

**BILINGUAL TEACHING PRACTICES IN SOUTH
AFRICAN HIGHER EDUCATION: MAKING A CASE
FOR TERMINOLOGY PLANNING**

THESIS

**Submitted in fulfilment of the requirements for the degree of
MASTER OF ARTS**

Sisonke Mawonga

**School of Languages: Department of African Languages
Rhodes University
Grahamstown**

January 2015

Supervisor: Dr Pamela Maseko

Co-Supervisor: Dr Dion Nkomo

DECLARATION

I, the undersigned, Sisonke Mawonga declare that this thesis is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references. This work has not been submitted previously in its entirety, or in any part, at any other higher education institution for degree purposes.

.....
Sisonke Mawonga

.....
Date

DEDICATION

This thesis is dedicated to my father, Ntozakhe Willy Mawonga and my late mother, Lesebo Maggie Mawonga.

ACKNOWLEDGEMENTS

Most importantly, I would like to thank my supervisors Dr Pamela Maseko and Dr Dion Nkomo for being patient with me throughout until the end. I sincerely thank you for nurturing me and providing your guidance, feedback and support. It was not an easy journey but none of you ever thought of giving up on me. *Ngombulelo ongazenzisiyo, enkosi kakhulu Mem, nakuwe Dr D!*

I also like to acknowledge and thank the Centre for Critical Research on Race and Identity (CCRRI) from the University of Kwa-Zulu Natal for funding my studies for the past two years. Thanks to the staff and other research participants for their support and input on my study during the workshops.

Many thanks goes to the 2014 Humanities Extended Studies (Politics and Sociology) class, I thank you guys for allowing me into your space and to interact with you. Thank you for participating in my study, I am truly grateful. To Ms Corinne Knowles, the lecturer for the class, thank you so much for your support throughout my studies from my first year at Rhodes; your advice and assistance on accessing permission from the ESU staff to conduct my research with the students is truly appreciated.

I would also like to take my friends and former classmates who took part in the preliminary surveys for my study. Thank you guys for your responses and all the effort you put in. *Dankie batshana!* Sincere thanks and acknowledgement also goes to Professor Louise Vincent from the Rhodes University Department of Politics who assisted and provided me with the electronic version of her textbook. I would also like her for the time she gave me to have a chat with her.

Thanks to the staff of the Department of African Languages especially Mrs Bulelwa Nosilela; Professor Russell Kaschula and Ms Hannelie Rielly. Thank you for your support and rapid responses whenever I needed help. *Ndiyabulela kakhulu Mem nakuwe Prof.*

To Wanga Gambushe, I would not have opted for a better friend and ‘partner in crime’ to travel this journey with. *Enkosi* for all the support and advice you offered me when I needed it my friend. It was not easy but your presence was as inspiration for me to keep going. *Nathi side safika entanjeni ☺*

The assistance from the friendly Rhodes University main library staff is acknowledged, I would like to thank them for always making themselves available whenever we needed help.

I would like to send my gratefulness to my father and my aunt Mrs Tandiswa Gela, for their support since I started university. Thanks to my siblings for the support they gave me.
Ndiyabulela MaYirha!

To my friends: thanks to Mr Godfrey Bitesigirwe for your input and formatting my thesis, your help is truly appreciated. *Asante sana Kijana!* To my best friend Sybil Nozipho Mvulane; my cousin Kolosa Gela and my friends Pumeza Mabusela and Chikumbutso Gremu...Thank you so much guys for believing in me, your motivations and emotional support whenever I needed one, I am grateful for those. To my special friend Herman Bengo, thank you for always being there for me and cheering me up whenever I needed you.

TO EVERYONE ELSE, *ENKOSI KAKHULU, nangamso!!!*

ABSTRACT

When the apartheid government was in power universities in South Africa were segregated according to a race and language. After apartheid, the democratic government came into power and its vision was abolition of segregation. There was also equal and equity of access to public institutions which were set aside for certain people to have access to. Access to universities was equalized and students with different racial, social, cultural and linguistic backgrounds were allowed access to universities which they used not to have access to before. The students' access to all universities led to diversity within these institutions. Even though this was the