer their reading skills. In addition, this might work well provided the languages share the same alphabets. The other ways in which the students' L1 can be used (other than transfer) is for support purposes, such as giving translations, discussing the subject during or after class, previewing the material before a lesson in L2 (Goldenberg, 2008: 11; Freeman and Freeman, 2005: 26). The L1 may also be used "to clarify concepts, introduce new ideas, or provide explanations" (Condelli and Wrigley, 2005:17). The different ways in which L1 can be used alongside L2 demonstrate that, where theories on skills transfer (see 3.1.4 on interdependence hypothesis) are not applicable, there are other options that can be pursued in an endeavour to promote bi-/ multilingual education. These different options can particularly be useful in situations where academic literacy has not been extensively developed in the L1.

In terms of what essential skills should be developed in an academic literacy class to promote academic success at university level, Weideman (2006: 84, citing Weideman, 2003a:xi; cf. also Cliff, Yeld and Hanslo, 2006 and Cliff and Hanslo, 2005) indicates that a student who is academically literate should be able to:

- (1) understand a range of academic vocabulary within context;
- (2) interpret and use metaphors and idioms, as well as be able to perceive connotations, wordplay and ambiguity;
- (3) understand the relations between different parts of a text, be aware of the logical development of (an academic) text, and know how to use language that serves to make the different parts of a text hang together;

- (4) interpret different kinds of text type (genre), and show sensitivity towards the meanings that they convey and the audience at which they are aimed;
- (5) interpret, use and produce information presented in a graphic or visual format;
- (6) make a distinction between essential and non-essential information, between fact and opinion, and between proposition and argument; distinguish between cause and effect, as well as classify, categorise and handle data that makes comparisons;
- (7) identify sequence and order and make simple numerical estimations and computations that are relevant to the academic information, thus allowing one to make comparisons which can be utilised in arguments;
- (8) know what counts as evidence for an argument, extrapolate from information by making inferences, and apply the information or its implications to cases other than the one at hand;
- (9) understand the communicative function of various forms of expression in academic language (such as defining, providing examples, arguing); and
- (10) discern meaning (e.g. of an academic text) beyond the level of the sentence.

Weideman's (2003) list is exhaustive and appropriate as it draws from various scholars and meets the needs of both pre-university and first-year students. Pre-university students are expected to develop these academic literacy skills in their academic literacy and communication skills course to enable them to be better prepared for full-time study when they begin their first semester of their national diploma in engineering. The reading section of a course can better serve the development of these academic literacy skills. For instance, newspaper or internet articles on topics related to the students' field of study can provide a good source of teaching vocabulary within a context. Other aspects of academic literacy that may be attended to in the process of reading articles could be coherence in a text, distinction between fact and opinion, and text organisation as it relates to cause and effect, compare and contrast, description and classification. The same skills developed during the reading lessons may also be applicable to both writing and speaking skills section of a course. If for instance students have been exposed to texts that present information in different forms they might also find it easy to present their written and spoken tasks in the required styles. They can use the knowledge gained in one lesson across different lessons of a course in academic literacy and across their content subjects.

3.2.7 Summary

This chapter has examined the literature on bilingual education in an effort to provide a clear definition of the term and its related concepts and theories. In the process, the discussion of the distinction between MBE and TBE is made to indicate technical differences in bilingual education programmes. The distinction between BICS and CALP is also made to illustrate the different language skills that students need to develop. Further discussion of research in this field indicates that researchers do not seem to agree on the benefits of this approach to education. This is because for "every research report that indicates that mother-tongue education is effective, there is another one that indicates that it is not" (Fasold, 1984: 312, cited in Kamwangamalu, 2000). Similarly, some researchers (Goldenberg, 2008: 42) that endorse mother tongue instruction admit that the effects of primary language instruction are modest, estimated at approximately 12-15% improvement on students' academic achievement.

One benefit associated with bilingual education that this study seeks to explore is the issue of language attitudes. Research indicates that bilingual education programmes have received mixed reactions even among the people who are supposed to benefit from them, however, this area has not been well investigated in higher education. This gap in research allows the current study to investigate the issue of language attitudes in tandem with a dual language instruction course.

The second section explored the theoretical framework surrounding the design and development of a dual language instruction (DLI) course. Areas of focus in this section are: the goals of the DLI pilot course, the underlying teaching methodology, and the DLI course's syllabus design. Following this discussion, the design of the dual language instruction course of the study is presented in the next chapter.

CHAPTER 4

RESEARCH METHODOLOGY AND COURSE DESIGN

4. Introduction

The purpose of this chapter is to present the research methodology and the dual language instruction course design of the present study. These two were used to investigate the relationship between language and education from the perspective of attitudes. The first section provides a description of the site as well as of the participants and the researcher in order to contextualise the study. The data collection procedures and measurement techniques are then described. The second section describes the DLI course material and discusses its curriculum. The summary of the chapter is provided.

4.1 The research site

The educational institution that formed the site of the study was the Mangosuthu University of Technology (MUT), which was until the end of 2007 known as Mangosuthu Technikon. MUT is situated in the Umlazi township, south of the city of Durban, in the province of KwaZulu-Natal (KZN), South Africa. The Umlazi township is a residential area that is both historically and currently occupied almost entirely by Blacks, who are predominantly isiZulu speakers. It is due to the nature of these demographics that, during the past political dispensation (i.e. the Apartheid regime, 1949-1994) that emphasised ethnic and racial segregation, the then Mangosuthu Technikon was designated for isiZulu-speaking African students. As a result, in spite of new, democratic policies that promulgate equality and integration across all spheres of society, the majority of South Africa's previously black educational institutions tend to remain Black in terms of their student enrolments. There has been a notable trend whereby it is mainly Black South Africans who tend to move to previously white and Indian schools and

universities, rather than a general racial integration into all the available educational institutions. This is partly because the educational institutions that were previously reserved for races other than Blacks are well resourced and associated with quality education. The previously black educational institutions are generally less centrally located for white and Indian South Africans.

To illustrate the above information, table 1a and 1b below read together present the number of students registered in the first semester of 2008 at MUT, their race and first language.

Table I a

2008 MUT First Semester Enrolment: Female students (language and race)

LANGUAGE					
	BLACK	COLOURED	INDIAN	WHITE	TOTAL
ENGLISH	6	2		3	11
OTHER AFRICAN LANG	5				5
OTHER EUROPEAN LANG	1				1
SOTHO (NORTH)	11				11
SOTHO (SOUTH)	31				31
SWATI	39				39
TSONGA	11				11
TSWANA	5				5
VENDA	24				24
XHOSA	319				319
ZULU	4632				4632
TOTAL	5084	2	0	3	5089

Table I b

2008 MUT First Semester Enrolment: Male students (language and race)

LANGUAGE						OVERALL TOTAL
	BLACK	COLOURED	INDIAN	WHITE	TOTAL	
ENGLISH	12	5	3	4	24	35
OTHER AFRICAN LANG	10				10	15
OTHER EUROPEAN LANG					0	1
SOTHO (NORTH)	13				13	24
SOTHO (SOUTH)	40				40	71
SWATI	85				85	124
TSONGA	19				19	30
TSWANA	11				11	16
VENDA	32				32	56
XHOSA	311				311	630
ZULU	4424				4424	9056
TOTAL	4957	5	3	4	4969	10058

In total, there were 10 058 students enrolled in the first semester of 2008 when data was first collected for the study of which, the majority 10 041 (99,8%) were black. The student racial population comprised of only seven coloureds, three Indians and seven whites. In terms of the students' first language, the majority (9 056 = 90%) were isiZulu speakers followed by isiXhosa speakers at 630 (6%). Eighteen black students indicated that English was their first language.

Students attend MUT from across the country, with a few international students from the African continent, particularly Swaziland. The majority however, reside in KwaZulu-Natal, their urban and rural backgrounds being reflected in their diverse home life and schooling experiences both of which have limited capacity to effectively promote English proficiency and academic literacy. Moreover, the institution provides a wide range of bridging programmes, some that are not subsidised by the Department of Education, namely engineering. This is done in an effort to meet the plight of many black students who do not do well in their matric due to their poorly resourced schools and other reasons. Unfortunately, despite this second chance in education, few progress past their first year or semester of study (as illustrated in Chapter 1).

The dominant language on campus, which socially unites the students, is isiZulu. It is against this background that the current study aims to draw from the students' everyday language to facilitate the teaching and learning of their academic literacy and communication skills in English. This was done in the hope that this approach would impact positively on their attitudes towards the use of African languages in a higher education environment.

4.2 Research participants

The initial sample size of the population consisted of 300 students selected from over 500 in the foundation programme (also referred to as Pre-tech programme) for undergraduates registered for the first semester in 2008. The students in the Pre-tech programme are from the Departments of Civil and Survey, Electrical, Construction and Survey (Building), Chemical, and Chemistry and Mechanical Engineering in the Faculty of Engineering at MUT.

In 2010, a group of eighty seven (87) students were selected based on accessibility from the Department of Civil and Survey, Electrical and Chemical Engineering, and were requested to complete a third questionnaire. These students had been part of the population that participated in the 2008 two surveys. At the time of the third survey they were in semester 4 of their full-time studies in addition to the first semester of 2008 that was spent at foundation level.

Ten teaching staff members who consisted of six lecturers and four educators from nearby schools were involved in the study. Where there are staff shortages for the teaching of foundation students suitably qualified educators from neighbouring schools are employed by various engineering and service departments. All the teaching staff members involved in the foundation programme are employed on a separate part-time contract as the classes are conducted after normal working hours. The teaching staff served as informants in the study since they also completed a questionnaire.

4.3 Practitioner research

This section reviews the biographical information of the researcher, his role in the study and his position on the issue under investigation. All of this is done in an effort to declare potential biases that may influence the interpretation of the collected data.

The researcher is a male native isiZulu speaker, and an English second language (ESL) lecturer by training and work experience. The study was conducted after fifteen years' experience in teaching black South Africans. In addition to having a Masters degree in Linguistics, a postgraduate course in Translation Proficiency was completed before embarking on this project. The Translation Proficiency course proved to be useful when compiling the dual language instruction study guide as many sections of the information presented needed to be translated. However, additional assistance with the translation was sought from other skilled translators in and outside the institution. Their role included editing and back-translating the questionnaires.

At the start of research, the researcher coordinated and taught a Communication Skills course aimed at teaching academic literacy and communication skills in a foundational engineering programme called Pre-Tech(technikon). The duties as the course coordinator included designing and revising teaching and learning material over and above administrative duties. The broad level of involvement in the programme enabled problems to be easily identified in the classes with both the teaching material and the research. Access to students in classes taught by other lecturers was negotiated.

4.4 Data collection methods

The study adopts a mixed-method approach for the collection of its data. The size of the student participants and the focus of the study on language attitudes made it necessary to select questionnaires as the main research tool. The questionnaires were supplemented with focus group interviews conducted with two groups of students. In addition,

students' responses to a second questionnaire were supplemented with their lecturers' answers to a different questionnaire. The data collection process can be outlined as follows:

- Develop dual language instruction (isiZulu-English) material for an Academic Literacy and Communication Skills course.
- 2. Assess the attitudes of a group of 300 students to the use of isiZulu before exposure to the DLI course material (semester 1, February 2008).
- 3. Undertake the pilot course that is in both English (about 65%) and isiZulu (about 35%).
- 4. Administer a second questionnaire to the 300 student participants to elicit their language attitudes and the evaluation of the DLI pilot course (semester 1, May 2008).
- 5. Administer a questionnaire to 10 lecturers of the pilot course to elicit their language attitudes, their observation of students during the course and their evaluation of the course material (semester 1, May 2008).
- 6. Facilitate a focus group discussion with a sample of two groups (28 and 30) of students after the course and the administration of the second questionnaire (semester 1, May 2008).
- 7. Longitudinally assess the attitudes of a sample of 87 students from the original cohort of 300 after a period of three semesters has passed (semester 1, March 2010).

The questionnaires consisted of mostly closed questions and a few open questions. The closed questions required the respondents to indicate their opinions by locating their responses on a rating scale. However, in order to minimise bias, both negative and positive statements were included. Open questions in the questionnaire and the focus group discussions with students were intended to allow the participants the opportunity to express their views in their own words so as to offset the bias and limitations that might have been created through the use of closed questions.

The study was an embedded mixed-method research approach as it was mainly quantitative in its use of questionnaires but supplemented the statistical responses with data collected through qualitative research methods in its use of open questions in some of the questionnaires and focus group interviews.

4.4.1 Student questionnaire

As this was a study on bilingual education, the development of questionnaires in two languages was considered appropriate. Consequently, the students' questionnaires were formulated in both isiZulu and English throughout. In the same vein, students were allowed to respond to open questions in either English, isiZulu, or a combination of both. The translation of questions was made to allow bilingual students to refer to the isiZulu version if they do not understand the English version very well. As mentioned in 4.3 above, the questions were not directly translated from the source language into the target language. Additional steps, such as back translation and the involvement of more than one translator, were undertaken to protect the validity of the research tool.

The first student questionnaire was divided into two sections, with the first section requiring them to provide their biographical information. Requiring this information from the onset was necessary because language attitudes are usually evaluated within the context of a certain society and are dependent upon many interrelated factors (Baker, 1992: 25; Lehman and Mehrens, 1979: 163). In the first three questions, the respondents were required to first provide personal information on their age, gender and home language. The next five questions concerned their previous schooling. These five questions inquired about the racial composition of the student and teacher population, the type of location of the school, and the language(s) used by teachers. This type of information was used to assess whether or not the students' type of schooling influenced their language attitudes.

The second section of the first questionnaire had ten closed questions (Items 8-17) which were measured with a five-point scale in which the students have to agree or disagree

with given statements by choosing from *strongly agree*, *agree*, *unsure*, *disagree*, to *strongly disagree*. The questions elicited the students' existing attitudes towards the use of different languages in education (see copy of questionnaire in Appendix 1).

The second student questionnaire evaluated the dual language instruction (DLI) teaching and learning materials as used in the pilot course, and addressed its impact on the students' language attitudes. There were five questions that evaluated the material's strengths and weaknesses as a teaching tool.

This second questionnaire consisted of fifteen questions divided into three parts (see Appendix 2). The first part of the questionnaire inquired on the biographical information (age, gender and previous school (Items 1-3). The second part had ten closed questions (Items 4-13), and the last part had five open questions (Items 14-18). The biographical information was necessary to assess attitude changes among the respondents. particular, it was anticipated that the previous school could influence attitudes to the preferred language of instruction in higher education. The rest of the questions were phrased such that they assessed participants' changes in language attitudes. In setting the questions in part 2 and 3 it would have been ideal to use exactly the same questions used in the first questionnaire to correctly evaluate the level of change in attitudes. This approach was constrained by the fact that the second questionnaire was completed after students had been exposed to practical experience with mother tongue instruction at a tertiary institution. However, an effort was made to phrase the questions such that they inquired about the attitude in different terminology. To increase validity of the tool, a third party's opinion was sought to assess the close meaning in questions. For example, the two questions below are from different questionnaires but they attempt to obtain the same type of information:

Questionnaire 1: It is possible for African languages to become languages of education.

Questionnaire 2: I learnt to value the role of my home language in education.

During the analysis, questions were grouped together and their findings compared to determine the extent to which attitude change had occurred.

The third questionnaire that was completed by 87 students after a period of three semesters (March 2010) of a DLI course assessed whether their attitudes on arrival and those developed during participation in the dual language course had changed. It was divided into two parts, the first part required f biographical information (Items 1-4). The second part consisted of ten questions (Items 5-14) that elicited students' prevailing language attitudes. This last section of the questionnaire was the repeat of the questions in the first questionnaire (February 2008) that was administered before exposing the students to a DLI course (see Appendix 3).

Despite all the efforts that were undertaken to increase validity of collected data, the researcher was aware of major drawbacks of questionnaires. These include the simplicity of answers that are likely to be produced by students especially when they are at a foundation level of their study. Moreover, the literacy level of students could have led to unclear and irrelevant answers that would have ended up not being useful. Even though every effort was made to limit the length of the questionnaires while ensuring that relevant information was elicited it is likely that some of the respondents would have found the task a burden. As a result, they would not provide well thought out answers. In addition, the fact that completing questionnaires yields self report data their validity may be questionable because of the possibility that the respondents might provide the answers that they think the researcher expects (Dornyei, 2003: 9; and Neuman, 2007: 168).

4.4.2 Lecturer questionnaire

The fourth questionnaire was given to ten lecturers who used the DLI teaching material at the end of the 2008 first semester. The purpose of involving lecturers was to gauge the impact of the course on their language attitudes compared to those of the students. At the same time, the questionnaire required lecturers to provide their evaluation of the teaching

material and to report on their observations of the student performance during the use of the DLI course material.

The lecturers' questionnaire was divided into four sections. Section 1 (Items 1-7) required the respondents to provide demographic details regarding their age group, gender, proficiency in isiZulu, first language, language(s) used at home, English teaching experience and highest qualification. However, the small size (n=10) of the lecturer group does not allow for significant generalisations during data analysis.

Section 2 (Items 8-19) consisted of closed questions in the form of positive and negative statements that assess the impact of the bilingual study guide on the lecturers' language attitudes, in particular their attitudes towards teaching and learning in two languages. Each statement was assessed on a 5-point Likert scale: (5) strongly agree; (4) agree; (3) unsure; (2) disagree; and (1) strongly disagree. Section 3 (Items 20-24) contained five open questions that evaluated the strengths and weaknesses of the bilingual study guide as well as ways of improving it for future use (see Appendix 4).

While lecturers were expected to provide reliable and complete data, there was a possibility of the effect of fatigue because of the length of the questionnaire and because of the many responsibilities that they have. Moreover, the professional and personal relationship between the researcher and the respondents could have contributed to biased and unreliable responses (Dornyei, 2003).

4.4.3 Focus group interviews

Two groups of 28 and 30 students each were selected to participate in the focus group interviews that were facilitated by the researcher. The selection of the two groups was per classes in which they were in rather than a random selection of individuals. The selection of the two classes was influenced by their availability that was secured after negotiating with their respective lecturers. In using large groups from the same classes it was hoped that this would enable the respondents to speak freely among familiar

classmates. This however did not prove to be useful as certain individuals tended to be willing to participate while the rest appeared to be reserved. It was not clear whether this was as a result of the presence of the researcher whom they were not familiar with or it was something else. The questions that guided the discussion are presented in Appendix 5 and the transcript of the discussion that took place is presented in Appendix 6.

4.5 Procedure for data collection

4.5.1 Pilot study

Prior to the administering of the research tools, it was essential to pre-test them. The purpose behind this was to ascertain whether when the final data collection procedure was undertaken, the questions would be understood by the respondents as intended, and that they would capture the objectives of the study. The tools were mainly pre-tested amongst the students taught by the researcher. Furthermore, input was sought from the research supervisor on the quality of the research tools.

4.5.2 Administration of the questionnaires

Three hundred students completed the first questionnaire before commencing with the dual language instruction (DLI) pilot course at the beginning of the first semester in 2008. This stage of data collection occurred over one week between Monday 4 February and Saturday 9 February 2008, in different classes. The second questionnaire was administered at the end of the semester to the same 300 students who completed the first questionnaire, to investigate the extent to which participation in the DLI pilot course had impacted on their language attitudes and how they evaluated the DLI course material. This took place between 5 and 10 May, 2008. The third questionnaire was completed by eighty-seven (87) students after a period of three semesters had elapsed to uncover if the attitudes developed during the participation in the DLI course were persistent. Access to the participants was gained through negotiation with their content subject engineering lecturers in the week of 15 to 19 March 2010. The questionnaires were administered to

students from the department of chemical, electrical and mechanical engineering as these were the only ones that the researcher was able to locate them in big numbers within one class. In all cases the completion of the questionnaires took about 15 minutes of the students' period which allowed their lecturers to continue teaching in the remaining time.

Ten lecturers completed questionnaires in the week of 5-10 May 2008 after the lectures had ceased in which they had used the DLI course material in their classes. Their completed questionnaires were pushed underneath the researchers' door on completion to ensure anonymity.

4.5.3 Conducting focus group interviews

To obtain a good quality recording of the discussion proceedings, the Senate Chamber was secured as it had an advanced recording system with individual microphones at each desk that were activated by switching them on and off. There was also a main microphone that recorded discussions around the venue. Once completed, the recordings were transferred to a computer for listening and transcribing purposes.

Student availability was arranged with their respective lecturers and the participation in the research was explained. It was explained that the interviews were a follow-up to the questionnaires they had completed and they were informed that the proceedings would be recorded. They were told that they would be free to use both English and isiZulu amongst themselves during the discussion, and that their anonymity would be assured. The researcher explained his role as that of a facilitator. The students were promised a free lunch as a means to ensure their presence. This was necessary because during the pre-testing of questionnaires, very few students had indicated their willingness to be interviewed. It was for the same reason that the focus group discussions were chosen rather than individual interviews. The discussion took place during the study week before the first semester examinations in May 2008. The discussion of the two groups occurred on the same day but at different times.

4.6 Dual language instruction course design

The dual language instruction (DLI) pilot course material formed the central part of the study. This is because it was used as a prompt to ascertain the extent to which the use of first language (L1) alongside a second language (L2) impacted on attitudes towards the use of isiZulu in higher education. Therefore, this section presents information on how the DLI course on Academic Literacy and Communication Skills was developed following the theoretical and didactic considerations that were discussed in chapter 3, 3.2.

The guiding theoretical framework was that a well-developed dual language instruction course is driven by a well-designed curriculum, an effective teaching approach in addition to the use of L1 as resource to facilitate teaching and learning (Condelli and Wrigley, 2005; Paciotto, 2009; Thomas and Collier, 1997). The presentation of this section is on curriculum and tasks and their rationale. Selected examples of the information that was used to compile the study material are provided; the complete study guide is in Appendix 7.

4.6.1 Course description

The course is described as dual language instruction teaching and learning material because it was compiled using two languages. The two used languages were isiZulu, which is estimated at 35% and English that is estimated at 65%. The uneven use of the two languages was as a result of the fact that the use of L1 was for support purposes in a course material that aimed to develop academic literacy and communication skills in English (L2). For this reason, the material did not aim to provide a translation of every aspect of the content used. Instead, the students' L1 was mainly used to give translations where necessary (Goldenberg, 2008: 11) and "to clarify concepts, introduce new ideas, or provide explanations" (Condelli and Wrigley, 2005: 17).

The first part of the course in which the students encountered the use of L1 in a form of translation was the "Welcome" section of the instructional material. The purpose of this section was to outline the course, the outcomes, the assessment criteria and the rules regarding attendance. This section was translated because it was considered important that students clearly understood what will be covered in the course and what will be expected from them on entering into the course. Below is an example (Example 1) of the DLI material that was used.

Example 1

WELCOME

Dear Student

Welcome to the Department of Communication. The aim of this course is to provide you with academic literacy and communication skills that you require in your field of study, work environment and in your everyday life.

SIYAKWEMUKELA

Mfundi Othandekayo

Siyakwemukela ngaphansi kwezifundo zokuxhumana. Inhloso yalesisifundo ukukunika ulwazi oludinga ezifundweni zakho, ngenkathi ususebenza na nsukuzonke empilweni yakho.

Other sections of the course material that are translated by the researcher include the assessment criteria on the speaking and listening skills. It was reasoned that if students were not clear as to how they will be evaluated they might fail. Example 2 shows how the presentation skills evaluation chart was translated.

Example 2

Presentation skills evaluation chart (100%)

Introduction (15%)

Attention-getter (*Heha*)

Preview/summary of main points (*Ingqikimba yenkulumo*)

Body (40%)

Main points match preview (*Amaphuzu ancike esihlokweni*)

Well organised, logical and consistent (*Hleleka*)

Effective transitions (*Qhubeka ngobuciko*)

Most of the used material that appeared in isiZulu or both English and isiZulu were sourced in their original form from newspapers, magazines and the internet, as shown in Examples.

Example 3

Impumelelo ye-Afrika kwezesayensi ayigcini emandulo. Ngisanda kuzwa ukuthi iKreepy Krauly, lobuya bucwazicwazi obasungulwa, obugcina iziziba zomhlaba jikelele zibenyezela, basungulwa ngo-1974 eNingizimu Afrika unjiniyela osebenzisa amandla amanzi (hydraulics engineer), uFerdinand Chauvier. Kanti futhi sino-Afronaut Mark Shuttleworth ogabavula ashone ezinkanyezini enza imizamo yokuvala igebe lolwazi elikhona kwezedijithali, ukusetshenziswa kwemithombo evulekile yohlelo olufakwa kukhompyutha (software) eyenziwe ekhaya, olungezukumba eqolo ukuba luthengwe ngamadola nangopondo. Ngineqiniso lokuthi basebaningi kabi ososayensi nezazi zemethemethiki, abesilisa nabesifazane, abanezindaba ezingakhuthaza, uma zingagcinwa ezindaweni ezinedumela ngokugcina okufunwa ukukhunjulwa njengezindlela ezahlukahlukene zobuciko.

Africa's scientific successes are not limited to our past. I recently found out that the Kreepy Krauly, that brilliant invention that keeps pools the world over sparkling, was invented in 1974 in South Africa by hydraulics engineer Ferdinand Chauvier. And of course we have Afronaut Mark Shuttleworth charging across galaxies in his quest to bridge the digital divide, using home grown, open-source software that will not cost us an arm and a leg to buy in dollars or pounds. Thebe Medupe's film *Cosmic Africa* is a step in the right direction. Now we know that Africans have for centuries had sophisticated knowledge about the stars and planets around us. I'm sure there are many more African scientists and mathematicians, men and women, whose stories can inspire if preserved in popular memory through multiple art forms.

(Njabulo Ndebele, 1998. *Remembering Ancient Sciences*. (Ukukhumbula Isayensi Yamandulo) Available at www.outlet.co.za:

The instruction that accompanied the above texts was that students should pair scientific terms that are in English with the equivalent ones that are in isiZulu as they appear in both texts. In this manner, the academic literacy and communication skills course was able to integrate information related to students' content subjects. This is in line with the view held by various scholars that an effective teaching approach at tertiary level could be task based and informed by an integrated approach to language and literacy development (Genesee, 1987; Ngwenya, 2006; Nunan, 2004 and 2006). This teaching

approach can allow students to view the language class as beneficial to their success in the content subjects' classes. In the same vein, the DLI course adopted a task based language teaching (TBLT) approach in that the teaching and learning material was composed mostly of activities that students were required to engage in during their classes. Some of the activities necessitated that the students bring knowledge acquired from their content classes into the academic literacy and skills class in line with the integrated approach of the course (see Example 4 below.

Example 4

TASK 5: ARGUMENTATIVE/PERSUASIVE/DEBATE PRESENTATION

Working in groups or pairs, choose an invention in science, technology or engineering and discuss whether you think it has been good or bad/has advantages or disadvantages for people, economy or environment. Present your views in front of the class.

Following the three stages of tasks (pre-task, during the task and post-task) provided opportunities for the use of L1 as a resource to facilitate effective teaching and learning of L2 and academic literacy skills (Ellis, 2006; Prabhu, 1984). The sections of the DLI material that drew from L1 were sourced from original published documents some of which were written by members of the L1 students' community (Torrez-Guzman, 2002). The pre-task stage of the DLI course included the use of information that is provided in isiZulu and English to teach a skill such as interviews. Magazines such as *Bona* that are available in different languages were useful in providing information that was used to teach academic literacy and communication skills. During the task activities, included the use of pair and group work to enable the students to draw from their primary language to facilitate their private discussions of the task provided. However, the post-task activities were geared to make students use the target language (L2) when making class presentations and submitting written work.

Grammar was instructed throughout the course material and contextualised into different aspects of the course. Example 6 below presents how L1 was used to clarify English

grammatical concepts that are also used in isiZulu. It was hoped that when the related concepts were presented alongside each other students would understand them better.

Example 5

Parts of speech (Izingcezu Zenkulumo)

- (1) Noun (*Ibizo*): a word that names people or things (e.g. a <u>couch</u>).
- (2) Verb (*Isenzo*): a word that describes an action or condition and shows tense/time (e.g. he <u>kicked</u> the ball, I <u>was running</u>).
- (3) Adjective (*Isibaluli*): a word that describes a noun (e.g. a good guy, a yellow dress).

The use of isiZulu was not limited only to the course material but was also available during tests. This was done by providing students with the option of answering the question either in English or in isiZulu (sees Example 6). The aim of such questions was to show students that it would be possible to assess them on the same skills taught in L2 using L1.

Example 6

Choose either Question 2A or Question 2B.

Logical connectors/linking words: Indicate the function of the underlined, bold words in the sentences that follow by choosing from (a) listing and addition, (b) contrast, (c) time sequence, (d) reason, or (e) emphasis. Write only the number and the corresponding letter, e.g. 1. D

Question 2A

I-yoghurt ikhulula umgudu wokudla

LINGENILE ihlobo kanti lokhu kusho ukuthi abaningi bazoshintsha nendlela abebedla ngayo ebusika. Baningi abashintsha i-lifestyle yabo bathutheleke nasejimini (1) <u>uma</u> kungena ihlobo ngoba befuna ukunciphisa amafutha azo zonke izicofucofu ebezidliwa ebusika.

I-yoghurt ingenye yohlobo lokudla abaningi abazitika ngayo ukuziba iphango (2) **ngoba** bengafuni ukudla okuzobakhuluphalisa.

I-yoghurt kayimnandi nje kuphela kodwa inomthelela wokuba nomzimba onempilo kulaba abathanda ukuba ngamalamba edlile ngoba inomsoco (3) <u>futhi</u> kayinakho okungadingwa wumzimba. (4) <u>Kodwa</u> akufanele nayo uyidle kuze kweqe. (5) <u>Okubalulekile</u> wukuthi nawo ama-yoghurt ahlukene kanti uma ufuna

ukungakhuluphali kufanele ugxile kwi-low fat. Okuhle ngayo wukuthi iyaliziba iphango njengoba kukhona nenezigaxa zama-fruit ayizinhlobo ezahlukene. Izinhlobo eziningi zama-yoghurt zinobisi okusho ukuthi kukhona i-calcium edingwa yigazi. Iyasiza nokukhulula umgudu wokudla ivule nenhliziyo.

Umbiko ngabakwa (Danone Clover) *Ilanga LeTheku Online*, 4 September 2008.

Question 2B

- (1) I feel fluoride should not be added to drinking water <u>until</u> we are sure it is safe.
- (2) <u>Owing to</u> extensive research it has emerged that fluoride is the sixth most poisonous cause of water pollution in the world.
- (3) <u>Some</u> scientists do not believe that fluoride is dangerous.
- (4) **However,** we should be aware of some of its side-effects.
- (5) **Fundamentally**, scientists believe fluoride is completely safe to drink.

(Adapted from *Read Well*, a people's college book.)

4.6.2 Curriculum

A language teaching syllabus was understood to mean the combination of subject matter (what to teach) and linguistic matter (how to teach) (Far, 2008) in a particular course of study (Nunan, 2004). This can include the skills of speaking, listening, reading and writing which should be developed by providing a print-rich classroom environment for students (Torres-Guman, 2002). The identified skills were then organised into units that were presented in the form of task-based lessons that were performed by students (Ellis, 2006) in line with the outcomes of the course as presented on page three of the course material (see Appendix 7). Therefore, the DLI course material was organised into the following three main units:

Unit 1: Speaking and listening skills

Unit 2: Reading and comprehension skills

Unit 3: Writing Skills

These three units formed the main framework of the course within which different communication and academic literacy skills were developed and assessed during a semester. The contents of different units were guided by what Weideman (2003:61) described as the academic abilities that students are required to possess at tertiary level (see Chapter 3, 3.2.6).

Firstly, speaking and listening skills in English were identified as one of the critical skills required of engineering students. They need these skills for oral presentations that are required of them on a regular basis in their content classes and for listening to their lecturers in class. However, some of the challenges that ESL students experience include lack of confidence during oral presentation situations such as interviews and making presentations. Therefore, the use of L1 in facilitating the teaching and learning of these skills was considered essential. This was achieved by engaging students in group and pair tasks to help them gain confidence as they converse with each other in the L1 before individual presentations in L2.

Secondly, the reading skills unit was used to provide print-rich texts that were used to develop various academic literacy skills, drawing from Weideman's (2003) list of essential academic skills required at tertiary level. The teaching of these skills was also considered essential for Foundation students in engineering.

Lastly, the writing unit of the DLI course focused on academic writing in the form of summary writing and organising related information together. In addition the course material addressed work related writing skills such as business writing (CV's, business letters), notice writing and the completion of forms.

4.7 Summary

This chapter provides the research methodology and the course design of the study. The research methodology mainly uses survey questionnaires completed by both students and lecturers. The survey questionnaires are supplemented with focus group interviews with students. The lecturers' questionnaire is used to allow them to report on their observations of students during lectures as well as to examine their language attitudes.

The design of the DLI course material that utilised both isiZulu (35%) and English (65%) is provided. The course material is on Academic Literacy and Communication Skills for engineering students at Foundation level. The course is organised into three units within which various academic literacy and communication skills are developed. The role of the DLI pilot course in the study is to use it as a prompt in the investigation of language attitudes. The results of this investigation are presented in Chapter 4.

CHAPTER 5

FINDINGS AND ANALYSIS

5. Introduction

The present study investigates the extent to which participation in a dual language instruction (DLI) pilot course in Academic Literacy and Communication Skills (for Engineering students at foundation level) impacts on the attitudes of African language speaking students and their lecturers towards the use of isiZulu alongside English as a medium of instruction in higher education. The theoretical framework that guides the examination of this topic is Triandis' (1971) argument to the effect that attitudes can be developed and changed in three ways. These are (1) the affective component (positive or negative feelings towards language use) which can either be changed from direct experience (either pleasant or unpleasant) or from other people (agents of socialisation); (2) the cognitive component (beliefs or ideas about language use) which can be changed by providing new information; and (3) the behavioural component (reaction towards language use) which can be changed through reinforcement. In addition, instrumental and integrative reasons that motivate individuals to support the development or learning of one language over another or more than one language are considered (Gardner and Lambert, 1972 in Baker 1992). Hence, the hypothesis that guides the study is that if participation in a DLI pilot course is perceived by students and their lecturers as beneficial to teaching and learning, it might lead to the development of positive attitudes towards the use of a black African language in education. The findings of the study are also assessed to establish possible implications for the implementation of the 2002 Language Policy for Higher Education (LPHE) and the Mangosuthu University of Technology's (MUT) language policy, both of which promote the use of black African languages in higher education.

The research tools were three questionnaires that were completed by the students and one questionnaire answered by the lecturers. Student survey questionnaire data were supplemented by focus group interviews with two groups (28 and 30) of students as well as lecturers' observations as reported in response to their questionnaire. The lecturer questionnaire was also used to evaluate the DLI pilot course and establish their language attitudes.

The current chapter is divided into three parts: firstly, there is an explanation of how the data were analysed; secondly, there is a demographic analysis of the respondents' background; and thirdly, the language attitudes of the students and their lecturers are explored. The analysis of the students' attitudes towards the use of English and isiZulu in education as indicated in their responses to the three questionnaires is presented. Next, the students' and lecturers' reflections and evaluations of the DLI pilot course material are used to assess its impact on their language attitudes. Lastly, in an effort to gain a deeper understanding of students' language attitudes as expressed in response to the first and the second questionnaire, the data collected during focus group interviews is presented. A discussion of the findings and their implications is presented in the next chapter.

5.1 Data analyses

Quantifiable data from the questionnaires were enumerated and subjected to statistical analysis by an independent statistician. The statistician used a Statistical Package for Social Sciences (SPSS) version 15.0 (SPSS Inc., Chicago, Illinois, USA) for the statistical analysis. Frequency tables, bar graphs and pie graphs describe the responses to categorical variables while median scores summarise Likert scale variables. Since the Likert scale data use ordinal variables, non-parametric statistics are used to compare groups of students and lecturers with regards to Likert scale type of responses. In the case of binary groups, Mann-Whitney tests were used and for groups with more than two

levels, Kruskal-Wallis tests were used. The Wilcoxon signed ranked test was used for the results on change from the first to the third questionnaire.

Focus group interviews were tape recorded and later transcribed for the purpose of analysis (see Appendix 6). The transcriptions include five pre-planned focus questions and probing questions that were asked as follow-up during discussions. The answers are presented verbatim below each question. Non-verbal communication that might have transpired during the discussions has not been recorded.

In presenting the interview excerpts data, square brackets, [...] are used to show that sections have been edited out of the original text. The reader can refer to the full transcript as provided in Appendix 6 where comments, such as the translation of isiZulu information into English, are presented in brackets [my comments] and ... is used to show either a pause or inaudible utterance made by a speaker. Samples of responses from open questions of survey questionnaires and the discussion that took place during focus group interviews are presented in their original form, without corrections of grammar, or vocabulary.

5.2 Respondent demographics

This section introduces the respondents of the present investigation, starting with the student group and then moving on to the lecturer group. Demographic indicators (age, gender, home language, type or level of education, and teaching experience in the case of the lecturers) are considered since they have proven to be significant in other studies.

5.2.1 Student demographics

5.2.1.1 Age

Original cohort: First and second questionnaire and focus group interviews

Three hundred students responded to the first and the second questionnaire (2008). Their age distribution is shown in Table 2. The majority (69%) were in the sixteen to nineteen

year old age group and would have completed school recently. Over one quarter of the students (31%) were twenty years and over.

Table 2: Age distribution of participants

Age	2008 Q	uestionnaire	2010 Questionnaire				
	Number	Percent	Number	Percent			
16-19	207	69	0	0			
20-24	87	29	74	85			
>25	6	2	13	15			
Total	300	100	87	100			

Follow-up cohort: Third (2010) questionnaire

Eighty-seven students who were part of the original cohort (87/300 = 29%) completed the third questionnaire in 2010. The small sample size is due to lack of accessibility of students as they continued with their studies. The majority of students in the follow-up study were in the 20-24 age group and the remainder (15% = n13) were over the age of 25 years. The difference in age groups between the 2008 and the 2010 survey is due to the two year time gap between the surveys.

5.2.1.2 Gender

Original cohort: First and second questionnaire and focus group interviews

The gender composition of the student group in 2008 is fairly equally distributed between the two sexes: 59% were male and 41% were female (see Figure 1). Engineering is traditionally a male occupation; however, this has been changing, as is reflected by the fact that the margin between the two sexes is relatively small.

Follow-up cohort: Third questionnaire

The 2010 cohort is different from the original cohort in that the majority of participants were male (84%: n=73). The reasons behind this discrepancy may be that this randomly chosen sample incidentally contains more males than females.

5.2.1.3 Home languages

Original cohort: First and second questionnaire and focus group interviews

The majority of the study's participants (94.9%) were L1 isiZulu speakers. Table 3 mirrors the general demographics of the student population at MUT. IsiZulu-speaking students constitute the majority of the student body at MUT due to the university's geographical location and its history as a previously black tertiary institution.

Table 3: Students' home languages, 2008 and 2010

Language group		2008	2010				
	Number	Percent	Number	Percent			
isiZulu	282	94.9	79	90.8			
isiXhosa	9	3.0	6	6.9			
Tshivenda	3	1.0					
siSwati	3	1.0	2	2.3			
Total	297						
Missing	3						
Total	300	100.0	87	100.0			

Follow-up cohort: Third questionnaire

Not surprisingly, the participants in the follow-up cohort were also mostly isiZulu-speaking (91%: n=79); with a few (7%: n=6) isiXhosa-speaking participants and only 2% (n=2) isiSwati-speaking participants (see Table 2b).

5.2.1.4 Racial composition of students at high school

Original cohort: First and second questionnaire and focus group interviews

The purpose behind inquiring after the racial composition of participants' high schools was to see if this factor might have impacted their present language attitudes and preferred languages during study group discussions. The majority of student respondents (82%) of the 2008 cohort attended schools with a predominantly black student population while the remaining 18% attended racially mixed high schools

Follow-up cohort: Third questionnaire

The majority of students in the follow-up cohort (84%: n=73) indicate that they previously attended black schools and very few (16%: n=14) went to racially mixed schools.

5.2.1.5 Racial composition of teachers at high school

The majority of the students (66%) in the study were taught solely by black teachers when they were at high school; only 25% were taught by teachers of mixed races (Table 4). The purpose behind inquiring into this information was to assess whether or not it would have a bearing on the students' responses on what language(s) the teachers used in class (see 5.2.1.7).

Table 4: Racial composition of participants' high school teachers

	Number	Percent
Multiracial	75	25.0
Black only	198	66.0
White only	9	3.0
Indian only	18	6.0
Total	300	100.0

5.2.1.6 Location of students' high schools

Of the 300 student participants in the original cohort, 39% attended black township schools, 29% attended black rural schools, and 14% attended semi-rural schools (see Figure 1).

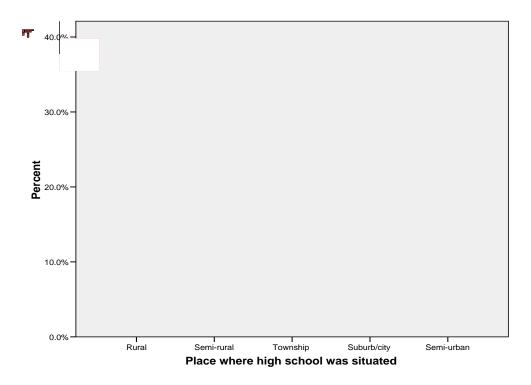


Figure 1: Location of high schools

5.2.1.7 High school Language of instruction

Table 5 below displays that 52% of the student respondents were taught in English alone. Only 38% percent of students confirmed that their school teachers mixed English with isiZulu when teaching. The majority indicated that they attended schools where the composition of student and teacher population was black and the location of schools was in areas populated by Blacks. For these reasons, one would expect that the majority of teachers in these schools would draw from the students' primary language as a teaching resource, as research has found this to be a common practice. Appalraju (2010: 147) expresses a similar surprise in her study conducted in KZN schools when the majority of students and their teachers claim that English is the dominant language in class. Appalraju (2010: 147) finds that this claim contradicts her observations where she noted that "both English and Zulu are used for teaching, but especially isiZulu." This contradiction between self-reports and observation can be understood against Moodley's (2003: 344) study in the school environment which found that a few students "hold

intensely negative attitudes toward CS [code-switching] and denigrate it; others feel that it serves its purpose in informal arenas but should be proscribed from formal domains such as school." It would then be interesting to establish the students' attitudes towards the use of two languages in a DLI pilot course material (see 5.3.2 below)

Table 5: Language(s) in which high school teachers taught

	Number	Percent
isiZulu	27	9.0
English	156	52.0
isiZulu and English	114	38.0
Other	3	1.0
Total	300	100.0

5.2.2 Lecturer demographics

This section reviews the lecturer cohort of the study which consisted of ten academics.

5.2.2.1 Age

Four of the ten lecturers were over fifty years old, while the remaining six lecturers were younger than fifty. Table 6 shows, that one lecturer falls in the 30-35 years age-group; one is between 36 and 40; three are between 41 and 45 and one is between 46 and 45 of age.

Table 6: Age group of lecturer respondents (n=10)

Age	Number
30-35	1
36-40	1
41-45	3
46-50	1
>50	4
Total	10

5.2.2.2 Gender

The majority (n=7) of the lecturers who participate in the study are female, while the other three are male.

5.2.2.3 Proficiency in spoken isiZulu

As shown in Figure 2, only a few (n=3) of the lecturers are not at all proficient in isiZulu; however, given the overall small sample size these constitute 30%. Fifty percent of all lecturers in the study report proficiency levels in isiZulu that are above average. Overall levels of proficiency range from excellent (n=2), to very good (n=2), to average (n=1), to below average (n=2). It appears that the lecturers' average proficiency in isiZulu might augur well for their facilitation of an isiZulu-English DLI pilot course in their lecture rooms.

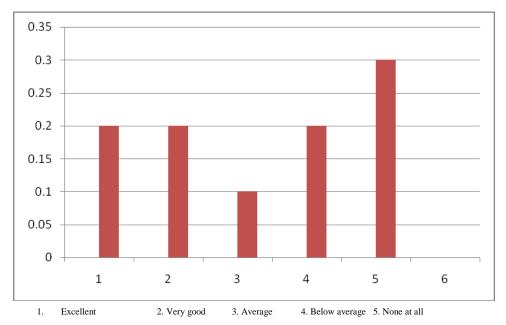


Figure 4: Proficiency in spoken isiZulu in lecturer sample

5.2.2.4 First and home language(s)

In light of the previous question concerning the lecturers' proficiency in spoken isiZulu (see 5.2.2.3), it was considered important to determine how these figures correlate with their first languages and home languages. It was hoped that this knowledge would provide further insight into the lecturers' attitudes on and practices concerning bi-/ multilingualism.

The 'Home Language' (Table 7) profile of lecturers displays that the majority of them (n=6) are isiZulu speakers. This is a good number to raise the expectation that more of the lecturer group would be able to make sense of the students' L1, which appears in the teaching and learning material. Moreover, it suggests that they might be capable of drawing students' attention to the information presented in isiZulu. However, only two lecturers indicated that they had excellent proficiency in isiZulu (see Figure 4). Furthermore, among the six L1 speakers of isiZulu, four reported that they use isiZulu only when at home. The other two lecturers revealed that they combine isiZulu with English at home. There are three lecturers who are English L1 speakers and use English at home. Not surprisingly, it is the very same lecturers who indicated that they lack any level of proficiency in isiZulu as per Figure 4 above.

Table 7: First languages and home languages of lecturer respondents (n=10)

	First la	nguage	Home language			
	Number	%	Number	%		
English	3	30	3	30		
seTswana	1	10	1	10		
isiZulu	6	60	4	40		
isiZulu and English	1	-	2	20		
Total	10	100%	10	100%		

5.2.2.5 Teaching experience

The number of teaching years ranged from 7 to 30 years, with a mean of 19.2 years, and a standard deviation of 9 years.

5.2.2.6 Highest qualification of lecturer respondents

Fifty percent (n=5) of the lecturers hold an Honours degree, while the remaining 50% (n=5) have a Masters degree. It was assumed that these qualifications might, depending on when they were obtained, be an indicator on the participants' familiarity with current debates, theories and policies on first and second languages as media of instruction. It would however have been useful to actually find out from the lecturers if they are familiar with the multilingual education policies and theories. While this was not actually done it was however possible to assess it based on the open responses provided by lecturers.

5.3 Language attitudes

This section reports on students' and lecturers' language attitudes. The discussion of the findings is presented thematically as per the objectives of the study. Firstly, a statistical comparative analysis of students' preferred languages of learning as elicited pre and post participation in the DLI course material is provided to assess the DLI pilot course's impact on language attitudes (original cohort, n= 300). For a subgroup of these students (n87) language attitudes are further examined longitudinally using the third questionnaire to understand whether or not there were any longer term changes in language attitudes and whether changes observed in the original study were stable.

Secondly, a comparative discussion of the students' and lecturers' evaluation and experience of the use of the DLI pilot course and how this in turn impacted on attitudes is assessed. In addition, the engineering students' overall academic performance in their

foundation level of study is sourced from the MUT's Management Information Systems (MIS) office. The students' average academic performance is compared to the students' and lecturers' attitudes towards the academic benefits of the dual language instruction course material. Lastly, focus group interview data (Appendix 6) is compared to the students' responses to their first and second questionnaire in an effort to deepen the understanding of their attitudes.

5.3.1 Students' preferred languages of learning

The findings first discussed in this section refer to those questions that investigated students' preferred languages of learning at various times of the study. These questions sought to investigate the affective and cognitive components of students' language attitudes (Triandis, 1971). To this effect, Questions 8, 9 and 10 of the first questionnaire (see Table 8), Questions 5, 6 and 7 of the second questionnaire (see Table 9) and Questions 5, 6 and 7 of the third questionnaire (see Table 11) are comparatively analysed to examine this area of the investigation.

The results of Question 8 (Table 8) disclose that 78% (SA = 40% and A = 38%) find it beneficial to use both isiZulu and English in group discussions. It is not surprising that 6% of those who are either unsure or who deny that the use of two languages in group discussions is beneficial came to MUT from racially mixed schools where the use of English as the common language of learning and socialising tends to be the norm among students. In response to Question 9, 72% (SA = 42% and A = 30%) students indicate that they use their L1 as a resource to facilitate their understanding of what they read and hear in their L2. Seven percent are unsure, while the remaining 21% (D = 14% and SD = 7%) deny using their L1 to help themselves understand what they are learning. A cross-check of the previous schooling background of these 21% indicates that 15% of them attended multiracial schools. This suggests that some of the students who would have attended school in an environment where English is frequently used may not experience problems with the continued exclusive use of English as the medium of learning.

Contrary to responses of Question 9 that show that a lot of students (72%) draw from their L1 as a learning resource, Table 8, Question 10 (first questionnaire) shows that 50% (SA = 24% and A = 26%) of students support using English during lectures. An almost equal number (42%) of students does not support this view, with only 8% uncertain about which language should be used during lectures. This shows divided views on this question (Question 10) regarding what should happen in lectures as compared to what language(s) students use on their own to facilitate their learning (Question 9).

However, the findings of the second student questionnaire distributed after the completion of the DLI pilot course indicate an increase in the number of students who are in favour of the formal use of L1 for teaching and learning purposes. Question 5 (Table 9) shows that 86% (Strongly Agree = 53% and Agree = 33%) of the students find the mixing of English with isiZulu in the teaching and learning course material helpful. In response to Question 6, the majority (96%) (Strongly Agree = 68% and Agree = 28%) indicate that the DLI material enabled them to better understand and use the information of the course material that is in English. This response is however not surprising as it is consistent with the majority (72%) of students' responses to Question 9 of the first questionnaire (Table 8) who indicated that they made use of their L1 to make sense of what they are learning. Similarly, responses to Question 7 of the second questionnaire (Table 9) show that a very high number of students (86%) (Strongly Agree = 37% and Agree = 49%) claim to have experienced effective teaching and learning through the use of the DLI course material. The increase (from 72% to 86%) in the number of students who appreciated the use of their L1 in the DLI course material is as a result of the 12% of students that had initially not supported the idea of African languages in education. Therefore, the use of the DLI pilot course was favourably received because it was in line with the students' preferred style of learning. The DLI pilot courses' contribution to attitude change regarding the formal use of L1 in education was as a result minimal. This is in line with the theoretical framework of the study which suggests that the affective component of attitudes can be changed by new experience (Triandis, 1971).

Table 8: First student questionnaire, responses to Questions 8 -10.

	Strongly Agree		Agree Uns		ure	Disag	Disagree		Strongly Disagree	
	No.	%	No.	%	No.	%	No.	%	No.	%
8. In group discussions I learn better when we use both English and isiZulu.	120	40	114	38	18	6	24	8	24	8
9. To better understand what I read and hear in English, I think about it in my home language.	126	42	90	30	21	7	42	14	21	7
10. In lectures, students should use English throughout, even in the group discussions.	72	24	78	26	24	8	51	17	75	25

Table 9: Second student questionnaire, responses to Questions 5-7.

	Strongly Agree		Strongly Agree Agree		Unsure		Disagree		Strongly Disagree	
	No.	%	No.	%	No.	%	No.	%	No.	%
5. I found the mixing of languages in the guide suitable to my style of learning.	159	53	99	33	12	4	21	7	9	3
6. The guide enabled me to understand and use English better.	204	68	84	28	12	4	0	.0	0	.0
7. I experienced effective teaching and learning.	111	37	147	49	24	8	18	6	0	.0

In addition, the comparison of the teacher composition at last school of different groups of students versus Question 5 (I found the mixing of languages in the guide suitable to my style of learning) (Table 9) responses shows that there was no difference in the groups. There was however a trend towards most agreement on this question in the group who had African teachers and least in those with multiracial teachers (compare Table 10a and 10b below). This is consistent with the results on demographics that show that the majority (66%) of student participants were taught by black African teachers only (see Table 4).

Table 10a

	Racial composition of teachers at high school	N	Mean Rank
I found the mixing of	Multiracial	75	51.12
languages in the guide suitable for my style of	African	198	49.02
learning	European	9	39.83
	Indian	18	44.58
	Total	300	

Test Statistics(a,b)

Table 10b

	I found the mixing of languages in the guide suitable for my style of learning
Chi-Square	.743
Df	3
Asymp. Sig.	.863

a Kruskal Wallis Test

The high positive response (86%) to Question 5 (I found the mixing of languages in the guide suitable to my style of learning) (Table 9) shows that the students found the formal use of L1 in the DLI course material helpful and thus it may assist students to realise that black African languages, such as isiZulu, can play a positive role in their learning experience. It was decided to establish if this impact of the DLI course on attitudes is long lasting or not.

The results of Question 5 (Table 11) indicate that the majority of students (70%) (Strongly Agree = 29% and Agree = 41%) support the continued use of both English and isiZulu during group discussions. This is a further confirmation that for the majority of English second language students, their primary language may remain an important learning resource throughout their learning. This is consistent with the initial high number (78%, Question 8, Table 8) of students who confirmed using two languages in their group discussions and the even higher number (86%, Question 5, Table 9) who subsequently indicated an appreciation of the use of these two languages in the DLI course material.

b Grouping Variable: Racial composition of teachers at high school

Furthermore, Question 6 (Table 11) shows that 62% (Strongly Agree = 24% and Agree = 38%) of the students still use their L1 as a resource to make sense of information presented in L2. Fifteen percent are however not sure whether they use this method, 17% indicate that they do not use their L1 (disagree) and 6% most certainly do not (strongly disagree). Overall, this shows a high number of black African students who maintain the continued informal use of their L1 as a valuable learning resource.

However, the very high overall change in attitude regarding the acceptance of the formal use of L1 in the teaching and learning environment that is noted immediately after participation in the DLI pilot course is not maintained over time when there is no formal use of L1 in lectures. Responses to Question 7 of the third questionnaire (Table 11) show that there is a high number of students (63%: Strongly Agree=26 and Agree=37%) who, over time, believe that during lectures, students should use English throughout, while 16% are neutral and 20% (Disagree=17% and Strongly Disagree=3%) are opposed to this view. This is unlike the balanced response to the first questionnaire (Table 8, Question 10) where students appear to be nearly equally divided on this matter, wherein 50% are for and 42% are not for the exclusive use of English during lectures. This may suggest that the acceptance of the formal use of L1 is appreciated in early levels of education. However, as students approach the end of their studies they become aware of the need for English proficiency in the workplace which might in their opinions be achieved through the exclusive use of English in lectures.

Table 11: Third student questionnaire, responses to Questions 5 -7.

	Strongly		Ag	ree	Unsure		Disagree		Stro	ngly
	Agr	Agree							Disa	gree
	No.	%	No.	%	No.	%	No.	%	No.	%
5. In group discussions I learn better when we use both English and isiZulu.	25	29	36	41	12	14	9	10	5	6
6. To better understand what I read and hear in English, I think about it in my home language.	21	24	33	38	13	15	15	17	5	6
7. In lectures, students should use English throughout, even in the group discussions.	23	26	32	37	14	16	15	17	3	3

To assess whether or not these attitudes are consistently evident throughout the responses of the students, subsequent questions of the three questionnaires directly inquire on the students' attitudes towards the role of L1 in education, as opposed to the current discussed set of questions that explored the students' preferred language(s) of learning.

5.3.2 Students' attitudes towards the use of languages in education

This section presents a comparison of the students' attitudes towards the use of English and isiZulu in education as assessed during different times of the study. The guiding theoretical framework in this regard is the behavioural component of attitudes (Triandis) and the instrumental and integrative motivation (Gardner and Lambert, 1972 in Baker, 1992). Question 11 to 17 of the first questionnaire (Table 12), Question 8 to 14 of the second questionnaire (Table 13) and Question 8 to 14 of the third questionnaire (Table 14) are discussed. The purpose of the comparative analysis of data from Table 12 and Table 13 is to investigate the extent to which participation in the DLI pilot course impacts on students' language attitude change towards the role of L1 instruction in education. Table 14 presents whether or not language attitudes both pre- and post-participation in the DLI course material are maintained or not. To further assess whether there is change

or not in attitudes among the participants, two forms of statistical analyses are conducted. Firstly, the students' responses to the first and second questionnaires are analysed in association with students' demographic features. Secondly, the 87 individuals that participated in the longitudinal part of the study (as per the third questionnaire) have their responses to the second questionnaire subjected to a comparative statistical analysis with their responses to the third questionnaire. This exercise was achieved by separating the 87 students' coded questionnaires from the 300 original cohort and tagging it with their third questionnaire responses.

Question 11 (Table 12) of the first questionnaire examines the students' language attitudes by declaring that English is the only language suitable for use as a language of instruction in higher education (HE). Sixty-two percent (Strongly Agree=36% and Agree=26%) agree to the statement, whereas 12% take a neutral position and only 26% (Disagree=14% and Strongly Disagree=12%) reject this view. The first response to this question (Question 11, Table 12) clearly indicates that prior to their participation in the DLI pilot course, the majority of the students believed that English was the only suitable language of instruction in HE

Table 12: First student questionnaire, responses to Questions 12-17

	Strongly Agree		Agree		Unsi	Unsure		gree	Stron Disag	
	No.	%	No.	%	No.	%	No.	%	No.	%
11. English is the only language that is suitable for use as a language of instruction in higher education.	108	36	78	26	36	12	42	14%	36	12
12. It is possible for black African languages to become languages of education.	72	24	120	40	27	9	36	12%	45	15
13. Switching from one language to another by a teacher is a bad thing.	54	18	54	18	24	8	42	14	126	42
14. The use of isiZulu during lessons helps me understand better.	99	33	126	42	21	7	12	4	42	14
15. I have difficulty following lessons that are presented in English alone.	27	9	75	25	30	10	48	16	120	40
16. It would help if examinations and test instructions could be translated into isiZulu.	57	19	72	24	18	6	78	26	75	25
17. The development and promotion of black African languages in higher education should be regarded as important.	129	43	87	29	21	7	24	8	39	13

In contrast to the results shown in Table 12, Question 11, the results of the second questionnaire (Table 13, Question 9), which were obtained immediately after participation in the DLI pilot course, show that the majority of the students (77%) (Strongly Agree=52% and Agree=25%) contend that the use of the DLI course material taught them to value the role of their home language in education. This indicates that participation in the DLI pilot course had a positive effect on students' attitudes to the use of isiZulu in education. At the same time, it is important to note that this was not a surprising response when considering that Table 12, question 12 shows that 69% of students were initially positive about the role of L1 in education. In addition, question 13 of Table 12 displays that there was a high support (56%) for code-switching while only

36% were not in favour. The overall results of the first questionnaire (Table 12) are mixed regarding the students' attitudes to the use of languages in education. There is however a suggestion that students pay lip-service to valuing African languages in response to questions 12 (64%), 14 (75%) and 17 (72%). This is evident in their responses to question 15 and 16 (Table 12) which show that they think they are fine with English.

Table 13: Second student questionnaire, responses to Questions 8-14

	Stron Agr		Agr	ee	Unsi	ure	Disag	gree	Stron Disag	
	No.	%	No.	%	No.	%	No.	%	No.	%
8. The guide helped me develop the desire to continue learning English into the future.	192	64	90	30	6	2	6	2	6	2
9. I learnt to value the role of my home language in education.	156	52	75	25	24	8	33	11	12	4
10. I had opportunities to develop my English vocabulary.	174	58	87	29	21	7	15	5	3	1
11. I had opportunities to develop my isiZulu vocabulary.	66	22	78	26	30	10	78	26	48	16
12. The guide helped me to develop competence in the skills of reading, writing and thinking, as is required for my content subjects.	117	39	150	50	3	1	15	5	15	5
13. I felt free to express myself in class.	108	36	111	37	36	12	21	7	24	8
14. Overall, I was satisfied with the quality of the subject's guide.	123	41	138	46	24	8	9	3	6	2

However, responses to the third questionnaire that again declares that English is the only language suited for use as a language of instruction indicate an increase in the number of students who agree to this statement. While in response to the first questionnaire (Table 8, Question 10) only 64% of students agreed, responses to the same question in the third questionnaire show (Table 14, Question 8) a generally higher support at 77% in which

36% strongly agree and 26% agree. This contradicts the high positive response (77%) regarding the effect of the DLI course material towards valuing the role of L1 in education (Table 13, question 9). Moreover, eighty-seven percent of students had indicated high satisfaction with the DLI course material (Table 13, question 14). This may suggest that question 14 (Table 13) had generally been interpreted to refer to the good design of the guide rather than its use of isiZulu.

Table 14: Third student questionnaire, responses to Questions 8-14

	Stron Agre		Agr	ee	Unsi	ure	Disag	gree	Stron Disag	
	No.	%	No.	%	No.	%	No.	%	No.	%
8. English is the only language that is suitable for use as a language of instruction in higher education.	30	34	36	41	10	11	8	9	3	3
9. It is possible for black African languages to become languages of education.	4	5	18	20	24	28	31	36	10	11
10. Switching from one language to another by a teacher is a bad thing.	14	16	22	26	9	10	35	40	7	8
11. The use of isiZulu during lessons helps me understand better.	12	14	43	49	13	15	12	14	7	8
12. I have difficulty following lessons that are presented in English alone.	6	7	12	14	7	8	40	46	22	25
13. It would help if examinations and test instructions could be translated into isiZulu.	5	6	21	24	12	14	31	35	18	21
14. The development and promotion of black African languages in higher education should be regarded as important.	12	14	33	37	18	21	18	21	6	7

Similar to the trend discussed above, other responses show contradictions in students' language attitudes throughout the study. Table 12, Question 12 displays that 64%

(Strongly Agree = 24% and Agree = 40%) of students are in favour of the statement that indicates that it is possible for black African languages to become languages of education. This support generally increases in response to a related question in the second questionnaire (I learnt to value the role of my home language in education) (Table 13, Question 9) because the majority of students (75%) either strongly agree (52%) or agree (25%). In contrast, a much lower number of students (25%) respond positively to the statement of the third questionnaire (Table 14, Question 9) that indicates that it is possible for black African languages to become languages of education. This suggests that as students get exposed to more vocabulary, terminology and concepts used in their content subjects they might realise that the role of their home languages might be limited in education.

Additionally, the association analysis of the responses to Question 9 of the second questionnaire (I learnt to value the role of my home language in education) with three of the demographic features of the students was made. Firstly, the results on gender show that the mean rank was slightly higher in females than males indicating a trend of more agreement in males. However the p value was .642, indicating no statistically significant difference in response between the genders, as shown in Table 15(a) and 15(b) below. This indicates that gender is not always a good indicator of language attitudes, as suggested in literature reviewed in Chapter 2.

Table 15a

	gender	N	Mean Rank	Sum of Ranks
I learnt to value the role	Male	171	47.44	2704.00
of my home language in education	Female	117	50.05	1952.00
cudcation	Total	288		

Test Statistics(a)

Table 15b

	I learnt to value the role of my home language in education
Mann-Whitney U	1051.000
Wilcoxon W	2704.000
Z	490
Asymp. Sig. (2-tailed)	.624

Grouping Variable: gender

Secondly, students' responses to the same question (Question 9, Table 13) were compared to the racial mix of the last school they attended. There was however no significant difference in responses to this question between those who went to multiracial school and African school (p=0.243), see Table 16a and 16b below. This suggests that either the DLI pilot course or students' exposure to the new educational environment cancels out the previous school environment.

Table 16a

	Racial composition of students at high school	N	Mean Rank	Sum of Ranks
I learnt to value the role	Multiracial	51	41.91	712.50
of my home language in education	African	237	49.92	3943.50
education	Total	288		

Test Statistics(a)

Table 16b

	I learnt to value the role of my home language in education		
Mann-Whitney U	559.500		
Wilcoxon W	712.500		
Z	-1.168		
Asymp. Sig. (2-tailed)	.243		

Grouping Variable: Racial composition of students at high school

Thirdly, favourable responses to the same question (Table 13, Question 9) were compared with the language(s) students reported as mostly used by their high school teachers in classrooms. There was however no statistically significant difference between the different student groups (p=0.631), see Table 17a and 17b. Therefore, the high number of students (75%) who showed agreement to this statement might have been influenced by their exposure to the DLI pilot course rather than a teaching approach they could have been used to. However, an analysis of students' responses to the first questionnaire indicates that some of them already had positive attitudes to the use of L1 in education. Table 12, Question 13 shows that only 36% of students found the mixing of languages by a teacher in class to be inappropriate, while the majority (56%) were favourably disposed to this practice and only 8% were uncertain. In the same vein, responses to the subsequent question (Table 12, Question 14) display that the majority (75%) find the use of isiZulu during lessons helpful towards facilitating their

understanding of information presented in English. It should however be noted that Table 12, Question 15 indicates that a generally high number of students (56%) either disagree (16%) or strongly disagree (40%) that they have difficulty following lessons that are presented in English alone. While these findings may at a glance appear significant, it should be borne in mind that they represent general trends across the large sample of student participants (300) rather than a close analysis of individuals' attitudes.

Table 17a

	Language high school teachers used to teach in	N	Mean Rank
I learnt to value the role	isiZulu	27	52.00
of my home language in education	English	156	46.37
cuication	isiZulu and English	114	51.11
	Other	3	25.00
	Total	300	

Test Statistics(a & b)

Table 17b

I WOLC I'D					
	I learnt to value the role of my home language in education				
Chi-Square	1.729				
Df	3				
Asymp. Sig.	.631				

a Kruskal Wallis Test

A comparative analysis of different responses within each questionnaire indicates a few cases of ambivalent language attitudes among the students. The first and the third questionnaire were particularly analysed because they were comprised of the same questions and they were administered at different times during the study.

Firstly, a selection of responses to related questions (Question 10, 13, 14, 16 and 17) of the first questionnaire were analysed to establish whether there was consistency or not in students' language attitudes. Responses to Question 10 (Table 8) show a slight difference in views between the students who support the exclusive use of English by students in class (50%) and those who do not (42%). However, the use of two languages by a

b Grouping Variable: Language high school teachers used to teach

teacher in class is favourably received by 56% of students (Table 12, Question 13). Similarly, responses to Question 14 (Table 12) show that the majority of students (75%) find the teacher's use of isiZulu in class useful towards facilitating their understanding of the information that is presented in English. In contrast, only 43% of students either strongly agree (19%) or agree (24%) to the translation of examinations and tests into isiZulu (Question 16, Table 12). While the minority (6%) is undecided on this question, the majority (51%) either disagree (26%) or strongly disagree (25%). Even though the difference in views between those in favour (43%) and those not in favour (51%) of translation of examination and test papers is not remarkably huge, this apparent contradiction to preceding responses was identified as an issue to be discussed in the group interview for further clarification. Another response that made it necessary to pursue this contradiction in the focus group discussion is that to Question 17, Table 12 about the development and promotion of black African languages in higher education. Seventy two percent of students were in favour of the development and promotion of black African languages while only 7% were uncertain, 8% disagreed and 13% strongly disagreed.

Secondly, an analysis of responses to related questions (Question 7, 10, 11, 13 and 14) across the third questionnaire was undertaken. Table 11, Question 7 displays that 63% of students either strongly agree (26%) or agree (37%) that English should be the sole language used by students in lectures. This majority view is generally not matched by responses to the question about the use of more than one language by the teacher in class. Table 14, Question 10 depicts that students are divided on this practice. While forty-two percent agree that it is inappropriate for a teacher to mix languages, at the same time 48% approve of this practice. Concerning the translation of tests and examination papers, Table 14, Question 13 displays that the minority (30%) were in favour while the majority (56%) were not in favour, as happened in response to the first questionnaire.

Despite the self-contradiction within each of the two questionnaires, it is however interesting to note that the comparison of responses to similar questions of the first and the third questionnaire indicates the desire to reduce the amount of L1 use in class as

students progress with their studies. For instance, responses of the first questionnaire show that 62% of students agree that English is the only language of education in higher education, whereas, in the third questionnaire this question receives a 75% support. In the first questionnaire a majority of 64% supported the possibility of using black African languages in education, yet, responses of the third questionnaire show that this suggestion is only supported by a minority of 25% of students. This suggests that L1 is favoured as a resource only as it serves to bridge the learning gap between university and school that students might need to fill while at their foundation studies of engineering. Instrumental motivation can be regarded as the motivational factor in this regard.

This observation about students only requiring L1 support at entry level of studies appears to be consistent according to the results of Question 15 of the first questionnaire (Table 12), and of the identical Question 12 of the third questionnaire (Table 14), i.e. I have difficulty following lessons that are presented in English alone. The results of Question 15 (Table 12) show that while the majority of students (56%) claim that they have no difficulty following lessons that are presented in English alone, a reasonably high number (34%: Strongly Agree=9% and Agree=25%) admits to having difficulty with lessons that are presented only in English while 10% are not sure about this. This shows a possibility for acceptance of the use of L1 as a resource to facilitate learning for a number of students. Responses to the questionnaire administered immediately after the use of the DLI pilot course generally confirm this favourable attitude to the use of L1 in education (see Table 13). However, responses to the same question (Question 12) in the third questionnaire (Table 14) indicate that very few students either strongly agree (7%) or agree (14%) that they experience difficulty with lessons that are only presented in English. While only 8% are not sure if they do cope in these lessons, the majority (71%) (Disagree=46% and Strongly Disagree=25%) claim to have no trouble at all. This can suggest that as students get more exposure to English as they progress with their studies they become more familiar and comfortable with using it and feel less need of the L1.

While the above findings may appear significant, it is however acknowledged that they represent different numbers of participants. To address this shortcoming, the 87

participants (from the original 300 cohort) who answered the same questionnaire from both phase 1 (Tables 8 and 12) and phase 3 (Tables 11 and 14) of the study, had their responses statistically analysed by identifying them using their coded questionnaires to establish any change in attitude. The median scores at each time point for similar statements (though the questions were numbered differently as shown in the used tables and Appendix 1 and 4) are shown in Table 18 below. The distribution of scores at each time point is shown in the box and whisker plots below.

Table 18: Median scores of phase 1 and phase 3.

Phase	Q8&5	Q9&6	Q10&7	Q11&8	Q12&9	Q13&10	Q14&11	Q15&12	Q16&13	Q17&14
1	2.00	2.00	2.00	2.00	2.00	4.00	2.00	4.00	4.00	2.00
3	2.00	2.00	2.00	2.00	3.00	3.00	2.00	4.00	4.00	2.00
Total	2.00	2.00	2.00	2.00	3.00	4.00	2.00	4.00	4.00	2.00

Paired Wilcoxon signed ranks tests were further done to compare the median scores between the two time points, see Figures 5a, 5b, Table 19a and 19b below. The mean of negative and positive ranks are compared. Where the mean of the positive ranks is greater than negative ranks, it indicates an increase in score from Phase 1 to Phase 3, which implies higher disagreement with the statement at Phase 3 than Phase 1. Conversely, where the mean of negative ranks is higher than positive ranks, it indicates a decrease in score from Phase 1 to Phase 3 which implied higher agreement with the statement.

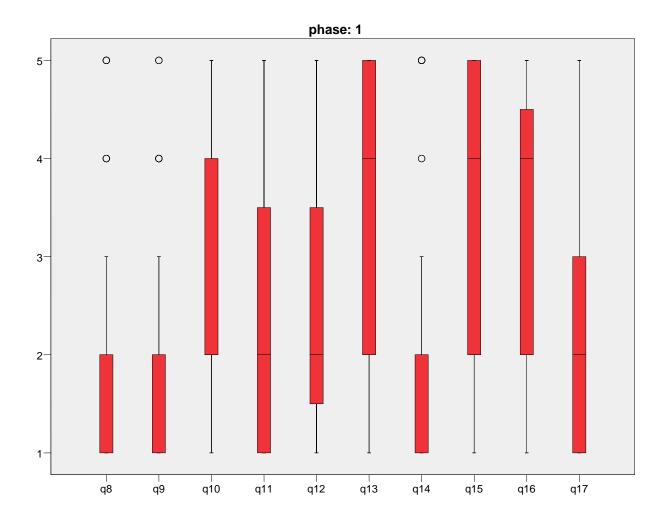


Figure 5a: Box and Whisker plot and distribution of scores from Phase 1 Questions 8-17.

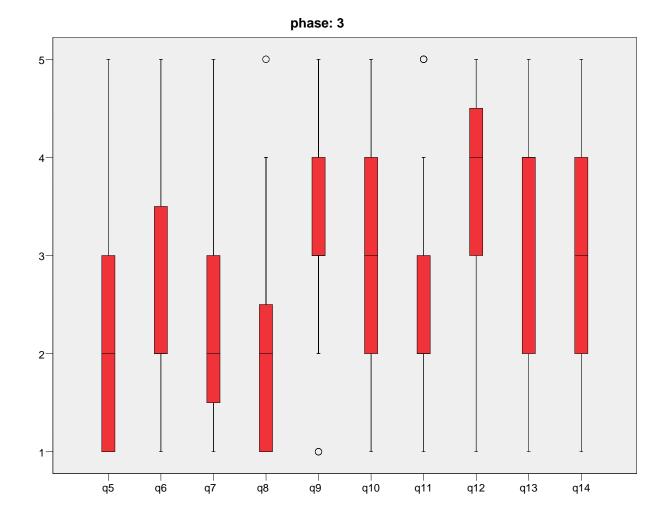


Figure 5b: Box and Whisker plot and distribution of scores from Phase 3 Questions 5-14.

There were significant differences between the two phases for Questions 9, 10, 12 and 17 of Phase 1 compared with Questions 6, 7, 9 and 14 of Phase 3, as already discussed above, in the same corresponding statements. For Questions 9 and 6; 12 and 9; and 17 and 14, the positive ranks indicates greater disagreement with the same statements over time, while for Question 10 and 7, the mean ranks of the negative ranks was higher, implying a higher agreement with the statement over time.

Table 19a: Wilcoxon signed ranks test to compare responses between Phase 1 and 3 $\,$

	Wilcoxon signed			
		N	Mean Rank	Sum of Ranks
q6.3 - q9.1	Negative Ranks	23(a)	31.65	728.00
	Positive Ranks	42(b)	33.74	1417.00
	Ties	22(c)		
	Total	87		
q7.3 - q10.1	Negative Ranks	44(d)	35.75	1573.00
	Positive Ranks	23(e)	30.65	705.00
	Ties	20(f)		
	Total	87		
q8.3 - q11.1	Negative Ranks	35(g)	37.71	1320.00
	Positive Ranks	30(h)	27.50	825.00
	Ties	20(i)		
	Total	85		
q9.3 - q12.1	Negative Ranks	15(j)	29.23	438.50
	Positive Ranks	49(k)	33.50	1641.50
	Ties	23(1)		
	Total	87		
q10.3 - q13.1	Negative Ranks	45(m)	37.10	1669.50
	Positive Ranks	28(n)	36.84	1031.50
	Ties	13(o)		
	Total	86		
q11.3 - q14.1	Negative Ranks	23(p)	32.11	738.50
	Positive Ranks	38(q)	30.33	1152.50
	Ties	25(r)		
	Total	86		
q12.3 - q15.1	Negative Ranks	32(s)	34.77	1112.50
	Positive Ranks	39(t)	37.01	1443.50
	Ties	16(u)		
	Total	87		
q13.3 - q16.1	Negative Ranks	32(v)	33.19	1062.00
	Positive Ranks	39(w)	38.31	1494.00
	Ties	16(x)		
	Total	87		
q14.3 - q17.1	Negative Ranks	23(y)	33.87	779.00
	Positive Ranks	46(z)	35.57	1636.00
	Ties	18(aa)		
	Total	87		
q5.3 - q8.1	Negative Ranks	28(bb)	29.11	815.00
	Positive Ranks	33(cc)	32.61	1076.00
	Ties	26(dd)		
	Total	87		

Table 19b: P values for Wilcoxon Test

	q6.3 -	q7.3 -	q8.3 -	q9.3 -	q10.3 -	q11.3 -	q12.3 -	q13.3 -	q14.3 -	q5.3 -
	q9.1	q10.1	q11.1	q12.1	q13.1	q14.1	q15.1	q16.1	q17.1	q8.1
Z	1	-	-	-	-	-	-	-	-	-
	2.294(a)	2.753(b)	1.650(b)	4.088(a)	1.771(b)	1.531(a)	.963(a)	1.254(a)	2.602(a)	.953(a)
Asymp.	0.022	0.006	0.099	< 0.001	0.077	0.126	0.335	0.210	0.009	0.340
Sig. (2-										
tailed)										

a Based on negative ranks.

5.3.3 Students' and lecturers' reflections on the DLI pilot course

This section presents a comparative analysis of the students' (Questionnaire 2) and the lecturers' reflections on the DLI pilot course material, as shown in Tables 9 and 12 (students) above and Table 16 (lecturers) below. The two areas that the analysis focuses on are: (1) the opinions of the participants on the role of the DLI course material towards facilitating effective teaching and learning, and most importantly for this study (2) the impact of the DLI course material on their attitudes towards the role of isiZulu in education. This approach is guided by the hypothesis of the study that the participants' perceptions (cognitive component) of the DLI course material towards teaching and learning might have a bearing on their attitudes towards the role (behavioural component) of isiZulu in higher education.

In conducting the analysis, the statistical data of each group (i.e. the student group and the lecturer group) that indicates the WHAT of their opinions is supplemented with its open responses from each questionnaire to understand WHY they have responded in a particular manner. As the students' questionnaires were not similar to the lecturers', the analysis is conducted by pairing related questions from the two groups of participants. The objective behind this comparative data analysis approach is to assess if there are any diverging and/or converging opinions between the two groups.

b Based on positive ranks.

c Wilcoxon Signed Ranks Test

In addition, the opinions of the two groups are examined against the students' academic performance in their studies. This group's academic progress from the time they registered in the pre-technikon or Foundation programme to the time when they are expected to be at their 4th semester (S4) of their full-time study was reviewed. The records on students' academic performance were sourced from the MUT's Management Information Systems (MIS) office. This additional information to supplement self-reports of the participants was obtained as the study did not make use of standardised tests to continuously assess the academic benefits of the DLI course material, which was not the objective of the study.

The results of the students' closed responses indicate that many of them (86%) (Strongly Agree = 53% and Agree =33%) found the mixing of languages in the DLI course material suited their style of learning (Table 9, Question 5). This was possibly because the guide enabled the majority (96%) to better understand and use English well (Table 9, Question 6). The responses of 86% (Strongly Agree = 37% and Agree = 49%) of the students was that the DLI course material is an effective tool for teaching and learning (Table 9, Question 7).

Ninety-four percent (Strongly Agree = 64% and Agree = 30%) indicated that the use of L1 instruction contributed towards their interest in continuing to learn their L2 (Table 12, Question 8). At the same time, 48% found that the course material provided them with opportunities to develop their isiZulu vocabulary. Eighty nine percent (Strongly Agree = 39% and Agree = 50%) of the students felt that the DLI material contributed towards the development of their academic literacy and communication skills required to succeed in their content subjects (Table 12, Question 12). They reported that the course material enabled the majority (73%: Strongly Agree = 36% and Agree = 37%) to participate freely in class (Table 12, Question 13). Supporting these generally positive opinions, answers to Question 14 (Table 12) show that most (SA = 41% and SA = 46%) of the students (SA = 41%) were generally satisfied with the quality of the DLI course material.

The majority of students (94%) (Question 8, Table 12) indicated that the DLI guide helped them to develop the desire to continue learning English. This is possibly because for the majority of students (87%) (Question 10, Table 12), the DLI pilot course had provided them with an opportunity to develop their L2 vocabulary. This is in agreement with the benefits associated with L1 use as it may contribute towards L2 development (see Chapter 3, 3.1). In addition, 48% claimed to have improved their L1 vocabulary. The higher number of students (87%) who indicated that the DLI pilot course helped them develop their L2 skills was to be expected, as this was a L2 course. Moreover, since isiZulu is the first language of the majority of the students (95%), it was assumed at the start of the course that the majority would be proficient in isiZulu. Nonetheless, it was interesting to note that the same students who felt that they had developed their L1 skills also indicated that they felt they had developed their L2 skills. This is in line with the claim made about the benefits of providing bilingual education, as it is supposed to contribute towards improved bilingualism (see Chapter 3, 3.1). The opinion that the pilot course benefited the students' multilingual proficiency and awareness was also expressed in their responses to the open questions (see Appendix 2, Question 11) of the second questionnaire:

Overall, students perceived the use of the DLI material positively as an aid to their teaching and learning. The students' responses indicate that isiZulu served as a useful resource to facilitate their understanding of the information presented in English. Since the students' perceptions were not tested using standardised tests, this makes their self-reports unreliable. An alternative way in which the study attempts to address this potential weakness in the data is to first compare the students' views of the DLI material with those of their lecturers who observed them in their classes. The second way is to examine the students' self-assessments against their overall academic performance, as obtained from the MUT's Management Information Systems (MIS) records.

To understand the reasons behind positive responses to closed questions, responses to open questions (see Appendix 2, Questions 15 to 19) were factored in.

Firstly, question 15 asked the following:

What do you think are the strengths of this subject's learner guide? *Yini encomekayo ngencwadi yalesi sifundo?*

This question received these following responses:

- I have learnt a lot because what I did not understand in English was written in Zulu and vice versa.
- The study guide must be given to all the learners because of its great help in learning languages.
- The subject guide is important to every student who wants to improve their language.
- It gives us the basic of both languages while English is not our mother language.
- It made me use both languages better than before.
 - I can refer to Zulu if I do not understand English.
- You can easily understand what is needed if you are given an activity because it is also written in Zulu.
- It explains in both English and Zulu, explains clearly by giving examples.
- It can transfer English to Zulu and there were words I did not know now I know them.
- It helped us to increase our knowledge and helped me to speak free in the class and had an opportunity to raise my opinion.
- It is to be included from pre-tech to s4.
- This guide must not be abolished.
- It enabled me to communicate better in two languages.
- I have learnt that you must be confident in anything you are doing.
- It prepares me for future situation and even more on my career course.
- If this guide continues to be used then students won't struggle with English as a language and in future they will succeed.
- I learnt how to communicate with other people of different languages. I'm able to get different meaning of the words in English and my first language.
- It helped us to develop our understanding about our mother language and other languages and we also experienced more words which we were unfamiliar with.
- We were able to communicate with each other in different languages.
- Learnt how to get our message across clearly in English and Zulu.
- The fusion of two languages helped me understand Zulu a little bit.
- Ifundisana ukuba ube nesibindi ekukhulumeni ulimi lwesiNgisi kanye nokuthola izincazelo zamanye amagama esilungu. [It develops your confidence to speak in English and develops your vocabulary]

- Yenza kubelula kulabo abangakwazi ukuqonda kahle isiNgisi. [It makes things easy to those who do not understand English]
- Senza umuntu akwazi ukuzethemba uma e presenter egunjini lokufunda. [It develops self-confidence to make oral presentation in class]
- Yenza umfundi athole ulwazi kalula. [Students learn better]
- Yenza sikwazi ukulandela incazelo yamagama anzulu. [It helps us understanding of difficult words]
- Engingakuncoma ukuthi lesisifundo sithuthukisa abantu abamnyama ekutheni baqonde ulimi lwesiNgisi. [What I can commend about this subject is that it develops black students'understanding of English]
- Ukwazi olunye ulimi kuyinto ebalulekile kwezokuxhumana. [Knowledge of another language is important in communication]
- Singashintswa isitayela sokukhiqiza lencwadi, okunalokho banezelele. [The style used in developing this study material must not be changed, instead it should include more information.]
- Abaqhubeke njalo bebhale izincwadi ngolimi lwesintu kanye nesiNgisi. [More books should be written in both black African languages and English]

The above data indicates that the students reacted positively to the use of isiZulu in the study guide due to the way in which the information (35% of the total course material) contributed towards their understanding of the course material, which was mostly (65%) presented in English. Particular areas pointed out by students are: vocabulary, confidence to make presentations, development of both languages and a clear understanding of instructions on tasks to be performed. For this reason, some of the students further suggested that this type of knowledge presentation should continue throughout their studies, as it has the potential to help them succeed in the future. It was interesting to note that while students were permitted to answer in any of the two languages, the majority chose to answer in English.

The concerns raised by students in response to Question 16 that requires them to indicate the weaknesses of the DLI course material are the following:

- If you include Zulu only what about the guys who are not Zulus.
- It used too much Zulu of which some of us are not Zulu speakers.
- It is good to use more languages like Xhosa.
- You should try to use other languages we like to learn other languages.

- Those who did not understand Zulu I can say they did not gain anything.
- It was very unfair because I am not Zulu.
- I learnt to speak and respect other languages.
- Include isiXhosa, Afrikaans and tsiVenda.
- Ngingafisa kwandiswe nezinye izilimi ukuze umuntu angagcini ngokwazi ulimi lwakubo kuphele bese ethi uyazi. [I would like to see more languages so that I can learn them]

The issues raised suggest that the DLI course material contributed to a high level of bi-/multilingual awareness among students. This observation seems to support literature which suggests that one of the aims of maintenance bilingual education (MBE) programmes or courses is to develop bi-multilingualism awareness (see Chapter 3, 3.1). The bi-/multilingualism awareness shown by the students is that they express concern that the course material uses only one black African language which disadvantages speakers of other languages. They further indicate that the inclusion of more black African languages (and perhaps of Afrikaans) would have enabled them to learn other South African languages.

The students were however not expected to give detailed assessments on the strengths and weaknesses of the course material as would be obtained from respondents with expert knowledge, such as lecturers. It is for this reason that the students' evaluation of the DLI course material is comparatively analysed against the views of their lecturers; see Table 15 below.

According to the data presented in Table 15, the lecturers agreed with the students concerning the contribution made by the DLI material to teaching and learning. In response to Question 8, eight lecturers (80%) were of the view that in their observation, the DLI course material appeared to be appreciated by the students. The lecturers' observations are consistent with the majority (86%) of students' who indicated that they found the mixing of languages in the DLI course material suitable for their style of learning.

Eight lecturers (Strongly Agree = 5 and Agree = 3) shared the view that the DLI course material's use of L1 helped sustain the students' interest in class (Question 10) and the same high number (80%: Strongly Agree = 5 and Agree = 3) agreed that the guide encouraged students participation during lectures (Question 13). The students interest and participation appears to be influenced by the fact that the majority felt free to use more of their L1, as observed by all ten lecturers (Table 15, Question 14, and less of L2, as indicated by three lecturers (Table 15, Question 15). Furthermore, nine lecturers (90%) did not think that the use of two languages in the DLI material might have led to language confusion (Question 16). The majority (70%) also agreed that the DLI course material did not slow down the development of the students' L2 skills (Question 12).

When lecturers were asked their opinion about the effectiveness of the DLI material in aiding their teaching (Table 15, Question 9), half (50%=n5) indicated that the course material resulted in more effectively delivered lectures. In checking the home language of the lecturers, it was not surprising that those who agreed to the effectiveness of the guide in their teaching were L1 isiZulu speakers. Two lecturers (20%) were not sure and three (30%) disagreed.

Table 15: Lecturers' questionnaire

The use of isiZulu	Strongly Agree		Agree		Unsure		Disagree		Strongly Disagree	
in the guide:			l							
	No.	%	No.	%	No.	%	No.	%	No	%
8. Is appreciated by students.	2	22.2	6	66.7	2	22.2	0	.0	0	.0
9. Results in effective lecturing.	4	44.4	1	11.1	2	22.2	3	33.3	0	.0
10. Increases students' interest during lectures.	5	55.5	3	33.3	1	11.1	1	11.1	0	.0
11. Helps students develop communication and literacy skills in both languages.	4	44.4	3	33.3	1	11.1	1	11.1	1	11.1
12. Retards the development of students' English skills.	1	11.1	2	22.2	0	.0	6	66.6	1	11.1
13. Encourages students to participate in class.	5	55.5	3	33.3	2	22.2	0	.0	0	0.
14. Enables students to freely use their home language in class.	5	55.5	5	55.6	0	.0	0	.0	0	.0
15. Enables students to freely use English in class.	2	22.2	1	11.1	4	44.4	2	22.2	1	11.1
16. Results in language confusion.	0	.0	0	.0	1	11.1	5	55.5	4	44.4
17. Shows respect towards students' home language (i.e. isiZulu).	6	66.6	3	33.3	1	11.1	0	.0	0	.0
18. Contributes towards my interest in the use of learners' home language in education.	3	33.3	7	77.8	0	.0	0	.0	0	.0
19. Broadens my perspective on bi/multilingual education.	5	55.5	4	44.4	1	11.1	0	.0	0	.0

The reaction of the majority (n=7) of lecturers was that the DLI material contributed towards the development of the academic literacy and communication skills (Question 11), a perception that is evident in the overall academic performance of students registered for this course as shown in Table 16.

Table 16: 2008 Pass rate

	Enrolment No.	Final Pass No.	Average pass rate
BUILD (Year 1)	296	258	87%
ACIVIL (1st semester)	168	150	89%
ACHEMI (1st semester)	149	103	69%
AELECT (1st semester)	190	176	93%
AMECHA (1st semester)	98	80	82%
Collective	605	509	84%

BUILD - PreTech

Building

AMECHA - PreTech: Mechanical Engineering

ACIVIL - PreTech: Civil Engineering **AELECT**- PreTech: Electrical Engineering **ACHEMI**- PreTech: Chemical Engineering

Source: MUT's Management Information Systems (MIS) office

In addition, the lecturers' responses to the open questions (Appendix 3, Questions 20 to 24) revealed their general agreement with the students about the role of the DLI course material in facilitating effective teaching and learning. When the lecturers were asked to comment on the best features (Question 20) of the DLI course material their responses were:

- The guide has clearly spelt out outcomes. This helps both the facilitator and the students to know exactly what students have to know or be able to do at the end of each unit. The activities in the guide bring about student-centred lectures. Through the activities in the guide students take charge of their learning they learn by doing.
- The guide has some useful pedagogic activities for the learners especially on connective discourse markers.
- The guide as a whole is excellent.
- The learning material is relevant to students' immediate and likely future needs at university and in the workplace.

These positive responses were evident again in response to Question 24, which required the lecturers to provide any additional comments:

- This needs to be promoted in order to deconstruct the notion that African languages are inferior and cannot be used for academic purposes. Moreover, this would develop students' confidence to participate in class, and that would help them learn better.
- It's a good move for learners who come from disadvantaged areas, the guide helped them to develop some confidence. It was also beneficial to learners from ex model C schools.

The positive views on the role of L1 towards effective teaching from lecturers appear to have contributed positively towards their attitudes to the use of black African languages in higher education. Question 17 (Table 15) shows that nine out of ten lecturers (90%) felt that the use of the students' L1 showed respect towards the students' home language. Moreover, the responses to Question 18 are consistent with those of Question 17 in that all ten lecturers (100%) agreed that the DLI course material contributed towards their interest in the role of the learners' home language in education. Likewise, an open question (Question 23) on whether or not lecturers would recommend this type of teaching material for other courses or content subjects revealed positive responses. Seven of the lecturers responded in the affirmative, while the responses of only two lecturers were negative. One lecturer made no comment. The lecturers' positive responses to Question 23 were as follows:

- Yes. It will help both lecturers and students respect Zulu as a language of academia.
- Yes. The material and activities encourage student participation (and hence ownership of learning).
- Yes. It is in line with the latest developments in the publishing of textbooks in that efforts to integrate African languages with English are gaining ground.
- Yes. However, I anticipate problems with terminology used in content subjects as there might not be suitable equivalents of terms in Zulu.

The reasons provided by the lecturers for agreeing to the need for the broader use of bilingual instruction point to the respect it shows towards isiZulu as a language of instruction. Moreover, lecturers indicate that this approach is student-centred as it allows students to draw from their stronger language (L1) to facilitate learning in their weaker language (L2). This is consistent with the theories that inform the task based approach of the course material (see Chapter 3, 3.2.2). Therefore, the DLI course material impacted positively on lecturers' attitudes towards the role of L1 in HE.

While many of the lecturers perceived the course material's use of isiZulu as helpful in facilitating teaching and learning, they were at the same time critical of the DLI pilot course material in certain areas. Their reservations with the course material, in response to Question 21 that required the lecturers to name the worst features of the DLI course material, were:

- I feel that most of the issues are dealt with only at surface level, which is good for teaching but bad for learning. The organization of units could have been better.
- The micro-skills of speaking, listening, reading and writing could be organized into very clear micro-skills that are integrated to avoid the repetition of topics. For example, there is no reason why summarizing in listening should be treated differently from summarizing in reading.

Other concerns that are indicated by lecturers, in response to Question 24 that allows them to make additional comments, are as follows:

- While it is important for educators to be respectful of learners' first language and create opportunities for its use in lectures, however, there is no need to put too much emphasis on it [isiZulu] in lectures given the fact that learners do most of their communication outside the class in Zulu. The Guide also assumes that all students can speak [read] Zulu whereas this is not always the case.
- Not all students benefit from the use of Zulu since it is not their first language. At the same time though, the role of Zulu to teach English cannot be overlooked. It also helps the non-Zulu-speakers to learn the basics of the language.
- One student however had problems because her mother tongue is Venda.

- Students should refer to the Zulu version of the text to help them understand but the English class should not be turned into a Zulu class. After all, not all students in class are Zulu speakers.
- It is important to find the right balance between translating and giving students a chance to practice their English usage.
- Lecturers should not rely on the use of mother tongue but focus on the development of the target language.
- Only a few pages have been translated.

While the majority of the lecturers (n=9), like the students, felt that the piloted DLI course material broadened their perspective on bi-/multilingual education (Table 13, Question 19), they were equally concerned that the material did not include enough black African languages to address linguistic diversity in classes, as indicated in the above open responses. This general feeling of discontent among students and lecturers regarding the use of only one black African language in the DLI pilot course is consistent with findings by Dalvit and De Klerk (2005), who conducted a similar study among isiXhosa-speaking students. Dalvit and De Klerk also cite similar findings by Dyers (1998). This can be taken as an indication that future multilingual courses need to find ways of including more black African languages if their objective is to truly contribute towards bi-/multilingualism in South Africa. At the same time, the above open responses indicate that the views vary on whether there should be more or less use of black African languages in an L2 class.

In line with the generally high positive perceptions of the DLI course material by eight of the lecturers, only two were negative about recommending bilingual instruction for content subjects (Question 23), as per the following information:

- No. I don't think that the return to the Translation Method of teaching language has benefits for mastering the target language. Of course the teacher, if s/he knows the learner's home language can use it for illustrative purposes, but to teach a language through another may not be beneficial.
- No. I feel it would take a lot of time to publish such books. I also fear that learners
 might get accustomed to being translated to all the time. This might lead to them
 experiencing problems in their exams as well as when they have completed their
 studies.

The two lecturers' disapproval of the widespread use of the DLI materials has to do with concerns that such an approach encourages the students to depend too heavily on isiZulu for instruction, which might later cause problems in exams. The two lecturers suggested that the students' L1 could be used informally when teaching [resulting in mixed language use in the classroom] as a resource, rather than being used formally, as is done when used in printed materials such as the DLI pilot course material.

Overall, the majority of students and their lecturers responded positively towards the potential role of isiZulu as a medium of instruction alongside English in the Academic Literacy and Communication Skills course. This is attributed to the positive responses that followed their participation in the DLI pilot course.

It was however important to further examine the students' generally negative attitudes on the use of L1 in teaching and learning as they progressed with their studies. Table 17 below shows a much better academic progress among the students who participated in the DLI pilot course (from 2008 to 2010) compared to the results of the 2003 to 2006 cycle (discussed in Chapter 1) across different Departments in the Faculty of Engineering. The progression analysis of the 2003 to 2006 shows that the student throughput rate was very bad. It ranged from nil to as high as an 84% drop-out rate in some engineering departments. In contrast, the 2008 to 2010 analysis, that coincides with the inception of the DLI pilot course in 2008, shows a minimum of 13% and a maximum of 40% in drop-out and failure rates across different engineering departments. It is however acknowledged that other factors could have influenced these results during these different periods.

Table 17a: Enrolment and Progress of engineering students

BUILD	2008		2009	2010	
	Year 1	Rate	Year 2	Rate	Year 3
ENROLMENT	149	70%	105	91%	96
Changed Qualification	9	6%	9	9%	
Failed / Dropout	35	23%			
ACHEMI, AELECT, ACIVIL & AMECHA	2008		2009		
	1st Sem	ester	2nd Sem	ester	
	0	Rate	S1	Rate	
ENROLMENT	605	68%	414	85%	
Changed Qualification	62	10%	12	3%	_
Failed / Dropout	129	21%	52	13%	

BUILD – Pre-Tech Building
AMECHA - PreTech: Mechanical Engineering
ACIVIL - PreTech: Civil Engineering
AELECT - PreTech: Electrical Engineering
ACHEMI - PreTech: Chemical Engineering

Table 17b

2009	2009							
1st Seme	ester	2nd Seme	1st Semester					
S2	Rate	S3	Rate	S4				
350	61%	212	60%	127				
3	1%							
135	39%	85	40%					

Source: MUT Management Information System office

5.3.4 Students' focus group interviews

To gain a better understanding of students' language attitudes, their responses to the first and second questionnaire are examined together with the views expressed during the focus group interviews with a sample of two groups of students (group 1: n = 28, group 2: n = 30). The questions were asked in both English and isiZulu and presented on paper, and the focus group interviews were conducted in both languages (see Appendix 5 and 6). There were five semi-structured focus group interview questions to allow for elaboration of statistical information. The three attitudinal components (affective, cognitive and behavioural) and the two motivational concepts (instrumental and integrative) are examined. In this section the findings are presented by first presenting the questions from the two questionnaires, the results of which required in-depth answers before mentioning each specific focus group interview question and the responses that were meant to follow-up on the questionnaire results.

The results of Question 8 (Table 8) indicate that 78% (Strongly Agree = 40% and Agree = 38%) found it beneficial to use both isiZulu and English in group discussions. Similarly, responses to Question 5 (Table 9) show that 86% (Strongly Agree = 53% and Agree = 33%) of the students found mixing English with isiZulu in the DLI course material helpful. This suggests that bilingual education is preferable to the use of L2 only as the medium of instruction, albeit in the first-year or semester. However, responses on the possibility of the use of African languages as media of instruction also receive a favourable high response of 64% (Table 11, Question 12). The support is even higher after participation in the DLI pilot course 77% of the students indicated that they learnt to value the role of their L1 in education (Table 12, Question 9). It is however acknowledged that these were not exactly the same questions, and as such, preference for the use of one's' L1 in education might not necessarily mean the same as the view that one might have on the general use of black African languages in higher education. To find out from the students whether they would prefer the use of black African languages alongside English or the use of black African languages on their own in education, the question for discussion was phrased as follows:

Given an option, how would you prefer the use of African languages in education to be done between using them on their own and mixing them with English? Explain. Uma kungathiwa khetha, ungathanda ulimi lwakho lusetshenziswe lodwa noma luxutshwe nesiNgisi uma kufundiswa ngalo? Chaza.

- I would prefer to use both English and Zulu ... words that are difficult to understand in English as black people.
- I would also go with mixing them because students will understand better ..., but not in the Communication class only but in other subjects.
- I don't think that is a good idea, I think we should use English then we must propose to have Zulu dictionaries ... in the universities there are lecturers who are Indians and Europeans ...

In the second group the following came up during their discussion:

- I think both they should be used ... get a clear understanding.
- I disagree ... this thing of using both languages maybe sometimes it can be a problem. Like when it comes to assessments ... English ... not mixed with any African language.

The students appear to have been divided on this issue. While some support bilingual education others are sceptical about the practicality of such an approach. The reasons cited for opposition to dual language instruction is the diversity of first languages among lecturers and the fact that assessment activities are conducted in English. The reasons given are that the use of L1 as a resource facilitates the understanding of difficult words from L2. The opposing views raise concerns regarding the lack of proficiency of lecturers in the students' L1 as one of the problems that can make it difficult to implement bilingual education. For the same reason it would be difficult to also allow students to mix languages during examinations as not all lecturers will be able to read the students' answers.

The use of language(s) for examinations also came up in the analysis of the first questionnaire. While the rest of the responses (see Table 8, Question 8 and 9; and Table 11, Question 13 and 14) indicated a high preference for the use of L1 as a learning resource and a teaching language, responses on whether or not the same should apply

during assessments received less support with 43% against 51% that objected to this idea (Table 11, Question 16). Although the difference is very small between the two groups, to establish an explanation the following question was asked:

Given an option, how would you prefer the use of African languages in higher education to be done between using them for teaching purposes only but be assessed in English and for using them both for teaching and assessment?

Uma kungathiwa khetha, ungathanda ulimi lwakho lusetshenziswe kanjani kwezemfundo ephakeme phakathi kokuthi lusetshenziswe ekufundiseni kuphela kodwa uhlolwe ngesiNgisi noma kukho kokubili ukufundisa nokuhlolwa?

In the first group discussion the following responses came up:

- When given a question paper maybe ibe nesiZulu [it should have isiZulu] but for answering purposes we should use English .. I'm not a Zulu speaker I would also want to answer or respond in my own language
- Use English only because what you will be testing us on is something you have taught us
- It is right ... some people fail to understand English but they can write it.
- But there are words that you can't change to isiZulu, like i- equilibrium.
- Like you just said, IKHWILIBHILUMU.

In the second group the following came up:

- Good to include English and isiZulu ...for understanding, but ... English is the medium of instruction ... it will lose its value.
- Manje uma ku-mixed kowu two [if two languages are mixed] uyezwa kangcono noma ungabhala into okuyiyona [you understand better and you can write the correct thing] no-100% ungawuthola [you can even get 100% pass]

It appeared that students were divided on the issue of the use of black African languages for assessment purposes. Those who supported the idea indicated that the use of black African languages would assist their understanding of questions and avoid failure because they misunderstood the instructions. One student was opposed to this and felt that English would lose its value if it is mixed with black African languages.

Responses to the second questionnaire (Table 9 and 12) generally indicated a high support for the use of the DLI course material in the Academic Literacy and Communication Skills lectures. To establish the views of the focus group interview participants about the extension of this teaching approach to their content subjects in engineering the question for discussion was phrased as follows:

What do you think about the possibility of using African languages in your content subjects, such as Physics?

Ucabanga kanjani mayelana nesimo lapho kungathiwa akusetshenziswe izilimi zesintu ezifundweni zakho njenge Physics?

The responses from the first group included:

- I doubt it would work because African languages have limited material that you can use in research ...
- I wish to differ ... go to your computer and check Google. Google South Africa can be translated into isiXhosa, isiZulu, seSotho and other South African languages. I do not doubt them in any way or form.
- the use of African languages at university can be helpful to us as the students who are from public schools in rural areas. We are used to being taught in isiZulu.
- Protons, ama-prothonzi.
- French people pride themselves in their language. So by doing that they have influenced other nations to take notice of them. ...we have professors who have been taught in their languages which are Spanish and Chinese.

The second group indicated the following:

- I think it should work because a lot of students they lack of understanding of English that's why even at matric level they are failing.
- I doubt it ... In engineering there are a lot of other concepts that cannot be understood in isiZulu.
- I disagree with ... [when a person wants to develop his English vocabulary he understands it better when words are also explained in isiZulu ...]
- [What I think ... it has been realised that it was difficult for the previous generation to learn English. That is why they are trying to provide us with other languages that will help us understand better.
- There was apartheid and oppression, but now we are free.

Views appear to differ on the extension of the use of isiZulu in the Academic Literacy and Communication Skills course to content subjects in engineering. Those that oppose the idea cite the difficulty in finding appropriate terminology to suit the engineering field. This is however disputed by one of the students as a possible hindrance because of his noted increase in the recognition and use of diverse languages in technology, such as in the internet. It is also interesting to note that the majority of lecturers (n=7), supported the idea of the use of dual language instruction across different subjects (see 5.3.3 above).

Responses to the first questionnaire (Table 8, Question 12) support the use of black African languages as media of instruction. Furthermore, 77% reported in the second questionnaire (Table 12, Question 9) that participation in the DLI course material enabled them to learn to value the role of their L1 in education. To find out if this suggested that the respondents would support the implementation of the 2002 Language Policy for Higher Education and their views on it, the question for the discussion on this matter was as follows:

Are you aware of, and what do you think about, the fact that South Africa has the 1997 Language in Education Policy for schools and the 2002 Language Policy for Higher Education for universities that entitle students to choose to be taught in any language they want when that is considered "reasonably practicable" in an effort to promote access and success in education?

Uyazi futhi ucabangani mayelana nephuzu lokuthi lapha eMzansi kuneNqubomgomo yoLimi eMfundweni yezikole eyaphasa ngo 1997 kanye neyemfundo ephakeme eyaphasa ngo 2002 evumela abafundi ukuthi bakhethe ulimi abafuna ukufunda ngalo uma lokho kungakwazi ukuthi kwenzeke ukuze abafundi bathole futhi baphumelele kwezemfundo?

The discussion that followed included:

- It is a great way of educating our people as it promotes our culture, yet we must also take a look at that is also a great deal of work to be done. ... I am a Swati from Swaziland ... If I find that education is set up in isiZulu well that will be very difficult for me to study here, let alone Sothos and Tshivendas.
- Do you really think that it would be easy for them to actually teach in 12 diverse languages? That's totally not practical. ... We can't choose the best from them all except to use one medium of instruction which is English.

The second group indicated the following:

- Izifundo ezinjengo physics kukhulunywa ngo-reaction ... akezwa nokuthi ini okukhulunywa ngayo kodwa ngesiZulu angezwa ,so ngingathi u-right lomthetho wokuthi kusetshenziswe ama-languages oyi-two. [subjects such as physics are about concepts such as reaction ... a person does not understand but in isiZulu it works, so I think this policy is fine about using two languages.]
- This policy will work to a certain extent but you will find that in some universities there is a broad race of students
- This policy has good intentions, it's just that most of the time it seems unpractical.

Students' views on the policy show a reasonable level of understanding of the practical implementation of the policy. While they acknowledge that there is a need for MTI, students are aware of the fact that the policy might not be practical considering the number of official languages in the country and the diversity of the student population at other higher education institutions. However, as noted in Chapter 1, the policy recommends the use of regional languages rather than all of them at once. At the same time, there are books that have already been published that provide a translation of terminology in different subjects using up to 11 languages, such as the *Multilingual Glossary of Economics terms* published by Maskew Miller Longman in 2005.

Lastly, while the second questionnaire sought to obtain students' reaction to the use of the DLI course material, it did not allow them to give detailed information, except in the limited space of the open questions. The last question for discussion allowed students to comment on advantages and disadvantages of using the DLI pilot course material. This question was prompted by the support of the DLI pilot course study material by the majority of students in response to the second questionnaire. To find out if this positive view would be expressed during the group discussion and the possible reasons students would provide, the question was phrased as follows:

What kind of advantages or disadvantages were there towards your learning in using a bilingual guide?

Kukhona okubone kuwusizo nokungekuhle ekufundeni kwakho uma usebenzisa ibhuku elixube izilimi ezimbili?

The following are responses that emerged from one of the two focus groups interviewed:

- You find that we did not understand that much English and you find that it is written in isiZulu, and you understand ... even the question in the exam on how are you going to answer.
- I understand it better because it is also written in my own language.
- If it is written in both languages I can just read the Zulu part only and still be able to even write the correct answer in English. I think the students can take advantage of this.
- Once again, it is very good but it helps those who can understand isiZulu. ... this should be applied upon the primary and secondary level so that by the time the students reach the tertiary level he is properly cooked and baked to understand English and Zulu perfectly
- I think Sir, it is an advantage but then it goes with pride. ... Don't you think that it is an advantage for you because it also helps you to learn isiZulu? You know English why don't you learn isiZulu? You have to be proud of your language, and you must be willing to learn.
- That is why I'm saying we should have other African languages taught in universities so I could learn them.

Similarly, diverse views were expressed during the discussion that took place in the second focus group interview:

- Ya it did work a lot because some of the content presented in isiZulu is not much different to isiSwati. This policy it is a good idea, you see Africa has been oppressed ...
- Well personally it was very beneficiary like I managed to understand some concepts very easily ...
- The majority of students are black so when we interact amongst ourselves it is mostly in isiZulu but we do incorporate English...
- According to my own perspective it was beneficiary a lot ... it made everything very easy like English is not something you can just take easy it has got its own difficulties so if it expressed in your language then it is much easier to understand.
- Yes they [content subject lecturers] do explain to us using isiZulu some concepts. There is also one lecturer who also commented that here at MUT many students at their secondary schools their teachers were using isiZulu. As a result, when he is

- teaching maths they do not understand him. When he asked them about how they learned maths at school, they said they were using isiZulu.
- It makes a difference when we are being taught by a lecturer who is using both languages while teaching.

The discussion among students confirmed their positive experience with the DLI pilot course that was also expressed by the majority in response to the questions of the second questionnaire (see Table 9 and 12). Similar concerns that were raised in the open questions of the second questionnaire were also raised during the discussion. Issues of concern are mainly the fact that the DLI pilot course material only uses two languages whereas the use of more languages could have developed their knowledge of more South African languages.

To sum up, the focus group interviews and questionnaire data indicates that there is consistency in students' language attitudes. Although there is considerable support for the use of L1 as a resource in education there are also critical concerns.

5.4 Discussion of results

The three attitude components are central to the investigation of attitudes. This is particularly so when the study aims to develop and change language attitudes. In the field of education the positive feelings (affective component) towards the use of a particular language can be developed and changed through participation in a course that uses this particular language. Such positive feelings would however depend on the participants' opinions (cognitive component) about the effectiveness of the use of the language in question. For example, if the language's use is associated with academic success and in line with preferred forms of learning and teaching, positive feelings are likely to be developed. As a result, endeavours directed at the use of specific languages in education might receive positive reaction from individuals.

Other important factors that can impact on language attitudes are reasons that individuals would have for wanting to learn or use a language at different levels of their education.

These reasons could either be instrumental or integrative if not both, depending on the social context. For example, the use of L1 together with L2 could be considered useful for effective teaching and learning at early levels of education. However, towards the end of studies attitudes might change to be stronger towards a language that is considered to have more socio-economic benefits than the one that has fewer benefits.

5.5 Summary

The results from both the students' self-assessments and the lecturers' views are consistent with each other concerning the positive role of L1 instruction in education. The participants further displayed positive attitudes towards and support for the continued use of black African languages in education during the first phase of the data collection (2008).

The criticisms of the DLI pilot course by its participants cannot be ignored. Some of the important issues that need addressing are: the extent of the use of L1 instruction in a L2 class, and the use of only one black African language in the teaching material. Concerns with the use of L1 instruction in a L2 class are part of the debate that surrounds bilingual programmes (see Chapter 2). Bilingual education is controversial as there are those who do not accept the role of L1 instruction in facilitating the development of L2 skills, despite scientific research indicating that there may be benefits to this approach (Goldenberg, 2008). A detailed summary of the study's findings and a discussion of their implications are provided in the following chapter.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6 Introduction

This final chapter reviews the main findings of the study and evaluates the extent to which the research questions of the study have been answered. The limitations of the study are discussed as well as the implications of the findings.

6.1 Summary of the main findings

This section highlights the four major findings of the study and their significance. The discussion makes reference to other sociolinguistic studies and the theories that informed the study.

Firstly, the study found that although English was identified as the main language of instruction, isiZulu (L1) was the preferred language of learning among the majority of student participants, particularly at foundation level of their studies. They use L1 as a learning resource amongst themselves in group discussions and to understand what they hear and read in their studies. The majority of students found that the use of teaching and learning material that presents information in both isiZulu and English suited them. Similarly, five of the ten lecturers who were isiZulu L1 speakers found the dual language instruction (DLI) course material helpful in enabling them to lecture more effectively. This suggests that the DLI material offered them a favoured style of teaching as they are likely to draw from isiZulu to facilitate teaching and learning in their classrooms. This insight supports the findings of Saville-Troike (2003: 183), that attitudes towards language are generally culturally determined. This is because while English is indeed the dominant language of instruction isiZulu remains the primary language at Mangosuthu University of Technology (MUT). Moreover, isiZulu is also, according to the Statistics South Africa report (2003), a demographically significant language in South Africa, and in the province of KwaZulu-Natal. Further evidence supporting the view that attitudes are determined by culture is to be found in previous sociolinguistic studies (as discussed in Chapter 2) that were conducted in similar environments to MUT around South Africa. For instance, studies among isiXhosa-speaking students (Aziakpono and Bekker, 2010; Dalvit, 2004; Dalvit and De Klerk, 2005) have shown that there is great support for the use of isiXhosa alongside English in education. Also, the students in these studies viewed isiXhosa as a language of daily communication that would be useful in their future careers. In addition, one large-scale study on language attitudes and practices (undertaken in 2001 and repeated in 2007 among the students and academic and administrative staff of the University of the Witwatersrand) revealed that there was consistent support there for the development of isiZulu as a language of instruction and communication (Van Zyl and Nyika, 2009). This is in spite of the fact that Gauteng is a linguistically polyglot province and only a small percentage of both the study's sample groups identified isiZulu to be their home language. However, Moodley's (2009: 180-182) sociolinguistic analysis of the attitudes of the staff and students of the University of KwaZulu-Natal (UKZN) towards bilingual (English-isiZulu) education presented different results to those of the present study. Moodley found that very few of the study's respondents showed any inclination towards bilingual education. Part of the reason for the general lack of support for isiZulu instruction at UKZN is that the majority of the staff and students said that they 'rarely' or 'never' use isiZulu on campus. Therefore, the use of isiZulu as a primary language at MUT during this research project led to there being a generally positive attitude towards its use in the DLI course material. The study contributed to an appreciation that language attitudes should be understood against experience in the particular context. The findings suggest that in an educational context, where the community's L1 is used more frequently than their L2, attitudes towards L1 can be expected to be positive.

Secondly, the use of isiZulu in the piloted DLI course impacted positively on changing attitudes of the participants towards it use in lectures. The students' responses to the first questionnaire that displayed a preference for the informal use of their L1 as a learning resource did not initially translate into positive attitudes concerning the formal use of their L1 in higher education. This is because the majority (62%) of the students initially

indicated that they viewed English as the only language suitable for instruction in higher education. There was also no clear support for the use of isiZulu during assessments. However, after participation in the DLI pilot course, 77% of students indicated that they learnt to value the role of their L1 in education. Some of the students who, after participation in the DLI course, found the use of LI in education helpful, were from racially mixed schools where they had indicated that neither they nor their teachers used L1 as a learning resource. This suggests that the DLI course influenced the change of attitudes be positive.

Thirdly, the formal use of L1 in education is preferred more at first semester of study and less in the final semester. Responses to the first questionnaire indicated that 62% students identified English as the only language suitable for use in education. At the same time, 64% of students indicated that isiZulu can be used in education. However, responses to the third questionnaire revealed that a higher percentage (75%) of student participants identified English as the only language of education. There was also a far lower number (25%) of students who saw the possibility of L1 in education at final year level. In addition, while the majority of students were in favour of the use of L1 to facilitate teaching and learning, the majority did not support the use of L1 during assessment activities, according to both the first and the third questionnaire answers. The ambivalent attitudes in response to different questions of the same questionnaire and between the first and the third questionnaire can be understood in terms of instrumental and integrative motivation. On the one hand, Weger-Guntharp (2008: 14-18, citing Dornyei 1990) notes that an instrumental motivation can be a factor for language learning when the language is used as the medium of instruction. However, this motivation might only as regards an intermediate level of proficiency when it is not the majority language in society (Weger-Guntharp, 2008, citing Shaaban and Gaith, 2000). On the other hand, Weger-Guntharp (2008, citing Yashima 2000) notes that other motives to learn a language are intrinsic-instrumental-integrative in that individuals might have a vague sense of necessity, such as the need to work among the L2 speakers and access to information.

Fourthly, experience with mother tongue instruction (MTI) is a good indicator of language attitudes, as opposed to surveying attitudes towards the use of black African languages where the respondents have been exposed to teaching and learning resources that only make use of English. The students' responses to both the closed and open questions of the second questionnaire, as well as the views expressed by the sample that participated in the focus group interviews, indicated that they appreciated the formal use of their L1 alongside English in the DLI course material. The students' views were similar to their lecturers' views and observations. All ten lecturers indicated that their use of the DLI course material contributed towards their interest in the use of the students' primary language in education, and nine lecturers were of the opinion that the use of isiZulu shows respect for black African languages. Seven of the ten lecturers further supported the extended use of the DLI course material to content subjects. These findings are in line with the view expressed by Koch and Burkett (2005: 1091), who argue that South African research on the attitudes of black African language speakers towards MTI indicates that there is a strong preference for it, as long as it provides quality L1 education while at the same time develops English proficiency (citing De Klerk, 2002; Heugh, 2002; Markdata-Pansalb, 2000; Rudwick, 2004 and Dalvit, 2004). This implies that once black African languages are formally used in teaching and learning materials, such as textbooks and study guides, they might be accepted by many stakeholders, such as academics and students.

Moreover, the fact that some of the study's participants feel more positive about the role of L1 instruction after its use in the DLI pilot course suggests that the research approach adopted in the investigation of attitudes is a critical factor in changing the stakeholders' language attitudes. The present study took note of Triandis's (1971) theory of attitude change, which is based on the idea that there are three components to attitude. Triandis (1971: 142) claims that by providing someone with new information, the cognitive component of their attitude may be changed. This attitude change is, however, determined by the perceived nature of experience in the presence of a new object towards which one has attitude. The change in feeling might translate into support for any future

behaviour that is directed towards the promotion of the subject, such as language use in education. In the same manner, the increase (from 64% to 77%), in the number of students who support the use of black African languages in education is linked with the high number (87%) of students who were satisfied with the quality of the DLI course material. These results are therefore consistent with Triandis's claim. This helps inform researchers as to how future sociolinguistic investigations should be conducted: communities need to be provided with a personal experience of DLI on which to base their feelings about the use of black African languages in education. However, the fact that the change in attitudes was not sustained should be understood in the light of the discussion provided at the end of the third finding above.

Lastly, many (87%) students felt that their participation in the DLI pilot course provided them with an opportunity to develop their English vocabulary. At the same time, 48% of the respondents indicated that they developed their isiZulu vocabulary. The development of students' isiZulu skills in the Academic Literacy and Communication Skills class shows that the DLI pilot course had a positive effect on the vitality and maintenance of their L1. In this respect, the DLI pilot course appears to have contributed towards additive bilingualism. The students also appeared to have developed awareness on the importance and status of all official South African languages. This was evidenced by the fact that student and lecturers remarked in their open responses that the DLI pilot course did not include enough black African languages to accommodate non-isiZulu speakers. Furthermore, nine of the ten lecturers agreed that participation in the DLI pilot course broadened their perspective on bi/multilingual education. The programme generated an interest among nine of the lecturers concerning the use of learners' home language in education. These results confirm some of the benefits associated with the Maintenance Bilingual Education (MBE) teaching approach that informed the theory on which the design of the DLI pilot course was based (see Chapter 3). A number of researchers have associated MBE with improved language awareness which in turn contributes towards positive attitudes concerning mother tongue language and culture (e.g. Baker, 1992; Benson, 2000; Cummins, 2000, 2001, 2002, 2005a and 2005b; Schiffman, 2005; Torres-Guzman, 2002; Tucker, 1998 and 2005).

6.2 Implications of the study

The findings of this study have implications on two levels: (1) educational sociolinguistic investigation, and (2) multilingual education policy implementation.

Firstly, the thesis has contributed to knowledge about gaining a better understanding of the relationship between language and education. In this regard, it has introduced the strategy of providing respondents with practical experience in L1 teaching and learning, which served as a starting point for the researcher to investigate their attitudes towards L1 use in higher education. It was argued that if participants in an educational sociolinguistic investigation have only ever been exposed to L2 instruction, it is to be expected that they would wish their L2 to remain the main language of instruction in education. Communities' language attitudes are strongly influenced by prevalent social practices, such as the exclusive use of their L2 as the language of education. As an approach to investigating how the role of L1 instruction is perceived by stakeholders in education, it would be appropriate to first engage the participants in an educational experience that uses the L1.

Secondly, the findings of the study indicate that the educational environment in which L1 is used as the complementary language of instruction can determine language attitudes. The generally positive attitudes by students and lecturers at MUT towards L1 as a learning resource are attributable to the fact that the student population and the surrounding communities are predominantly isiZulu-speaking.

Lastly, the positive results concerning bi-/multilingual education are encouraging regarding the development of black African languages as media of instruction. This should not, however, be misconstrued as meaning that only black African languages should be used in higher education in South Africa. Rather, black African languages should be used alongside Afrikaans and English in an effort to promote a truly multilingual education system. Furthermore, the study's positive findings on

multilingualism support the sentiments of the former South African President (Thabo Mbeki), which appear in the introduction to the 2002 LPHE:

In sharing one's language with another, one does not lose possession of one's words, but agrees to share these words so as to enrich the lives of others.

This suggests that the learning of an additional language, such as English, should not 'subtract' from the learners' L1. Instead, it should contribute towards the repertoire of languages that a person possesses, which enables them to better function in a multilingual country such as South Africa. At the same time it is implied that it would be of great value for all South Africans to be bi-/multilingual.

6.3 Limitations of the study

Although an effort was made to conduct this investigation in a manner that would ensure reliability and validity, there were several limitations to realising this goal.

Firstly, the researcher's position as the course coordinator, and a lecturer in the department might have inadvertently influenced the outcome of the study. This might have occurred during the setting of questionnaire and interview questions. In addition, the association of the researcher with lecturers who were his colleagues might have in other cases influenced supportive responses from the lecturers. Student participants might have also provided responses that they thought were expected by the researcher.

Secondly, the impact of the DLI pilot course on language attitudes relies mainly on self-reports. The study does not provide periodic reports on students' behaviour during lectures. Conducting lecture room observations on student reactions to the DLI course material was considered, but it was not feasible to do so as the majority of student participants were taught by other lecturers. Visiting their lecture rooms might have been considered as intrusion which could have negatively impacted on proceedings. The study

therefore relies on the observations made by lecturers during their lessons. Lecturers report on their observations in response to specific questions in their questionnaire.

Lastly, it would have been useful to establish if there was any correlation between participation in the DLI pilot course and an improvement in the students' academic performance and dropout rate. However, the DLI pilot course was conducted in one semester at foundation level and was a small part of the respondents' overall curriculum. For this reason it was not reasonable to expect the DLI pilot course to have had an impact on students' academic performance across all their semester subjects in engineering. The study only investigates language attitudes as they relate to the participants' perceived academic benefits associated with the use of isiZulu in the academic literacy and communication classes.

6.4 Recommendations for multilingual education policy implementation

This study was motivated by a concern over the lack of the implementation of the Language Policy in Higher Education (2002) at MUT and generally in higher education institutions despite the continued high failure and dropout rates particularly among black African students. The lack of policy implementation has partly been attributed to educational stakeholders' generally negative attitudes towards the use of black African languages in higher education because of the lack of bi-multilingual resources. At the same time there are indications that students may support mother tongue instruction that contributes to quality education and English proficiency. Hence, it was hypothesised that experience with an instructional model that uses L1 alongside L2 could serve as a catalyst for changes in attitude towards the role of black African languages in higher education. Therefore the aim of the study was to investigate the extent to which attitudes towards the role/use of isiZulu in higher education can be changed by presenting it alongside English in an Academic Literacy and Communication Skills course offered to foundation engineering students. The empirical evidence suggests that the study's participants felt more positively about the role of L1 instruction in South African higher education, than some of those who have been investigated by other researchers. The following five recommendations are made about implementing a multilingual strategy in institutions of higher learning.

Firstly, it is commended that all educational institutions have multilingual educational policies in place. However, the lack of policy implementation suggests that monitoring and evaluation need to take place on regular bases to ensure that the multilingual policy is being effectively implemented and modified as required.

Secondly, the findings of the present study have revealed that once multilingual educational resources are made available there is a greater chance that the role of black African languages in education may be positively viewed by its present sceptics. Therefore, strategies to implement language policies must be based on stakeholders' personal experience rather than on preconceived ideas. This implies that educational institutions need to undertake bi-/multilingual pilot courses to determine how best to implement multilingual instruction and whether it will be worth the effort. However, adequate financial and human resources need to be made available to develop and implement multilingual educational resources. The resources can be made available by the department of education, academics and the management of educational institutions. It is particularly the management on the ground that can ensure the implementation of language policies by providing both leadership and support in this direction.

Thirdly, before a multilingual strategy is implemented an assessment of the available L1 students on a campus needs to be done to determine which language(s) should be used and if the staff complement has the linguistic resources to do it. This can help ensure that there are no students who feel marginalised when their languages are left out. In cases where the staff complement lacks adequate linguistic resources, tutorials conducted by L1 senior or post-graduate students should be provided.

Fourthly, the findings suggest that there is often a contradiction between what people say about their actual use of language is and how they wish the languages should be used. In

this case, the majority of students confirm that they actually use their L1 as a learning resource in education. However, this is not the same language that they report is the best for educational purposes. Therefore, when investigating the implications of stakeholders' attitudes towards language policy implementation, researchers should require their respondents to indicate what language(s) they normally find effective when it comes to learning. The results should then inform decisions on policy implementation.

Fifthly, the results of the study have confirmed that in higher education institutions where the student population remains predominantly black in terms of demographics these institutions should lead in the implementation of multilingual education policies. Particular levels of students' study that need attention are foundation and first-year/semester. This is because there are indications that it is such students who are the most affected by the use of English as the main medium of instruction. Moreover, in black institutions, the lecturers' practices tend to influence the attitudes of the students as regards the use of black African languages in education.

Finally, once implemented, research into the effect of multilingual tuition needs to be widely conducted across the country to assess whether it is having the desired effect. Research needs to be done by way of progression analysis and graduation rates so as to determine whether or not bi-/multilingual education contributes to students' academic achievement and English proficiency.

6.5 Summary

The thesis has highlighted the importance of conducting a bilingual course that provides participants with personal experience of L1 instruction alongside that of L2. The underlying hypothesis was that this practical experience will most likely best inform the participants about the merits of dual language instruction and better inform their language attitudes. This approach enabled the participants to base their attitudes on practical experience with L1 instruction rather than on preconceived ideas. Therefore, the focus of

future educational sociolinguistic studies ought to be based on practices of language use in educational contexts. Higher education institutions should lead the way by providing their students with skills in specific subjects as well as the ability to learn and transfer information. However, this should not be restricted to academic situations, but to their broader interaction with the people who employ them and the communities they serve. Moreover, in training the future workforce, care should be taken to ensure that this training is in line with the actual linguistic practices of society, particularly in a multilingual country such as South Africa.

REFERENCES: IMITHOMBO YOLWAZI

Ager, D. 2001. *Motivation in Language Planning and Language Policy*. Clevedon: Multilingual Matters.

Agheyisi, R. and Fishman, J. 1970. Language attitude studies: A brief survey of methodological approaches. *Anthropological Linguistics* 12:137-157.

Alanis, I. 2000. A Texas two-way bilingual program: Its effects on linguistic and academic achievement. *Bilingual Research Journal*, 24 (3), 225-248.

Alexander N. 2001. Language policy, symbolic power and democratic responsibility of the post-apartheid university. Paper presented at the D.C.S. Oosthuizen Memorial Lecture. Rhodes University, Grahamstown, 9 October 2001.

Alexander, N. 2006. Language rights and indigenous language development. Paper presented at UKZN panel discussion. Westville.

Appalraju, D.P. 2010. Emerging bilingualism in rural secondary schools in KwaZulu-Natal: The impact of educational policies on learners and their communities. Unpublished PhD thesis. Durban: University of KwaZulu-Natal.

August, G. 2006. So, what's behind adult English second language reading? *Bilingual Research Journal*, 30(2): 245-264.

August, D., and Hakuta, K. 1997. *Improving Schooling for Language-Minority Children*: *A Research Agenda*. Washington, DC: National Academy Press.

Aziakpono, P. and Bekker, I. 2010. The attitudes of isiXhosa-speaking students toward language of learning and teaching issues at Rhodes University, South Africa: General trends. *Southern African Linguistics and Applied Language Studies*, 28(1): 39-60.

Baker, C. 1988. *Key issues in bilingualism and bilingual education*. England: Multilingual Matters, Ltd.

Baker, C. 1992. Attitudes and Language. Clevedon, England: Multilingual Matters Ltd.

Baker, C. 1993. Foundations of Bilingual Education and Bilingualism. Clevedon, England: Multilingual Matters Ltd.

Baker, C. 2000. The care and education of young bilinguals. An introduction for professionals. Clevedon, England: Multilingual Matters Ltd.

Baker, C. 2001. Foundations of Bilingual Education and Bilingualism, 3rd edition. Clevedon, England: Multilingual Matters Ltd.

Baker, C. 2006a. Psycho-sociological analysis in language policy. In Ricento, T. (ed.). *An Introduction to Language Policy. Theory and Method.* Maldon: Blackwell Publishing, 210-228.

Baker, C. 2006b. *Foundations of Bilingual Education and Bilingualism* (4th Ed). Clevedon, England: Multilingual Matters Ltd.

Baleghizadeh, S. 2010. Focus on form in an EFL communicative classroom. *Research on Youth and Language*, 4(1): 119-128.

Bamgbose, A. 1991. *Language and the nation: the language question in sub-Saharan Africa*. International African Institute; Edinburgh University Press, Edinburgh, Scotland.

Bangeni, B. and Kapp, R. 2007. Shifting language attitudes in a linguistically diverse learning environment in South Africa. *Journal of Multilingual and Multicultural Development*, 28(4): 253-269.

Barkhuizen, G.P. 2001. Learners' perceptions of the teaching and learning of Xhosa as a first language in Eastern and Western Cape High Schools: Summary Report. *PanSALB Occasional Papers nr. 3.* Pretoria: PanSALB.

Batibo, H.M. 2005. Language Decline and Death in Africa: Causes, Consequences and Challenges. Clevedon, England: Multilingual Matters Ltd.

Bekker, I. 2002. The Attitudes of L1-African Language Students towards the LOLT Issue at UNISA. Unpublished MA thesis. Pretoria: University of South Africa

Bell, B. 2001. *Mother-tongue maintenance and maths and science achievement: A contribution towards the formulation of multilingual language-in-education policies for South African schools*. Retrieved on August 8, 2007 from http://www.und.ac.za/und/ling/archive/bell-01.html

Benson, C.J. 2000. The Primary Bilingual Education Experiment in Mozambique, 1993 to 1997, *International Journal of Bilingual Education and Bilingualism*, 3 (3): 149-166.

Bialystok, E. 2002. Acquisition of literacy in bilingual learners: A framework for research. *Language Learning*, 52(1): 159-199.

Bless, C. and Higson-Smith, C. 2000. Fundamentals of Social Research Methods: An African Perspective (3rd Edition). Juta: Cape Town.

Bosch, B. and de Klerk, V. 1996. *Language Attitudes and their Implications for the Teaching of English in the Eastern Cape*. Philadelphia: John Benjamins Publishing Company.

Brock-Utne, B. 2010. Research and policy on the language of instruction issue in Africa. *International Journal of Educational Development*, 3(4): 1-10.

Brock-Utne, B. and Holmarsdottir, H.B. 2004. Language policies and practices in Tanzania and South Africa: problems and challenges. *International Journal of Educational Development*, 24: 67-83.

Burton, D. and Bartlett, S. 2009. Key Issues for Education Researchers. London: SAGE Publications

Butler, H.G. and van Dyk, T.J. 2004. An academic English language intervention for first year engineering students. *Southern African Linguistics and Applied Language Studies*, 22(1&2): 1–8.

Calteaux, K. 1996. Standard and non-standard African language varieties in the urban areas of South Africa. Main report of STANON Research Programme. Pretoria: HSRC.

Cameron, D., Frazer, E., Harvey, P., Rampton, M.B.H. and Richardson, K. 1992. *Researching Language: Issues of Power and Method*. Routledge: London.

Cape Times (5 November 2002). Asmal proposes African-language campus, page 5. Retrieved from www.iol.co.za

Carrington, L.D. 1997. Social contexts conducive to the vernacularization of literacy. In A. Tabouret-Keller, R.B. Le Page, P. Gardner-Chloros, and G. Varro (Eds.) *Vernacular Literacy: A Re-Evaluation*, 82-92. Clarendon Press.

Cazabon, M.T. and Nicoladis, E. 1998. Becoming bilingual in the Amigos Two-way immersion Programme. Centre for Research on Education, Diversity and Excellence. Retrieved on September 13, 2006 from www.cal.org/crede/pubs/research

Chick, K. and McKay, S. 2001. Teaching English in multiethnic schools in the Durban area: The promotion of multilingualism or monolingualism? *Southern African Linguistics and Applied Language Studies*, 19: 163–178.

Christian, D. 1996. Two-way immersion education: Students learning through two languages. *The Modern Language Journal*, 80 (1), 66-76.

Cloud, N., Genesee, F. and Hamayan, E. 2000. *Dual Language Instruction: A handbook for Enriched Education*. Boston, MA: Heinle & Heinle.

Cohen, G. 1984. The politics of bilingual education. *Oxford Review of Education*, 10(2): 225-241.

Cohen, L. and Manion, L. 1994. Research Methods in Education. London: Routledge.

Cohen, L. Manion, L. and Morrison, K. 2001. *Research Methods in Education*. London: Routledge.

Condelli, L. and Wrigley, H. S. 2005. *Real world research: Combining quantitative and qualitative research for adult ESL*. London: National Research and Development Centre for Adult Literacy and Numeracy.

Cook, A. 1999. Going beyond the native speaker in language teaching. *Tesol Quarterly* Vol. 33(2): 185-209.

Cook, J. 2001. Bridging the Gap Between Empirical Data on Open-Ended Tutorial Interactions and Computational Models. *International Journal of Artificial Intelligence in Education*. To appear in Part II of the Special Issue on Analysing Educational Dialogue Interaction, 12, (1). Retrieved on August 18, 2006 from http://www.cbl.leeds.ac.uk/ijaied/>

Cooper, R.L. and Fishman, J.A. 1974. The study of language attitudes. *International Journal of the Sociology of Language*, 1(3): 5-20.

Coupland, N. and Jaworski, A. 1997. *Sociolinguistics: A Reader*. New York: St. Martin's Press.

Crawford, J. 1997. Best evidence: Research foundations of the Bilingual Education Act. Washington, DC: National Clearinghouse for Bilingual Education. Retrieved March 20, 20008, from

http://www.ncela.gwu.edu/ncbepubs/reports/bestevidence/index.htm#Contents

Creswell, J. W. 1994. Research Design: Qualitative and Quantitative Approaches. California, USA: Sage Publications.

Creswell, J. W. 1998. Qualitative Inquiry and Research Design: Choosing Among Five Traditions. Thousand Oaks: Sage.

Cummins, J. 1984. *Bilingualism and Special Education: Issues in Assessment and Pedagogy*. Cleveland, Avon: Multilingual Matters.

Cummins, J. 1986. Empowering minority students: A framework for intervention. *Harvard Educational Review*, 56(1), 18–35.

Cummins, J. 1979. Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research*, 19, 222–251.

Cummins, J. 1994. The Acquisition of English as a Second Language. In K. Spangenberg-Urbschat, and R. Pritchard (Eds.). *Reading Instruction for ESL Students*. Delaware: International Reading Association.

Cummins, J. 1998. Immersion education for the millennium: What have we learned from 30 years of research on second language immersion? In M. R. Childs and R. M. Bostwick (Eds.), 34-47. Katoh Gakuen, Japan.

Cummins, J. 2000. *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Clevedon, UK: Multilingual Matters.

Cummins, J. 2001. *Negotiating Identities: Education for Empowerment in a Diverse Society*. 2nd Edition. Ontario, CA.

Cummins, J. 2002. Language and the human spirit. *TESOL Matters*. Retrieved on 7 September 2007 from http://www.hltmag.co.uk/nov05/sart11.htm

Cummins, J. 2003. BICS and CALP: Origins and rationale for the distinction. In Paulston, C.B. and Tucker, G.R. (Eds.), *Sociolinguistics: The Essential Readings*, 322-328. USA, Blackwell Publishing.

Cummins, J. 2005a. *Teaching and learning two languages in the EFL setting*. Paper presented at the TESOL Symposium on Dual Language Education, Istanbul, Turkey.

Cummins, J. 2005b. *Teaching for cross-language transfer in dual language education: Possibilities and pitfalls.* Paper presented at the TESOL Symposium on Dual Language Education: Teaching and Learning Two Languages in the EFL Setting, Istanbul, Turkey.

Cummins, J. 2009. Fundamental psycholinguistic and sociological principles underlying educational success for linguistic minority students. In A. Mohanty, M. Panda, R. Phillipson and T. Skutnabb-Kangas (Eds.). *Multilingual education for social justice*. *Globilising the local*, 21-35. New Delhi: Orient Blackswan.

Cummins, J. and Swain, M. 1986. *Bilingualism in Education: aspects of theory, research and practice*. New York: Longman.

Dalvit. L. 2004. Attitudes of isiXhosa speaking students at the University of Fort Hare towards the use of isXhosa as a language of learning and teaching (LOLT). Unpublished MA thesis. Grahamstown: Rhodes University.

Dalvit, L. and de Klerk, V. 2005. Attitudes of Xhosa-speaking students at the University of Fort Hare towards the use of Xhosa as a language of learning and teaching (LOLT). *Southern African Linguistics and Applied Language Studies*, 23(1): 1• 18.

De Klerk, V. 2002a. Language issues in our schools: Whose voice counts? Part 1: The parents speak. *Perspectives in Education*, 20(1): 1• 13.

De Klerk, V. 2002b. Language issues in our schools: Whose voice counts? Part 1: The teachers speak. *Perspectives in Education*, 20(1): 15• 273.

Denzin, N.K. and Lincoln, Y.S. 1998. Introduction: Entering the field of qualitative research. In N.K. Denzin, and Y.S. Lincoln (Eds.). *The Landscape of Qualitative Research: Theories and Issues*. Thousand Oaks, CA: Sage.

Department of Education (Republic of South Africa). 2002. *Language Policy for Higher Education*. Pretoria: Government Press.

Deprez, K. and Persoons, Y. 1987. Attitude. In A. Ulrich, D. Norbert and K.J. Mattheier, (Eds). *Sociolinguistics. An International Handbook of the Science of Language and Society*. Berlin/ New York: Walter de Gruyter.

De Wet, N.C. 2002. Factors influencing the choice of English as language of learning and teaching (LoLT) - a South African perspective. *South African Journal of Education*, 22:119-124.

Dicker, S.J. 1993. The universal second language requirement: An inadequate substitute for bilingual education (A response to Aaron Wildavky). *Journal of Policy Analysis and Management*, 2(4): 779 • 785.

Dornyei, Z. 2003. Questionnaires in Second Language Research: Construction, Administration, and Processing. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Drew, D. and Demack, S. 1998. A league apart: Statistics in the study of race and education. In P. Connolly, and B. Troyana (Eds.). *Researching racism in education*. Buckingham: Open University Press.

Driekie, H. and Monnapula-Mapasela, M. 2009. South African higher education before and after 1994: A policy analysis perspective. In E. Bitzer (ed), *Higher Education in South Africa: A scholarly look behind the scenes*, 1-20. Stellenbosch: Sun Media.

Du Plessis, P. 2008. Perspectives on managing Afrikaans and English as 'equal' languages of learning and teaching at the University of the Free State. *Southern African Linguistics and Applied Language Studies*, 26(3): 315 – 332.

Dyers, C. 2000. Language, identity and nationhood: Language use and attitudes among Xhosa students at the University of the Western Cape. Unpublished PhD thesis. University of the Western Cape.

Dyers, C. 2002. Intervention and language attitudes: short- or long-term change? Paper presented at the PanSALB conference on *Utilising Research and Development Project Results*, CSIR, 16 October

Edwards, J. 1994. Multilingualism. London: Routledge.

Ellis, R. 2003. Task-based language learning and teaching. Oxford: Oxford University Press.

Ellis, R. 2006. The methodology of task-based teaching. *Asian EFL Journal*, 8(3): article 6. Retrieved June 5, 2010 from www.asian-efl-journal.com

Erickson, F. 1986. Qualitative methods in research on teaching. In M. C. Wittrock (ed), *Handbook of Research on Teaching*, 119-161. New York: Collier-Macmillan.

Far, M.M. 2008. An Overview of Syllabuses in English Language Teaching, Karen's Linguistics Issues. Available at: http://www.3telus.net/linguisticsissues/mi

Fasold, R. 1984. The Sociolinguistic of Society. Oxford: Blackwell.

Fasold, R.W. 1997. Motivations and attitudes influencing vernacular literacy: Four African assessments. In A. Tabouret-Keller, R.B. Le Page, P. Gardner-Chloros, and G. Varro (Eds.). *Vernacular Literacy: A Re-Evaluation*, 246-270. Clarendon Press.

Finlayson, R. and Madiba, M. 2002. The Intellectualisation of the indigenous languages of South Africa: Challenges and prospects. *Current Issues in Language Planning*, 3(1): 40-61.

Fishman, J.A. 1977. Language and ethnicity. In H. Giles (ed). *Language, Ethnicity and Intergroup Relations*, 15-57. London: Academic Press.

Fishman, J. 1989. Language and Minority in Sociolinguistic Perspective. Clavedon: Multilingual Matters.

Frankfort-Nachmias, C. and Nachmias, D. 1992. *Research Methods in the Social Sciences* (4th edition). Great Britain: Edward Arnold.

Freeman, D. and Freeman, Y. 2005. Literacy essentials for dual language programs. Retrieved on November 8, 2007 from www.languagemagazine.com.

Gardner, R.C. 1985. Social Psychology and Language Learning. London: Edward Arnold.

Garrett, P, Coupland, N. and Williams, A. 2003. Investigating language attitudes: social meanings of dialect, ethnicity and performance. Cardiff: University of Wales Press.

Genessee, F. 1987. Learning Through Two Languages: Students of Immersion and Bilingual Education. Cambridge, Mass.: Newbury House.

George, R. 2000. Measuring change in students' attitudes toward science over time: An application of latent variable growth modeling. *Journal of Science Education and Technology*, 9(3): 213-225. Retrieved on June 01, 2010 from www.jstor.org.

Gibbs, A. 1997. Focus group. *Social research update*, Issue 19. Retrieved on July 2, 2007 from http://sru.soc.surrey.ac.uk/SRU19.html

Giliomee, H. 2009. A deadly war of languages. Retrieved from www.mg.co.za/article/2009-10-05

Gómez, L., Freeman, D. and Freeman, Y. 2005. Dual language education: A promising 50–50 model. *Bilingual Research Journal*, 29: 1.

Goldenberg, C. 2008. Teaching English language learners: What the research does and does not say. *American Educator*, 33(2), 8–44.

Gomez, L., Rodríguez, L., Irby, B.J., Galloway, M. and Lara-Alecio, R. 2004. Two-Way Immersion Bilingual Programs in Texas. *Bilingual Research Journal*, 28: 1

Gottlieb, N. 2005. Language and society in Japan. Journal of Pragmatics 38, 1313–1318

Guba, E. and Loncoln, Y. 1994. Competing paradigms in qualitative research. In N. Denzin, and Y. Lincoln, (Eds.), *Handbook of qualitative research*. London: Sage.

Hakuta, K. 1993. Second-Language Acquisition, Bilingual Education, and Prospects for a Language-Rich Nation. New York: Basic Books.

Hammersley, M. 2008. Troubles with triangulation. In M.M. Bergman (ed). *Advances in Mixed Methods Research: Theories and applications*, 22-36. London: Sage.

Hartshorne, K. 1992. *Crisis and Challenge: Black Education 1910-1990*. Cape Town: Oxford University Press.

Hartshorne, K. 1995. Language policy in African education: a background to the future. In R. Meshtrie (ed.). *Language and Social History: Studies in African Sociolinguistics*, 306-318. Cape Town and Johannesburg: David Phillip.

Helmberger, J.L. 2006. Language and ethnicity: Multiple literacies in context, language education in Guatemala. *Bilingual Research Journal*, 30(1): 65-86.

Henning, E. 2004. Finding your way in qualitative research. Pretoria: Van Schaik.

Henning, E.; van Rensburg, W. and Smit, B. 2007. Finding your way in Qualitative Research. Van Schaik: Pretoria.

Hernandez-Chavez, E. 1984. The inadequacy of English immersion education as an educational approach for language minority students in the United States. In *Studies on Immersion Education: A Collection for United States Educators*, 144-183. Sacramento: California State Department of Education.

Heugh, K. 2000. Giving good weight to multilingualism in South Africa. In R. Phillipson (ed). *Rights to Language: Equity, Power, and Education*. Mahwah, New Jersey: Lawrence

Heugh, K. 2002. 'A history of mother-tongue and bilingual education in South Africa' in T. Beckett (ed). *Reports on Mother-Tongue Education*. Cape Town: PRAESA University of Cape Town

Heugh, K. 2005. Mother-tongue education is best. HSRC review, 3(3):6-7.

Hoffman, C. 2001. Towards a description of trilingual competence. *International Journal of Bilingualism*, 5(1), 1-17.

Hornberger, N. H. 1991. Extending enrichment bilingual education: Revisiting typologies and redirecting policy. In O. García (ed.). *Bilingual Education: Focusschrift in honor of Joshua A. Fishman*, 215-234. Philadelphia: John Benjamins.

Hornberger, N.H. 2003. Literacy and language planning. In C.B. Paulston and G. R. Tucker (Eds.). *Sociolinguistics: The essential readings*, 449-459. Malden, MA: Blackwell Publishing.

Hunt, A. and Beglar, D. 2005. A framework for developing EFL reading vocabulary. *Reading in a Foreign Language*, 17(1):23-59.

Igboanusi, H. 2008. Mother tongue-based bilingual education in Nigeria: Attitudes and practice. *The International Journal of Bilingual Education and Bilingualism*, 11(6): 721-734.

Jiang, B. and Kuehn, P. 2001. Transfer in the academic language development of post-secondary ESL students. *Bilingual Research Journal*, 25(4): 417-436.

Johnson, R.B. and Onwuegbuzie, A.J. 2004. Mixed methods research: A paradigm whose time has come. *Educational Researcher*, 33(7): 14-26.

Kamwangamalu, N.M. 2000. A new language policy, old language practices: Status planning for African languages in a multilingual South Africa. *South African Journal of African Languages*, 20(1): 50–60.

Kamwangamalu, N.M. 2003. Social change and language shift. *Annual Review of Applied Linguistics*. USA: Cambridge University press, 23: 225-242.

Kaschula, R.H. 2005. South Africa's National Language Policy Revisited: The challenge of implementation. *Inter-disciplinary Journal for the Study of Arts and Humanities in South Africa. Literature and Languages*, 11(2): 10-25.

Kelly, K. 1999. From encounter to text: collecting qualitative data for interpretive research. In M. Terre Blanche, and K. Durrheim (Eds.). *Research in Practice: Applied Methods for the Social Sciences*, 379-397. University of Cape Town Press, Cape Town.

Keshavarz, M. and Astaneh, H. 2004. The impact of bilinguality on the learning of English vocabulary as a foreign language (L3). *International Journal of Bilingual Education & Bilingualism*, 7(4): 295-302.

Koch, E. and Burkett, B. 2005. Making the role of African languages in higher education a reality. Unisa Press *SAJHE*, 19 (6): 1089 -1107.

Ladegaard, H. J. 2000. Language attitudes and sociolingustic behavior: exploring attitude-behavior relations in language. *Journal of Sociolinguistics*, 4(2): 214-233.

Lambert, W. E. 1987. The effects of bilingual and bicultural experiences on children's attitudes and social perspectives. In P. Homel, M. Palij, and D. Aaronson (Eds.). *Childhood bilingualism: Aspects of linguistic, cognitive, and social development.* Hillsdale, NJ: Erlbaum.

Lambert, W.E. 1974. Culture and language as factors in learning and education. In F.E. Aboud, and R.D. Meade, (Eds.). *Cultural factors in learning and education. Fifth Western Washington Symposium on Learning*. Bellingham: Western Washington University.

Lambert, W. E. and Tucker, G. R. 1972. *The Bilingual Education of Children. The St. Lambert Experiment*. Rowley, MA: Newbury House

LANGTAG (Language Plan Task Group). 1996. *Toward a National Language Plan for South Africa: Final Report of the Language Plan Task Group*. Pretoria: DACST.

Larsen-Freeman, D. and Long, M. 1991. An Introduction to Second Language Acquisition Research. London: Longman.

Lee, P. 1996. Cognitive development in bilingual children: A case for bilingual instruction in early childhood education. *The Bilingual Research Journal*, 20(3&4): 499-522.

Lee, S. K. 2002. The significance of language and cultural education on secondary achievement: a survey of Chinese American and Korean American students. *Bilingual Research Journal*, 26(2): 327-340.

Lehman, I. and Mehrens, W. 1979. *Educational Research: Readings in Focus*. New York: Holt, Rinehart and Winston.

Letsie, M. M. 2002. African languages as media of instruction. In F. R. Owino (ed). *Speaking African: African Languages for Education and Development*, 33-44. Cape-Town: CASAS.

Long, M. 1991. Focus on form: A design feature in language teaching methodology. In K. de Bot, R. Ginsberg, and C. Kramsch (Eds.). *Foreign language research in cross-cultural perspective*, 39-52. Amsterdam: John Benjamins.

Long, M. and Robinson, P. 1998. Focus on form: Theory, research, and practice. In C. Doughty and J. Williams (Eds.). *Focus on form in classroom second language acquisition*, 15-63. Cambridge: Cambridge University Press.

Luckett, K. 1995. National Additive Bilingualism: Towards a Language Plan for South African Education. In K. Heugh, A. Siegruhn and P. Pluddemann (Eds.). *Multilingual Education for South Africa*, 73-79. Isando: Heinemann Publishers Ltd.

Maartens, J. 1998. Multilingualism and language policy in South Africa. In G. Extra and J. Maartens (Eds.). *Multilingualism in a Multicultural Context: Case Studies on South Africa and Western Europe*, 15–36. Tilburg: Tilburg University Press.

Macfarlane, D. 2007. Dropouts in their own words. *Mail & Guardian online*: 20 November 2007; Retrieved on November 8 2007 from www.mg.co.za.

MacSwan, J. and Rolstad, K. 2003. Linguistic Diversity, Schooling, and Social Class: Rethinking Our Conception of Language Proficiency in Language Minority Education. In C.B. Paulston, and G.R. Tucker (Eds.). *Sociolinguistics: The Essential Readings*, 329-340. Blackwell Publishing, USA.

Makhode, T . 2005. Ministerial spokesperson: Report on indigenous languages in higher education: Press Release – 15 March 2005.

Makua, J. M. 2004. *Re-conceptualizing the functional roles of African languages in education: bridging the gap between policy and practice*. Unpublished PhD thesis. Sovenga: University of the North.

Mangosuthu University of Technology 2003. *Language Policy*. Unpublished document.

Mason, E.J. and Bramble, W.J. 1997. *Research in education and the behavioural sciences: Concepts and methods.* California: Brown and Benchmark Publishers.

Matjila, D.S. and Pretorius, E.J. 2004. Bilingual and biliterate? An exploratory study of Grade 8 reading skills in Setswana and English. *Per Linguam*, 20, 1-21.

McCarthy, T.L. 2003. Revitalising Indigenous Languages in Homogenising Times. Indigenous Education: New Possibilities, Ongoing Constraints. *Comparative Education*, 39(2): 147-163.

McDonough, J. and McDonough, S. 1997. Research Methods for English Language Teachers. London: Arnold Publishers.

Mehisto, P. and Asser, H. 2007. Stakeholder perspectives: CLIL Programme Management in Estonia, *The International Journal of Bilingual Education and Bilingualism* Vol. 10(5): 683-701.

Mesthrie, R., Swann, J., Deumert, A. and Leap, W. L. 2000. *Introducing Sociolinguistics*. Edinburgh: Edinburgh University Press.

Mhlanga, S. 1995. Parental preferences regarding medium of instruction in primary schools in the Nongoma District of KwaZulu-Natal. Unpublished MA thesis. Grahamstown: Rhodes University.

Ministry of Education National Commission on Higher Education (NCHE). 1996. *NCHE Report: A Framework for Transformation*, Pretoria: NCHE.

Moodley, D.L. 2005. A sociolinguistic analysis of multilingual conflict in post-apartheid South Africa: with specific reference to isiZulu in the greater Durban Metro area. Unpublished MA thesis. Durban: University of Natal.

Moodley, D.L. 2009. A sociolinguistic analysis of the attitudes of staff and students of the University of KwaZulu-Natal towards a bilingual (English/IsiZulu) medium of education. Unpublished PhD thesis. Durban: University of KwaZulu-Natal.

Moodley, V. 2003. Language attitudes and code-switching behaviour of facilitators and learners in language, literacy and communication senior phase outcomes-based education classrooms. Unpublished PhD thesis. Durban: University of Natal.

Moodley, Y. 1999. Language Policy and language practice at Ganges Secondary: The choice of languages as subjects and media of learning. Unpublished MA thesis. Durban: University of Natal.

Morgan, D.L. and Kreuger R.A. 1993. When to use focus groups and why. In Morgan D.L. (Ed.) *Successful Focus Groups*. London: Sage.

Mwaniki, M.M. 2004. South Africa's constitutional language provisions and their implications on the South African public sector. Unpublished PhD thesis. Bloemfontein: University of the Free State.

Ndhlovu, F. 2008. Language and African development: Theoretical reflections on the place of languages in African Studies. *Nordic Journal of African Studies*, 17(2): 137–151.

Ndimande-Hlongwa, N. 2009. Ukuhlelwa Kolimi. South Africa: Shuter and Shooter.

Neuman, W.L. 1997. *Social Research Methods: Qualitative and Quantitative Approaches* (3rd edition). United States: Pearson Education, Inc.

Neuman, W.L. 2007. Basics of Social Research: Qualitative and Quantitative Approaches (2nd ed.). United States: Pearson Education, Inc.

Ngcobo, S. 2001. *IsiZulu-speaking educators' attitudes towards the role of isiZulu in education in Durban*. Unpublished MA thesis. Durban: University of Natal.

Ngwenya, T. 2006. Integrating language awareness with critical language skills: a legal English experience, *Southern African Linguistics and Applied Language Studies*, 24(1): 23–33.

Nunan, D. 1992. *Research Methods in Language Learning*. Cambridge: Cambridge University Press.

Nunan, D. 2004. *Task Based Language Teaching*. Cambridge: Cambridge University Press.

Nunan, D. 2006. Task-based language teaching in the Asian context: Defining 'task'. *Asian EFL Journal*, 8(3): article 5. Retrieved June 5, 2010 from www.asian-efljournal.com

Nunn, R. 2006. Designing holistic units for task-based learning. *Asian EFL Journal*, 8(3): article 4. Retrieved June 5, 2010 from www.asian-efl-journal.com

Ovando, C., Collier, V. and Combs, M. 2003. Bilingual and ESL classrooms: Teaching multicultural contexts (3rd ed.). Boston: McGraw-Hill.

Paciotto, C. 2009. What do I lose if I lose my bilingual school? Students' and teachers' perceptions of the value of a Slovene language maintenance program in Italy. *International Journal of Bilingual Education and Bilingualism*, 12(4): 449-475.

Patton, M.Q. 1987. How to Use Qualitative Methods in Evaluation. London: Sage Publications.

Pillay, R. 2007. The mismatch between language policy and language practice: status planning for isiZulu in a multilingual and multicultural society. Unpublished PhD thesis. Durban: University of KwaZulu-Natal.

Poole, A. 2005. Focus on form instruction: foundations, applications, and criticisms. *The Reading Matrix: An International Online Journal*, 5(1): 47-56. Retrieved April 19, 2010 from www.readingmatrix.com/articles

Preece, S. and Martin, P. 2010. Imagining higher education as a multilingual space. *Language and Education*, 24(1): 3-8.

Pretorius, E.J. 2002. Reading ability and academic performance: Are we fiddling while Rome is burning? *Language Matters: Studies in Language Matters of Southern Africa*, 33/189-195.

Price, L. 2007. Lecturers' vs. students' perceptions of the accessibility of instructional materials. *Instructional Sciences*, 35: 317-341.

Punch, K.F. 2009. Introduction to Research Methods in Education. London: Sage Publications.

Ramani, E., Kekana, T., Modiba, M. and Joseph, M. 2007. Terminology development versus concept development through discourse: insights from a dual-medium BA degree. *Southern African Linguistics and Applied Language Studies*, 25(2): 207-223.

Ramani, E., Modiba, M., Tlowane, M. and Joseph, M. 2009. *Lessons from a dual-medium undergraduate degree (BA CEMS) at the University of Limpopo*. Unpublished paper presented at the International Conference on Language Policy, Planning and Support in Higher Education: Challenges of Multilingualism on 17-20 November 2009. Stellenbosch, South Africa

Romaine, S. 1995. *Bilingualism*. (2nd edition). Oxford: Blackwell.

Rosnow, R.L. and Rosenthal, R. 1998. *Beginning behavioral research: A conceptual Primer*. Englewood Cliffs, N.J.: Prentice-Hall.

Rossell, C.H. and Baker, K. 1996. The effectiveness of bilingual education. *Research in the Teaching of English*, 30: 7-74.

Rudwick, S. 2004. 'Zulu, we need [it] for our culture': Umlazi adolescents in the post-apartheid state. *Southern African Linguistics and Applied Language Studies*, 22 (3 and 4), 159-172.

Ryan, E. B., Giles, H., and Sebastian, R. J. 1982. An integrative perspective for the study of attitudes toward language variation. In E.B. Ryan and H. Giles (Eds.). *Attitudes toward language variation*, 1-20. London: Edward Arnold.

Ryan, E.B., Giles, H. and Hewstone, M. 1988. The measurement of language attitudes. In A.N. Dittmar and K.J. Mattheier (Eds.). *Sociolinguistics: an international handbook of science of language*, Vol. 2: 1068-1081. Berlin: De Gruyter.

Sanz, C. 2000. Bilingual education enhances third language acquisition: Evidence from Catalonia", *Applied Psycholinguistics*, 21, 1: 23-44.

Saville-Troike, M. 2003. *The Ethnography of Communication: An Introduction* (Third Edition). Oxford: Blackwell.

Scarcella, R. 2003. Academic English: A conceptual framework. Linguistic Minority Research Institute (UC LMRI). University of California, Santa Barbara.

Schiffman, H. 2005. *Bilingualism and intelligence*. Retrieved on September 17, 2007 from Penn University of Pennsylvania at http://ccat.sas.upenn.edu/~haroldfs/540/bilingtl/bilingtl.htm

Schreiner, L. and Hulme, E. 2009. Assessment of student' strengths: The first step to student success. In Leibowitz, B., Van der Merwe, A. and Van Schalkwyk, S. (Eds.). *Focus on First-Year Success: Perspectives Emerging from South Africa and Beyond*, 69-78. Stellenbosch: Sun Media.

Scott, I. 2009. First-year experience as terrain of failure or platform for development? Critical choices for higher education. In B. Leibowitz, A. Van der Merwe, and S. Van Schalkwyk (Eds.). *Focus on First-Year Success: Perspectives Emerging from South Africa and Beyond*, 17-35. Stellenbosch: Sun Media.

Scott, K.W., Bell, S.M. and McCallum, R.S. 2009. Relation of native-language reading and spelling abilities to attitudes toward learning a second language. *Journal of Social Psychology*, 54(1), 30-40.

Seliger, H.W. and Shogamy, E. 1990. Second Language Research Methods. Oxford: Oxford University Press.

Setati, M. 2002. Researching mathematics education and language in multilingual South Africa. *The Mathematics Educator*, 12 (2). Retrieved on September 17, 2007 from http://www.math.coe.uga.edu/tme/issues/v12n2/v12n2.Setati.pdf

Sheen, R. 2003. Focus on form – a myth in the making. *English Language Teaching Journal*, 57(3): 225-233.

Shembe, S. 2003. IsiZulu as a teaching, learning and assessment tool in Chemistry in Higher Education. *PanSalb*, 6-8.

Short, D. and Fitzsimmons, S. 2007. Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners – A report to Carnegie Corporation of New York. Washington, DC: Alliance for Excellent Education.

Skourtou, E. 2005. *Skills, knowledge and academic performance of bilingual students*. Paper presented at Wellchi Network Project, Workshop 4 "Children in multicultural societies", Athens, 2-3 December 2005.

Slavin, R.E. and Cheung, A. 2003. Effective reading programs for English language learners: A best-evidence synthesis. Baltimore, MD: Johns Hopkins University, Center for Research on the Education of Students Placed at Risk.

Smit, U. 1996. A new English for a new South Africa? Language attitudes, language planning and education. Vienna: Braumuller.

Snow, C. 1998. *Preventing Reading Difficulties in Young Children*. Washington, DC: National Research Council.

Solís, A. 2001. "Boosting Our Understanding of Bilingual Education: A Refresher on Philosophy and Models." Intercultural Development Research Association Newsletter (2001). Retrieved on July 17, 2007 from ttp://www.idra.org/Newslttr/2001/Apr/Adela.htm#box >

Statistics South Africa. 2003. Statistics and graphs: Percentage of speakers per language in South Africa.

St Clair, R.N. 1982. From social history to language attitudes. In E.B. Ryan and H. Giles (Eds.) *Attitudes Towards Language Variation: Social and Applied Contexts*, 164–174. London: Edward Arnold.

Swain, M. and Lapkin, S. 1991. Additive bilingualism and French immersion education: The roles of language proficiency and literacy. In A.G. Reynolds (ed.). *Bilingualism*, *Multiculturalism and Second Language Learning*, 203-215. Hillsdale, NJ: Lawrence Erlbaum.

Swain, M. and Johnson, R. K. 1997. Immersion education: A category within bilingual education. In R. K. Johnson and M. Swain (Eds.). *Immersion education: International perspectives*, 1-16. NY: Cambridge University Press.

Tellez, K., Flinspach, S.L. and Waxman, H.C. 2002. *After data: Program Evaluations and Their Role in the Elimination of Language Education Programs*. Retrieved on 8 August 2007 from http://www.education.ucsc.edu/faculty/ktellez/evalchapwebd.htm

Terre Blanche, M. and Kelly, K. 1999. Interpretive methods. In M. Terre Blanche, and K. Durrheim (Eds.). *Research in Practice: Applied Methods for the Social Sciences*, 123-146. University of Cape Town Press: Cape Town.

Thomas, G. 2009. How to do your research project: A guide for students in education and applied social sciences. London: Sage Publications.

Thomas, W.P. and Collier, V.P. 1997. *School effectiveness for language minority students*. National Clearinghouse for English Language Acquisition (NCELA) Resource Collection Series, No. 9, December 1997. Available at hhttp://www.thomasandcollier.com

Thomas, W.P., and Collier, V.P. 2002. A national study of school effectiveness for language minority students' long-term academic achievement. Santa Cruz, CA: Center for Research on Education, Diversity and Excellence, University of California-Santa Cruz. Retrieved May 7, 2008 from http://crede.berkeley.edu/research/llaa/1.1_final.html

Torres-Guzman, M.E. 2002. Dual language programs: Key features and results. *Directions in Language and Education*, 14 (Spring). Washington, DC: National Clearing House for Bilingual Education.

Triandis, H. 1971. Attitude and Attitude Change. New York: John Wiley and Sons, Inc.

Tucker, G. R. 1998. *A global perspective on bilingualism and bilingual education*. Retrieved on March 18, 2007 from http://www.ericdigests.org/2000-3/global.htm

Tucker, G. R. 2005. Innovative language education programmes for heritage language students: The special case of Puerto Ricans. *Multilingual Matters*, 8(2-3): 188-195.

Uribe, D. 2008. Characteristics of Academic English in The ESL Classroom. *The Internet TESL Journal*, Vol. XIV(3): 1-7. Retrieved on August 7, 2008 from http://iteslj.org/Articles/Uribe-AcademicEnglish.html

Van der Walt, J.L. and Dreyer, C. 1995. Strategy use in the multicultural class. *Journal for language teachers*, 29(4): 306-319.

Van Dyk, T.J. 2005. Towards providing effective academic literacy intervention. *Per Linguam*, 21(2): 38-51.

Van Zyl, S. and Nyika, N. 2009. From attitudes and practices to policy? Reflections on the results of a large-scale study of language attitudes and practices at the University of the Witwatersrand in 2001 and 2007. Unpublished paper presented at an International Conference on Language Policy, Planning and Support in Higher Education: Challenges of multilingualism on 17-20 November 2009. Stellenbosch, South Africa.

Verhoef, M. 1998. In pursuit of multilingualism in South Africa, *Multilingua*, 17(2 & 3): 181-196.

Verhoef, M. and Venter, T. 2008. Functional multilingualism at the North-West University as part of the institutions' transformation agenda. *Southern African Linguistics and Applied Language Studies*, 26(3): 379-392.

Vesely, R. 2000. Multilingual environments for survival: The impact of English on Xhosa-speaking students in Cape Town. *PRAESA Occasional Paper No.*2.

Watson, K. 2007. Language, education and ethnicity: Whose rights will prevail in an age of globalisation? *International Journal of Educational Development*, 27(3): 252-265.

Webb, V. 1991. Conflict in South African society, and the role of language. *LAUD* Paper No. 232. Duisburg: LAUD.

Webb, V. 1996. Language planning and politics in South Africa. *International Journal of the Sociology of Language*, 118: 139–162.

Webb, V. 2004. African languages as media of instruction in South Africa: stating the case. *Language problems and language planning*, 28(2): 147-173.

Webb, V. 2007. *The sociolinguistic development of African languages at the University of Pretoria*. Paper presented at LSSA/SAALA/SAALT Joint Annual Conference 4-6 July 2007. North West University of Potchefstroom: Potchefstroom, South Africa.

Weger-Guntharp, H.D. 2008. Learner motivation and Preferences: Realities in the Language Classroom. Unpublished PhD thesis. Washington DC: Georgetown University.

Weideman, A. 2003. Assessing and developing academic literacy. *Per Linguam*, 19(1 & 2): 55-65.

Weideman A. 2006. Transparency and accountability in applied linguistics. *Southern African Linguistics and Applied Language Studies*, 24(1): 71–86.

Wesche, M. B. and Skehan, P. 2002. Communicative, task-based, and content-based language instruction. In R. B. Kaplan (ed.). *The Oxford handbook of applied linguistics*, 207-228. Oxford: Oxford University Press.

Wildsmith-Cromarty, R. 2003. Mutual apprenticeship in the learning and teaching of an additional language. *Language and Education*, 17(2): 138-154.

Wildsmith-Cromarty, R. 2008. Can academic/scientific discourse really be translated across English and African languages? *Southern African Linguistics and Applied Language Studies*, 26(1): 147–169.

Williams, C. O. 2007. *Esl glossary*. Retrieved on August 7, 2008, from http://www.ballardtighe.com/eld/ESLGlossary.html

Wong-Fillmore, L. and Snow, C. 2000. What teachers need to know about language. Washington, D.C. *ERIC* Clearinghouse on Language and Linguistics.

Wray, A., Trott, K. and Bloomer, A. 1998. *Projects in Linguistics: A Practical Guide to Researching Language*. London: Arnold Publishers.

Zwiers, J. 2005. The third language of academic English. *Educational Leadership*, 62: 60-63.

Zeng, Z. and Murphy, E. 2007. Tensions in the language learning experiences and beliefs of Chinese teachers of English as a foreign language. *TESL-EJ*, 10.4.

Zungu, P.J. 1998. The status of Zulu in KwaZulu-Natal. In G. Extra and J. Maartens, (Eds.). *Multilingualism in a Multicultural context. Case studies on South Africa and Western Europe*, 37-49. Tilburg University Press.

APPENDIX 1: STUDENT QUESTIONNAIRE 1

UNIV. OF KWAZULU-NATAL & MANGOSUTHU UNIV. OF TECHNOLOGY

INFORMED CONSENT STATEMENT

Language Attitudes

INTRODUCTION

You are invited to participate in a research study on the Language Policy in Higher Education. The aim of the study is to gather your views on the role of indigenous African languages in higher education institutions.

INFORMATION ABOUT PARTICIPANTS' INVOLVEMENT IN THE STUDY

The study consists of a number of questions that we request you to answer one after the other. The data collected is confidential and we will not be able to tell that it is yours personally.

DURATION OF THE STUDY

Your participation requires about 25 minutes in total.

RISKS

This study does not entail any medical, physical or emotional risks.

BENEFITS

This research might be beneficial for future curriculum planning.

CONFIDENTIALITY

The study is anonymous, i.e. we will not be able to relate the data obtained to your name. Be assured that your anonymity and confidentiality will be preserved – all of our analyses will focus on patterns in the overall data, rather than on the data of individuals. Your name will not appear in any published documents and no individual information about you will be passed on to any other party under any circumstances.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed your data will be destroyed.

PROJECT MEMBERS

Mr Sandiso Ngcobo: Department of Communications, Mangosuthu University of Technology, (031) 907 7406.

Prof. Heike Tappe: Department of Linguistics, University of KwaZulu-Natal, (031) 260 1131.

CONSENT

I have read the above information. I agree to participate in this study. I understand that I can withdraw from the study at any time, should I so desire.

Participant ³	's signature	

QUESTIONNAIRE (UHLOLOVO)

THIS QUESTIONNAIRE IS INTENDED TO FIND STUDENTS' LANGUAGE ATTITUDES.

LOLUHLOLOVO LUHLOSE UKUTHOLA IMIBONO YABAFUNDI MAYELANA NEZILIMI.

Section 1: Personal information (Okumayelana nawe)

The first set of questions is meant to gather some background information about the student who answers this questionnaire. Mark with a cross (X) where possible. Isigaba sokuqala semibuzo sihlose ukuthola ulwazi mayelana nomfundi ophendula imibuzo yalolucwaningo. Khombisa ngophawu oluwumbaxa (X).

1. Age (*Ubudala*)

υ \	,	
16-19	20-24	Over 25

2. Gender (*Ubulili*)

3. Home language (*Ulimi lwami*)

isiZulu	isiXhosa	Tshivenda
siSwati	seSotho	Other

4. The racial composition of students from your last high/secondary school. Uhlanga lwabafundi esikoleni owagogoda kulo izifundo zikamatekeletsheni.

multiracial	African
esixubile	abomdabu

5. The race of teachers at the school where you matriculated.
Uhlanga lothisha enaninabo esikoleni owagogoda kuso umatekeletsheni.

multiracial	African	European	Indian
abaxubile	abomdabu	abamhlophe	abaseNdiya

6. The type of place where your last school was situated. Uhlobo lwendawo lapho waqeda khona isikole.

rural	Semi-	Township/	Suburb/	Semi-
	rural	location	city	urban

7. What language(s) did your high school teachers use to teach you most of your subjects?

Iluphi ulimi olwalusetshenziswa kakhulu ngothisha basesikoleni sakho ekufundiseni izifundo ezahlukene?

isiZulu	English	IsiZulu and English	Other
---------	---------	---------------------	-------

Section 2: Language attitudes (Okumayelana nezilimi)

8. In group discussions I learn better when we use both English and isiZulu.

Ngifunda kangcono uma singabafundi sihlangene ngezifundo sixuba isiNgisi nesiZulu.

Stuangly Aguas	Agraca	Linguage	Digggree	C/Digggrage
Strongly Agree	Agree	Unsure	Disagree	S/Disagree

9. To better understand what I read and hear in English, I think about it in my home language.

Ukuze ngiqonde kahle engikufundayo noma engikuzwayo okungesiNgisi ngikucabanga ngolimi lwami.

Strongly Agree Agree	Unsure	Disagree	S/Disagree
------------------------	--------	----------	------------

10. In lectures, students should use English throughout, even in the group discussions. Ulimi okufanele lusetshenziswe zikhathi zonke ngabafundi isiNgisi.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
budien rigid	rigice	Clisuic	Disagree	DIDISUSI CC

11. English is the only language that is suitable for use as the language of instruction in higher education.

IsiNgisi isona kuphela esimele ukusetshenziswa emanyuvesi.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree

12. It is possible for black African languages to become languages of education. Izilimi zabantsundu zingakwazi ukusetshenziswa kwezemfundo.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
Burongly Agree	Agicc	Clisuic	Disagree	DIDISAGI CC

13. Switching from one language to another by a teacher is a bad thing. Akukuhle uma uthisha exuba izilimi.

·	l .			C 750.4
Strongly Agree	Λανοο	Unsure	Dicograa	S/Dicogram
Strongly Agree	Agree	Ulisure	Disagree	S/Disagree
	8			

14. The use of isiZulu during lessons helps me understand better. Uma uthisha echaza nangesiZulu ngiyasizakala.

	Strongly Agree	Agree	Unsure	Disagree	S/Disagree
--	-----------------------	-------	--------	----------	------------

15. I have difficulty following lessons that are presented in English alone. Kuba nzima ukuqonda kahle uma isifundo singesiNgisi kuphela.

G4 1 A	A	T. 7	Б.	C/D:
Strongly Agree	Agree	Unsure	Disagree	S/Disagree
Dublisty ristee	115100	Clibuic	Disagree	Dibugice

16. It would help me if examinations and test instructions could be translated into isiZulu. Kungasiza uma imibuzo yokuhlolwa ingachazwa nangesiZulu.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
~	8	0 0		g

17. The development and promotion of black African languages in higher education should be regarded as important.

Ukuthuthukiswa nokugqugquzelwa kwezilima zabantsundu kumele kuthathwe njengento ebalulekile emanyuvesi.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
Dublish rigide	115100	Clibuic	Disagree	Dibusice

You are not required to put your name to this document unless you are happy to be interviewed about some of your responses.

Igama lakho aliphoqelekile, kodwa singajabula ukulithola ukuze sikwazi ukucela

incazelo ngezinye zezimpendulo zakho uma ungenankinga ngalokho.

Name		
Contact no.		
Thank you. <i>Ukwanda kwal</i>	iwa ngumthakathi.	

APPENDIX 2: STUDENT QUESTIONNAIRE 2

UNIV. OF KWAZULU-NATAL & MANGOSUTHU UNIV. OF TECHNOLOGY

INFORMED CONSENT STATEMENT

Bilingual Pilot Course Evaluation

INTRODUCTION

You are invited to participate in a research study on the Language Policy in Higher Education. The aim of the study is to gather your views on the role of indigenous African languages in higher education institutions.

INFORMATION ABOUT PARTICIPANTS' INVOLVEMENT IN THE STUDY

The study consists of a number of questions that we request you to answer one after the other. The data collected is confidential and we will not be able to tell that it is yours personally.

DURATION OF THE STUDY

Your participation requires about 25 minutes in total.

RISKS

This study does not entail any medical, physical or emotional risks.

BENEFITS

This research might be beneficial for future curriculum planning.

CONFIDENTIALITY

The study is anonymous, i.e. we will not be able to relate the data obtained to your name. Be assured that your anonymity and confidentiality will be preserved – all of our analyses will focus on patterns in the overall data, rather than on the data of individuals. Your name will not appear in any published documents and no individual information about you will be passed on to any other party under any circumstances.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed your data will be destroyed.

PROJECT MEMBERS

Mr Sandiso Ngcobo: Department of Communications, Mangosuthu University of Technology, (031) 907 7406.

Prof. Heike Tappe: Department of Linguistics, University of KwaZulu-Natal, (031) 260 1131.

CONSENT

I have read the above information. I agree to participate in this study. I understand that I can withdraw from the study at any time, should I so desire.

Partici ¹	pant'	s signature	

Section 1: Personal information (Okumayelana nawe)

The first set of questions is meant to gather some background information about the student who answers this questionnaire. Mark with a cross (X) where possible. Isigaba sokuqala semibuzo sihlose ukuthola ulwazi mayelana nomfundi ophendula imibuzo yalolucwaningo. Khombisa ngophawu oluwumbaxa (X).

1. Age (*Ubudala*)

<u> </u>	,	
16-19	20-24	Over 25

2. Gender (*Ubulili*)

	,
male	female

3. Home language (*Ulimi lwami*)

isiZulu	isiXhosa	Tshivenda
siSwati	seSotho	Other

4. The racial composition of students from your last high/secondary school. Uhlanga lwabafundi esikoleni owagogoda kulo izifundo zikamatekeletsheni.

multiracial	African
esixubile	abomdabu

Section 2: Bilingual learner guide evaluation questionnaire

Cross (X) ONE of the options at the end of each statement that represents your most honest response to the given statement. The letters stand for: Phambanisa umdwebo (X) ekupheleni kwesitatimende ngasinye ukutshengisa umbono

wakho weqiniso ngokuthi ukhethe uhlamvu olulodwa. Izinhlamvu zimele lokhu:

 $5 = \text{Strongly agree } (Ngivuma \, ngokungananazi); \, \mathbf{4} = \text{Agree } (Ngiyavuma); \, \mathbf{3} = \text{Unsure } (Angizazi); \, \mathbf{2} = \text{Disagree } (Angivumi); \, \text{and } \mathbf{1} = \text{Strongly disagree } (Angivumi \, sanhlobo).$

5. I found the mixing of languages in the guide suitable to my style of learning. Ukuxutshwa kwezilimi encwadini kuyazwana nendlela engifunda ngayo.

The guide enabled me to understand and use English better.
Incwadi yenze ngikwazi ukusiqonda kalula isiNgisi.

I experienced effective teaching and learning.
Ngifunde ngedlela egculisayo.
5 4 3 2 1
5 4 3 2 1

	The guide helped me develop the desire to continue learning English in the future.	
Ì	Ngikhuthazekile ukuqhubeka nokufunda isiNgisi nangokuzayo.	5 4 3 2 1
9.		
	Ngifunde ukuhlonipha iqhaza elingabanjwa ulimi lwami kwezemfu	
10	The decomposition to decode a configuration of the control of	5 4 3 2 1
10.	I had opportunities to develop my English vocabulary.	5 4 2 2 1
	Ngithole ithuba lokukhuphula ulwazi lwamagama esiNgisi.	5 4 3 2 1
11.	I had opportunities to develop my isiZulu vocabulary.	
	Ngithole ithuba lokuthuthukisa ulwazi lwamagama esiZulu.	5 4 3 2 1
12.	The guide helped me develop competence in the skills of reading, writing and thinking, as is required in my content subjects.	anaa
	Ngikwazile ukuthuthukisa amakhono okufunda, ukubhala nokucab okudingakalayo ezifundweni zami.	anga 5 4 3 2 1
	окиштвакшауо егіјапашет гаті.	34321
13.	I felt free to express myself in class.	
	Ngizizwe ngikhululekile ukuphawula egunjini lokufunda.	5 4 3 2 1
14.	Overall, I was satisfied with the quality of the subject's guide.	
	Ngenelisekile ngebhukwana lalesisifundo.	5 4 3 2 1

Section 2

The next five questions require detailed answers. Feel free to explain in either isiZulu or in English.

Imibuzo emihlanu elandelayo idinga izimpendulo ezingokugcwele. Ungasebenzisa noma uluphi ulimi phakathi kwesiZulu nesiNgisi.

15.	What do you think are the strengths of this subject's learner guide? Yini encomekayo ngencwadi yalesi sifundo?
16.	What are the weaknesses of this subject's learner guide? Yini engeyinhle ngencwadi yalesi sifundo?
17.	What suggestions do you have for improving this subject's guide? Iziphi izincomo ongazibeka ukuze isifundo sithi ukuthuthukiswa?

18.	What are the most valuable things you have learnt through your participation in this type of subject that uses two languages? Iziphi izinto ezibalulekile ongathi uzizuzile ngokuba yingxenye yalesi sifundo esixuba izilimi?
19.	Any general comments? Okunye ongathanda ukukubeka?
	Окинуе опдатанаа икикиоека:

Thank you very much for your cooperation in completing this questionnaire. *Siyabonga kakhulu ngosizo lwakho ekuphenduleni lemibuzo*.

If you don't mind a group discussion on some of the responses given here, please give your name and contact number.

Uma ungenayo inkinga ngokubamba ingxoxo lapho sizobe sikhuluma khona mayelana nezihloko ezithintwa imibuzo elapha, nika igama ne nombolo yocingo.

APPENDIX 3: STUDENT QUESTIONNAIRE 3

UNIV. OF KWAZULU-NATAL & MANGOSUTHU UNIV. OF TECHNOLOGY

INFORMED CONSENT STATEMENT

Language Attitudes

INTRODUCTION

You are invited to participate in a research study on the Language Policy in Higher Education. The aim of the study is to gather your views on the role of indigenous African languages in higher education institutions.

INFORMATION ABOUT PARTICIPANTS' INVOLVEMENT IN THE STUDY

The study consists of a number of questions that we request you to answer one after the other. The data collected is confidential and we will not be able to tell that it is yours personally.

DURATION OF THE STUDY

Your participation requires about 25 minutes in total.

RISKS

This study does not entail any medical, physical or emotional risks.

BENEFITS

This research might be beneficial for future curriculum planning.

CONFIDENTIALITY

The study is anonymous, i.e. we will not be able to relate the data obtained to your name. Be assured that your anonymity and confidentiality will be preserved – all of our analyses will focus on patterns in the overall data, rather than on the data of individuals. Your name will not appear in any published documents and no individual information about you will be passed on to any other party under any circumstances.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed your data will be destroyed.

PROJECT MEMBERS

Mr Sandiso Ngcobo: Department of Communications, Mangosuthu University of Technology, (031) 907 7406.

Prof. Heike Tappe: Department of Linguistics, University of KwaZulu-Natal, (031) 260 1131.

CONSENT

I have read the above information. I agree to participate in this study. I understand that I can withdraw from the study at any time, should I so desire.

Participant's signature	

QUESTIONNAIRE (UHLOLOVO)

THIS QUESTIONNAIRE IS INTENDED TO FIND STUDENTS' LANGUAGE ATTITUDES IN HIGHER EDUCATION.

LOLUHLOLOVO LUHLOSE UKUTHOLA IMIBONO YABAFUNDI MAYELANA NEZILIMI KWEZEMFUNDO EPHAKEME.

Section 1: Personal information (Okumayelana nawe)

The first set of questions is meant to gather some background information about the student who answers this questionnaire. Mark with a cross (X) where possible. Isigaba sokuqala semibuzo sihlose ukuthola ulwazi mayelana nomfundi ophendula imibuzo yalolucwaningo. Khombisa ngophawu oluwumbaxa (X).

1. Age (Ubudala)

_	6- (
	16-19	20-24	Over 25		

2. Gender (*Ubulili*)

male	female

3. Home language (*Ulimi lwami*)

isiZulu	isiXhosa	Tshivenda
siSwati	seSotho	Other

4. The racial composition of students from your last high/secondary school. Uhlanga lwabafundi esikoleni owagogoda kulo izifundo zikamatekeletsheni.

multiracial	African
esixubile	abomdabu

Section 2: Language attitudes (Okumayelana nezilimi)

Cross (X) ONE of the options below each statement that represents your most honest response. *Phambanisa umdwebo* (X) *ekupheleni kwesitatimende ngasinye ukutshengisa umbono wakho weqiniso ngokuthi ukhethe uhlamvu olulodwa.*

Strongly agree (*Ngivuma ngokungananazi*); Agree (*Ngiyavuma*); **3** = Unsure/Neutral (*Angizazi*); Disagree (*Angivumi*); and Strongly disagree (*Angivumi sanhlobo*).

5. In group discussions I learn better when we use both English and isiZulu. *Ngifunda kangcono uma singabafundi sihlangene ngezifundo sixuba isiNgisi nesiZulu.*

Strongly	Agree	Unsure/Neutral	Disagree	Strongly
Agree				Disagree

6. To better understand what I read and hear in English, I think about it in my home language.

Ukuze ngiqonde kahle engikufundayo noma engikuzwayo okungesiNgisi ngikucabanga ngolimi lwami.

Strongly	Agree	Unsure/Neutral	Disagree	StronglyDisagree
Agree				

7. In lectures, students should use English throughout, even in their group discussions. *Ulimi okufanele lusetshenziswe zikhathi zonke ngabafundi isiNgisi*.

Strongly Agree Agree Unsure Disagree S/Disagree	Strongly Agree	Agree	Unsure	Disagree	S/Disagree
---	-----------------------	-------	--------	----------	------------

8. English is the only language that is suitable for use as the language of teaching in higher education.

IsiNgisi isona kuphela esimele ukusetshenziswa emanyuvesi.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
	1-5-00	CIDALO	21045100	D/ 22 10 45 1 0 0

9. It is possible for black African languages to become languages of education. *Izilimi zabantsundu zingakwazi ukusetshenziswa ukufundisa emanyuvesi*.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
Duringly rigide	115100	Chibart	Disagree	Dibugice

10. Switching from one language to another by a lecturer is a bad thing. *Akukuhle uma uthisha exuba izilimi.*

Strongly Agree Agr	ee Unsure	Disagree	S/Disagree
----------------------	-----------	----------	------------

11. The use of isiZulu by a lecturer during lessons helps me understand better. *Uma uthisha echaza nangesiZulu ngiyasizakala*.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
-----------------------	-------	--------	----------	------------

12. I have difficulty following lessons that are presented in English alone. *Kuba nzima ukuqonda kahle uma isifundo singesiNgisi kuphela*.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
Du diigij rigi ce	116100	Clibule	Disagree	DIDIGICO

13. It would help me if examinations and test instructions could be translated into isiZulu. *Kungasiza uma imibuzo yokuhlolwa ingachazwa nangesiZulu*.

Strongly Agree	Agree	Unsure	Disagree	S/Disagree
Dublish Histor	115100	Clisuic	Disagree	DIDIBUSI CC

14. The development and promotion of black African languages in higher education should be regarded as important. *Ukuthuthukiswa nokugqugquzelwa kwezilima zabantsundu kumele kuthathwe njengento ebalulekile emanyuvesi*.

Strongly Agree Agree	Unsure	Disagree	S/Disagree
------------------------	--------	----------	------------

S. Ngcobo 2010 Thank you. Ukwanda kwaliwa ngumthakathi.

APPENDIX 4: LECTURER QUESTIONNAIRE

UNIV. OF KWAZULU-NATAL & MANGOSUTHU UNIV. OF TECHNOLOGY

INFORMED CONSENT STATEMENT

Bilingual Pilot Course Evaluation: Lecturers

INTRODUCTION

You are invited to participate in a research study on the Language Policy in Higher Education. The aim of the study is to gather your views on the role of indigenous African languages in higher education institutions.

INFORMATION ABOUT PARTICIPANTS' INVOLVEMENT IN THE STUDY

The study consists of a number of questions that we request you to answer one after the other. The data collected is confidential and we will not be able to tell that it is yours personally.

DURATION OF THE STUDY

Your participation requires about 25 minutes in total.

RISKS

This study does not entail any medical, physical or emotional risks.

BENEFITS

This research might be beneficial for future curriculum planning.

CONFIDENTIALITY

The study is anonymous, i.e. we will not be able to relate the data obtained to your name. Be assured that your anonymity and confidentiality will be preserved – all of our analyses will focus on patterns in the overall data, rather than on the data of individuals. Your name will not appear in any published documents and no individual information about you will be passed on to any other party under any circumstances.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed your data will be destroyed.

PROJECT MEMBERS

Mr Sandiso Ngcobo: Department of Communications, Mangosuthu University of Technology, (031) 907 7406.

Prof. Heike Tappe: Department of Linguistics, University of KwaZulu-Natal, (031) 260 1131.

CONSENT

I have read the above information. I agree to participate in this study. I understand that I can withdraw from the study at any time, should I so desire.

Participant ³	's signature	

Section A: Personal details

Even though your participation in this study is anonymous, we would however appreciate it if you could provide the following general information about yourself:

1. Age group:	1.	Age	grou	p:
---------------	----	-----	------	----

<u> </u>				
30-35	36-40	41-45	46-50	Over 50

2. Gender:

3. Proficiency in spoken isiZulu

Excellent	Very good	Average	Below average	None at all

- 4. First language: -----
- 5. Language(s) used at home: -----
- 6. English teaching experience in years: -----
- 7. Highest qualification: -----

Section B: Learner Study Guide evaluation

Please ring the response that you think is most appropriate to each statement. If you wish to make any comments in addition to these ratings please do so on the back page.

The use of isiZulu in the guide:	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
8. Is appreciated by students.	5	4	3	2	1
9. Results in effective lecturing.	5	4	3	2	1
10. Increases student's interest during lectures.	5	4	3	2	1
11. Helps students develop literacy skills in both languages.	5	4	3	2	1
12. Retards the development of students' English skills.	5	4	3	2	1
13. Encourages students to participate in classes.	5	4	3	2	1
14. Enables students to freely use their home language in class.	5	4	3	2	1
15. Enables students to freely use English in class.	5	4	3	2	1

16. Results in language confusion.	5	4	3	2	1
17. Shows respect towards students' home language (i.e. IsiZulu).	5	4	3	2	1
18. Contributes toward my interest in the use of learners' home language in education.	5	4	3	2	1
19. Broadens my perspective on bi/multilingual education.	5	4	3	2	1

Section C: General information

The following five questions require slightly more detailed answers. Use the back of the page if necessary.

20.	What	are	the	best	features	of	the	guide?
-----	------	-----	-----	------	----------	----	-----	--------

- 21. What are the worst features of the guide?
- 22. Where can improvement be made in the guide?
- 23. Would you recommend the style of this guide to other content subjects and English lecturers/educators? Briefly explain.
- 24. Are there any other comments you wish to make about the use of isiZulu to teach English?

Thank you very much for your cooperation in completing this questionnaire. Kindly provide your name if you wouldn't mind a discussion to assist towards providing a deeper understanding of some of the issues raised here.

APPENDIX 5: Student focus group interview questions

1. Given an option, how would you prefer the use of African languages in education to be done between using them on their own and mixing them with English? Explain.

Uma kungathiwa khetha, ungathanda ulimi lwakho lusetshenziswe lodwa noma luxutshwe nesiNgisi uma kufundiswa ngalo? Chaza.

- 2. Given an option, how would you prefer the use of African languages in education to be done between using them for teaching purposes only but be assessed in English and using them for both teaching and assessment? Explain.

 Uma kungathiwa khetha, ungathanda ulimi lwakho lusetshenziswe ekufundiseni kuphela kodwa uhlolwe ngesiNgisi noma kukho kokubili ukufundisa nokuhlolwa? Chaza.
- 3. What are your doubts, if you have any, about the ability of your home language to be used as a language of teaching and learning?

 Iluphi ungabazane onalo, uma lukhona, mayelana nolimi lakho ekusetshenzisweni kwezemfundo?
- 4. Are you aware of and what do you think about the fact that South Africa has the 1997 Language in Education Policy for schools and the 2002 Language Policy for Higher Education for universities that entitle students to choose to be taught in any language they want when that is "reasonably practicable" in an effort to promote access and success in education?

 Uyazi futhi ucabangani mayelana nephuzu lokuthi lapha eMzansi kuneNqubomgomo yoLimi eMfundweni yezikole eyaphasa ngo 1997 kanye neyemfundo ephakeme eyaphasa ngo 2002 evumela abafundi ukuthi bakhethe ulimi abafuna ukufunda ngalo uma lokho kungakwazi ukuthi kwenzeke ukuze abafundi bathole futhi baphumelele kwezemfundo?
- 5. What kind of advantages or advantages were there towards your learning in using a bilingual guide?

Kukhona okubone kuwusizo nokungekuhle ekufundeni kwakho uma usebenzisa ibhuku elixube izilimi ezimbili?

Appendix 6

Thank you ladies and gentlemen for availing yourselves today.

THE FIRST QUESTION:

Given an option, what language or languages would you prefer to be taught in at our university? Should it be English only, the use of African languages on their own or mixing African languages with English? Explain.

Uma kungathiwa khetha, iluphi ulimi noma izilimi ongathanda zisetshenziswe emfundweni yakulenyuvesi. Kungaba isiNgisi, ulimi lwakho lodwa noma kuxutshwe ulimi lwakho nesiNgisi? Chaza.

- > Sir on my own opinion I would prefer to use both English and Zulu because you would find that there are words that are difficult to understand in English as black people. So if we use isiZulu we can know those words and also understand English.
- ➤ What do others think? Yes?
- ➤ I would also go with mixing them because students will understand better if we mix English with our African languages, but not in the Communication class only but in other subjects.
- I don't think that is a good idea, I think we should use English then we must propose to have Zulu dictionaries so that a student could look for the words they don't understand, because in the universities there are lecturers who are Indians and Europeans it will really be difficult for them to translate to isiZulu.
- What I am saying is we should mix it because we forget as African because it says here African languages, we are discriminating ourselves? I could be a Xhosa sitting in a class here at Mangosuthu and a lecturer speaking in an African or let me say mixing it, I would understand the English part better because we fail to understand that just because we are at KZN that doesn't mean that we are all Zulus. We are mixed, so if we are demanding to be taught in isiZulu aren't we discriminating against one another?
- ➤ If you go to other universities like Stellenbosch, University of Potchefstroom, Tshwane University of Technology you will find that they use two languages, that is, English and Afrikaans, as medium of instruction. Preparing black people of South Africa to start studying in their languages is actually going to need a lot of work. To translate every textbook that is written in English into all African languages and the terminology they use requires a lot of research, so I think English as a medium of instruction for now is correct but what needs to be done is proper preparation for students to understand the language and also to interpret and understand in a more simpler way.
- ➤ Sipho you spoke of two medium languages that are used at Potchefstroom University ... as you can hear it is an Afrikaans name, obviously they are supposed to use Afrikaans. Well, what I would like to find out is if we mix African languages together with English, what would happen when it is exams time?

THE SECOND QUESTION:

That's an interesting point you are making. In fact, it is the next question I also wanted to throw to all of you.

Given an option, how would you prefer the use of African languages in higher education to be done between using them for teaching purposes only but be assessed in English and for using them both for teaching and assessment?

Uma kungathiwa khetha, ungathanda ulimi lwakho lusetshenziswe kanjani kwezemfundo ephakeme phakathi kokuthi lusetshenziswe ekufundiseni kuphela kodwa uhlolwe ngesiNgisi noma kukho kokubili ukufundisa nokuhlolwa?

- Maybe it will be wise ukuba [that] when given a question paper maybe ibe nesiZulu [it should have isiZulu] but for answering purposes we should use English because as a person I'm not a Zulu speaker I would also want to answer or respond in my own language
- I think students should use English only because what you will be testing us on is something you have taught us, we know about it so we can use English in assessments.
- > Sir, I think it is right what *Amahle said because some people fail to understand English but they can write it.
- > Oh, they fail to understand the question?
- They fail to understand what was meant by this or that. Maybe one word for example and they fail that particular exam.
- Okay, and then you over there.
- I think this takes me back to the Universities I've mentioned those universities they test in both languages, they are tested in English and Afrikaans, depending on the language that you prefer or the medium that you have chosen. Now, if for example a University like this one that is situated in Umlazi is dominated by Zulu speaking students they should be tested in both languages also.
- Ngicabanga ukuthi kungalula but there are words that you can't change to isiZulu, like i-QUILLIBRIUM. How can we change that into isiZulu?
- Like you just said IKHWILIBHILUMU
- ➤ Hahaha (group laughs)
- > But you will be so used to having things made easy ... used to information being translated to your mother tongue. What happens when you are in a situation where you don't have a choice?

- Wait, let me tell you. You are still in the University, you are not in the work place.
- > But you are not going to end up here.
- ➤ No wait *Mlungisi, I know I am not going to end up here, but I am saying, it is here where I have to get an understanding. I am here to understand things. When the lecturer has explained to me the way I would understand the question. So I can pass it and when I have to go to the open world I would know what to do, I would know what happens when things happen in whatever way they happen, but I would have learned it in University so I should not be forced to use a language that is really not mine.
- I think our languages as our mother tongues should be used at universities but not that much.

THE THIRD QUESTION:

What do you think about the possibility of using African languages in your content subjects, such as Physics?

Ucabanga kanjani mayelana nesimo lapho kungathiwa akusetshenziswe izilimi zesintu ezifundweni zakho njenge Physics?

- ➤ I have to speak. I doubt it would work because African languages have limited material that you can use in research, using your African language whereby you cannot take that material abroad and use it there. Another thing is the methods that are used that can assist students in passing or moving to other levels of studying, your knowledge or your development of skills will be limited, you will be limited by your own mother tongue.
- Let's hear a different view.
- I wish to differ ... go to your computer and check Google. Google South Africa can be translated into isiXhosa, isiZulu, seSotho and other South African languages. I do not doubt them in any way or form. If you haven't realized that for example the French and other countries in the world pride themselves in their languages. Which is why you will find that when a French president goes to, for example, the United States he will actually speak French which is his home language. The Americans have to find a translator that will translate to English. So, I think if we pride ourselves in our languages it will make them grow. I think it is important that we all make our languages as important as any other languages in the world or they will perish.
- > Sne, doesn't that address your earlier concern that if you are taught at school in these languages and then when you go outside you will find that it doesn't work? In a way it does.
- ➤ I am saying the use of African at university can be helpful to us as the students who are from public schools in rural areas. We are used to being taught in IsiZulu.
- Yes some teachers would mix languages and others would teach biology in Zulu.

- Yes that can be helpful to us, and students will pass very well.
- > So do you agree especially after that argument that African languages can work too? Since as engineering students you do science subjects, can you give us examples of how it will work in terms of the terminology and concepts used in your content subjects.
- > Protons, ama-prothonzi.
- I think it can work, we can be taught in English in class but when papers are being set they must be written in both isiZulu and English so that we can understand because sometimes you fail because you did not understand the question and then when writing your answer you write it in English.
- I don't know I am doubting the African languages but I need us to remember one thing let us not invest in Africa only. Let us invest in the world. I know why we want to mix languages is because we believe that they are our fore-fathers' languages, by that let us invest in the whole world by knowing English, understand it and be able to take instruction and be able to speak it well so that other person can understand. Thank you.
- ➤ I would like to remind you that French people pride themselves in their language. So by doing that they have influenced other nations to take notice of them. By not taking our African languages seriously we are sending out the message that our languages are inferior. So we need to be careful in spreading that belief of thinking that English is the language of empowerment we really need to question that. We have seen it working in Tanzania with Swahili. Even in other Universities around the world we have professors who have been taught in their languages which are Spanish and Chinese. So what *Nkule is saying I beg to defend it.
- In fact that takes us to the next question.

THE FOURTH QUESTION:

Are you aware of, and what do you think about, the fact that South Africa has the 1997 Language in Education Policy for schools and the 2002 Language Policy for Higher Education for universities that entitle students to choose to be taught in any language they want when that is considered "reasonably practicable" in an effort to promote access and success in education?

Uyazi futhi ucabangani mayelana nephuzu lokuthi lapha eMzansi kuneNqubomgomo yoLimi eMfundweni yezikole eyaphasa ngo 1997 kanye neyemfundo ephakeme eyaphasa ngo 2002 evumela abafundi ukuthi bakhethe ulimi abafuna ukufunda ngalo uma lokho kungakwazi ukuthi kwenzeke ukuze abafundi bathole futhi baphumelele kwezemfundo?

- ➤ I think I should agree with the policy because it might make my education and my academic studies to be much easier since I would be able to understand the question and answer what is expected from me to answer, so I think we should support the policy.
- In my view I also agree with the policy. That is a great way of educating our people as it promotes our culture, yet we must also take a look at that is also a great deal of work to

be done. Let's take in my case, I am a Swati from Swaziland I came here to Zululand because I wanted to study. If I find that education is set up in isiZulu well that will be very difficult for me let alone Sothos and Tshivendas. It's true it is a brilliant policy yet we must take note that we need to find a single language that the whole of South Africa may understand.

- > So, are you saying the policy is not practical?
- ➤ No, it's 50/50 depending on how you look at it. The main thing is that we Africans take pride in our languages and cultures. So, a person who is seSotho-speaking would not agree to study in isiZulu, same as a Zulu would not agree to study in seSotho. Before we may implement the policy, let us set the language that we would understand the whole of South Africa or maybe Africa. The one that we may agree on and maybe study in it like siSwahili is growing but it is going to be a long process.
- Emm ... yes... What do you think about the policy?
- ➤ Before I say anything about this policy what I want us to know is that we spoke a lot of French people with their dominant language but what I want you to understand is that South Africa has 12 official languages, including the sign language. Do you really think that it would be easy for them to actually teach in 12 diverse languages? That's totally not practical. But if it is like Tanzania where they are dominated by one African language then they are free to study in that African language. They are unlike us who have 12 languages. We can't choose the best from them all except to use one medium of instruction which is English.
- This takes us back to doing a survey. A survey of how many people are which language could help us to know how many students prefer which language because we can't accommodate all students, than the language that has the majority will be used.
- What happens if I want to study in isiXhosa? Do you want to tell me that if I want to study in isiXhosa I must go back to Eastern Cape?
- I think you are right on that point, it's harsh.
- In other words the policy is not practical is that what you are saying?
- I want to say we can't start big but start in small portions like Mr. Ngcobo did. Our study guides are written in both English and IsiZulu. We are not saying that the one from Limpopo must live in Limpopo but we can start small and we can do it. Why are we looking down upon our languages because when some white people from other countries come here they don't even know how to speak English they got translators ... like the Bafana-Bafana coach speaks Portuguese and he has got a translator. I can go and speak English in Portugal, so someone can come and translate to the English.

THE FIFTH OUESTION:

Were there any kind of advantages or disadvantages that were there towards your learning in using a guide that used two languages?

Kukhona okubone kuwusizo noma okungekuhle ekufundeni kwakho uma usebenzisa ibhuku elixube izilimi ezimbili?

- Yes, there are advantages since in other words like we having our way of start that we did not understand that much you find that it is written in Isizulu, and you understand the question, you understand the instruction so you will understand even the question in the exam on how are you going to answer which now how you going to attempt any instance.
- ➤ I also think it works because it is written in English and isiZulu. I understand it better because it is also written in my own language.
- > Does it also help you improve your English?
- Yes, because the words are written in English and also isiZulu so it easy we refer to the Zulu part if we don't understand.
- ➤ Once again, it is very good but it helps those who can understand isiZulu. But then the struggle is not for the university as the problem begins from primary school. So, this should be applied upon the primary and secondary level so that by the time the students reach the tertiary level he is properly cooked and baked to understand English and Zulu perfectly, that's what I believe on my side.
- I would say there are advantages and disadvantages of this. I can read this in isiZulu and I can translate it to my own English. But, if it is written in both languages I can just read the Zulu part only and still be able to even write the correct answer in English. I think the students can take advantage of this.
- I think Sir, it is an advantage but then it goes with pride. What do you think *Zodwa since you said you don't understand written Zulu? Don't you think that it is an advantage for you because it also helps you to learn isiZulu? You know English why don't you learn isiZulu? You have to be proud of your language, and you must be willing to learn.
- That is why I'm saying we should have other African languages taught in universities so I could learn them. For example, like I said, I have never been in an African school and I can speak isiZulu but when it comes to reading it I really struggle and I am not proud of that, really not proud of it.
- ➤ Well you should blame your parents for that.
- Yes, I could blame my mother, I could blame anyone but I think I am old enough to blame myself and I am really not proud of it. That is why I say we should have other African languages in school so I could learn more about my culture, learn where I come from and more about African things.

Thank you, that will be all.

THE SECOND DISCUSSION

THE FIRST QUESTION:

Given an option, how would you prefer the use of African languages in education to be done between using them on their own and mixing them with English? Explain.

Uma kungathiwa khetha, Ungathanda ulimi lwakho lusetshenziswe lodwa noma luxutshwe nesiNgisi uma ufundiswa?Chaza.

- Some concepts they cannot be explained properly, so it is better to combine the two.
- ➤ What do others think ... you can respond in isiZulu don't feel tense and think ukuthi eish because isiNgisi sibuye sibaleka then I should keep quiet. We should all talk, we are here to talk.
- ➤ I think both they should be used so that a person could get a clear understanding.
- ➤ I disagree with their suggestion. Mine is that this thing of using both languages maybe sometimes it can be a problem. Like when it comes to assessments it can be a very big problem. So it will be better if English will be used since we know that English is the language of learning and teaching so it should be used only not mixed with any African language.

THE SECOND OUESTION:

Given an option, how would you prefer the use of African languages in Education to be done between using them for teaching purposes only but be assessed in English and in using them for both teaching and assessment? Explain.

Uma kungathiwa khetha, ungathanda ulimi lwakho lusetshenziswe ekufundiseni kuphela kodwa uhlolwe ngesiNgisi noma kukho kokubili ukufundisa nokuhlolwa? Chaza.

- Well as far as I'm concerned, I think it good to include English and isiZulu at the same time for understanding, but at the same time take we must take into consideration that as English is the medium of instruction ngicabanga ukuthi [I think that] it won't be good ngokuthi mhlasibe [because maybe] it will lose it value.
- Are you saying that English is of high value and therefore it should not be mixed with any African languages? Is that what you are saying?
- ➤ No. I mean English is the common language which is used in meetings and everywhere. So maybe like in study guide you find that information is in English and Zulu people that work hard to learn English, you know, we use to go for dictionaries ... blah blah blah. But we won't use dictionaries if it is now interpreted for us in isiZulu. That eagerness of knowing, researching ,and doing many stuff, it will be discouraged in a way.
- There are Zulu dictionaries out there but English is the main language of teaching because maybe English is the language that you would find elsewhere. We have to incorporate the two languages due to that a child maybe ekhulele emakhaya [brought up in a rural area] may not understand the simple concepts. She might need isiZulu maybe

to explain a simple thing like division, or subtraction because ingane [a child/learner] may not understand uma uzoyitshela kanjalo [when you tell her like that] but uma uzoyitshela ukuthi uyahlanganisa la uyasusa la [if you are going to tell her that we are adding here and subtracting here] it is so simple. That's why we have to incorporate the two languages.

- ➤ But to go back to his point he was saying about the study guide. Because you have something in English and it is explained in isiZulu does not encourage you to develop your English because now you don't have to go and use English dictionaries. So, do you feel that way from your experience using the guide ukuthi [that] this guy is making us dependent, he is not encouraging us to do more on reading and using the dictionary on our own?
- ➤ Or maybe let me clarify on that point ... well, I can say as I've said that it makes people to understand that content easily and obviously people are going to pass, right? But what I'm trying to say is that the English content as we all know that isiNgisi [English] i-language le setenjiswa [that is used] everywhere in Swaziland, Africa, European countries, you know when you go there it's the medium of instruction. I can say in most countries they use English as the language of communication, so in a way people you know it loses ... I can't say its value. Nami [Myself too] I'm taking my language as of great value. What I'm trying to say ukuthi abantu ngeke bakhone ukwenza i-research [people won't be able to conduct research] as we use ama dictionary for stuff.
- ➤ But you say the idea of using two languages in a study guide and textbooks will be to make things easy for us, so you don't think that it is good to make things easy for black students?
- ➤ I think it is good for us because njengathi esingamaZulu [like us Zulus], if into ibekwe ngesiNgisi yaphinda yachazwa ngesiNgisi uyaye ungabi na understanding okuyiyona ngampela [something is written in English and explained in English, you don't understand it well]. So, manje uma ku-mixed kowu two [if two languages are mixed] uyezwa kangcono noma ungabhala into okuyiyona [you understand better and you can write the correct thing] no-100% ungawothola [you can obtain 100%] kodwa manje uma kuyisiNgisi kuphela [but if it's English only] ay [no] some people find it difficult.
- Like in our case in communication class our lecturer *Mrs Pretorius doesn't speak isiZulu, right?.
- Ya ... (group agrees)
- So, when she was explaining things that were also explained in isiZulu in the study guide I found it helpful. It's like izinto ezinjenge zijobelelo [things such as suffixes]. Wena wazi ukuthi izijobelelo [You know it as isijobelelo] kodwa uma sekuyiwa esiNgisini sekuthiwa [but when it comes to English] it is prefixes and you wonder ukuthi yini ke le [what's that]?

THE THIRD OUESTION:

What do you think about the possibility of using African languages in your content subjects, such as Physics?

Ucabanga kanjani mayelana nesimo lapho kungathiwa kusetshenzisweni izilimi zesintu ezifundweni zakho njenge Physics?

- ➤ I think it should work because lot of students they lack of understanding of English that's why even at matric level they are failing.
- I doubt it could work because there are other concepts that cannot be explained in isiZulu like if we are tested, we are not tested in isiZulu we tested in English only. In engineering there are a lot of other concepts the cannot be understood in isiZulu. I think English should be used only as to develop English kithina singamaZulu [to us as Zulus] if we use both languages it will be hard to develop English as we engineers we have to travel around the countries we have to develop strong English.
- I disagree with this guy, because like uma ungumuntu uthole ukuthi wakha i-vocabulary uzama ukuthi uyenze ngendlela ukuthi uzoyi understander ngayo into ukuthi ini like makungukuthi into ichazwe ngesiNgisi iphinde ichazwe ngesiZulu ngezansi leyonto inyusa ivocab ukuthi ukwazi izinto ngesiZulu nangesiNgisi [when a person wants to develop his English vocabulary he understands it better when it is also explained in isiZulu. This helps you to develop your vocabulary].
- So my question is why izinto kithi kumele zibe [should things be made] easy, let us look back at abantu asebe [people who are] successful, sibona ukuthi kuwumqondo omuhle yini [do we think it is a good idea] because bona baba [they became] successful bezama ngayoyonke indlela ukuthi bafunde i-English isetshenziswa iyodwa [by working very hard to develop their English] so why kuthiwa kumele kube ama languages ayi two okumele asetshenziswe to us [should we use two languages]?
- Into engiyibonayo, njengoba u Sthe esho, abantu bakudala babona ukuthi ukufunda ngesiNgisi kuphela kuyinto enzima so ingakho bezama ukuthi thina manje sikwazi ukuthi sithole amanye ama languages azosisiza si understande kangcono [What I think is that, as *Sipho puts it, it has been realised that it was difficult for the previous generation to learn English. That is why they are trying to provide us with other languages that will help us understand better.
- And I want us as well to understand that there was apartheid and oppression, but now we are free.

THE FOURTH QUESTION:

Are you aware of, and what do you think about, the fact that South Africa has the 1997 Language in Education Policy for schools and the 2002 Language Policy for Higher Education for universities that entitle students to choose to be taught in any language they want when that is considered "reasonably practicable" in an effort to promote access and success in education?

Uyazi futhi ucabangani mayelana nephuzu lokuthi lapha eMzansi kuneNqubomgomo yoLimi eMfundweni yezikole eyaphasa ngo 1997 kanye neyemfundo ephakeme eyaphasa ngo 2002 evumela abafundi ukuthi bakhethe ulimi abafuna ukufunda ngalo uma lokho kungakwazi ukuthi kwenzeke ukuze abafundi bathole futhi baphumelele kwezemfundo?

- Indlela engibona ngayo abantu abaningi bala bangamaZulu speaking people ngicabanga ukuthi lokho kungenza ukuthi baphumelele kakhulu ngoba manje esikhathini esiningi uyaye uthole ukuthi mhlampe umuntu wenza izifundo ezinjengo physics kukhulunywa ngo-reaction uthole ukuthi zibekwe ngalolu limi okungalona olwakhe uthole ukuthi manje uzwa kunzima akezwa nokuthi ini okukhulunywa ngayo kodwa ngesiZulu angezwa ,so ngingathi u-right lomthetho wokuthi kusetshenziswe ama-languages oyi-two
- Ya vele it is a good idea this policy will work to a certain extent but you will find that in some universities there is a broad race of students where you find that there are Indians, Africans and all that.
- > Such as UKZN and DUT.
- Yes if you go inside the class where half of students who are black, not exactly half but equal proportion of race in a class so if you stand there and ask students if they want to be taught in Zulu and maybe others they want to be taught in other languages you will find that it not really practical to do that. So, there just have to be one medium language that has to be used, this policy has good intentions it's just that most of the time it seems unpractical.

THE FIFTH QUESTION:

Were there any kind of advantages or disadvantages that were there towards your learning in using a guide that used two languages?

Kukhona okubone kuwusizo noma okungekuhle ekufundeni kwakho uma usebenzisa ibhuku elixube izilimi ezimbili?

➤ Ya it did work a lot because some of the content presented in isiZulu is not much different to isiSwati. This policy it is a good idea you see Africa has been oppressed in a way you know as I have just said a friend of mine who is in Russia studying engineering there he said when you go there you first learn their language the first whole year just learn Russia. So you just ask yourself ukuthi labantu laba they bring English la ngakithi bafuna siyifunde while bona ngale uma befika ngala why ube nenkinga uthole ukuthi kugcwele ama-white?

- Mina ngokubona kwami ngibona ukuthi mhlasimpe kungangcono kufundwe ngaso isiZulu kodwa ke angithi vele kulama study guide akhona kumanje kuchazwe ngaso isiZulu ne siNgisi so an English speaking person uzofunda the English part and the Zuluspeaking person will also read the Zulu part.
- Yes but I can say it is oppression that is taking place lapha e-Russia because umuntu oqhamuka lana he must learn their language when it is supposed to be i-first year yakhe.
- ➤ Cha akuhambi kanjalo bona bangama Russians so kubalulekile like kwamanye amazwe like here in SouthAfrica there are different races we have Xhosa, Sotho, Tshivenda kodwa khona ngale like Egypt asingayi kude kakhulu amaGibhithe kuphela alapho but you go there you will find that everything is Egyptian even when they come here they won't speak English but their language.
- ➤ I think it a wrong conception to assume all over the world they are speaking English, no they are not, it the most and it is not oppression it their language you are coming to them you must learn because you came to them.
- ➤ Well personally it was very beneficiary like I managed to understand some concepts very easily like the proverbs that were there it helped me a lot
- According to my own perspective it was beneficiary a lot ... it made everything very easy like English is not something you can just take easy it has got its own difficulties so if it expressed in your language then it is much easier to understand.
- ➤ But your lecturer speaks English only how do you manage?
- The majority of students are black so when we interact amongst ourselves it is mostly in isiZulu but we do incorporate English. It is going to be part of our life later so ya we use a mixture of those two and it does work.
- Some of the lecturers that teach you content subjects here are Zulu-speakers, do they explain certain things in isiZulu as well or what?
- Yes they do explain to us using isiZulu some concepts. There is also one lecturer who also commented that here at MUT many students at their secondary schools their teachers were using isiZulu. As a result, when he is teaching maths they do not understand him. When he asked them about how they learned maths at school, they said they were using isiZulu.
- ➤ So, that's why they don't understand if he uses English only?
- It makes a difference when we are being taught by a lecturer who is using both languages while teaching.
- It makes a difference vele because indlela esi-pronouncer ngayo it is completely different uyambona lo okhuluma isiZulu umuntu phaca noma khuluma isiNgisi uyamuva ukuba

uthini but for example our English lecturer the way she pronounces words she rolls, the words do not come out clearly as much as they would be said by a Zulu lecturer.

- ➤ How many subjects are you doing?
- > There are six.
- > Out of six subjects you are doing how many lecturers are Zulu speakers?
- Four.
- > Well thank you ladies and gentlemen this is the end of our discussion.
- * Names anonymous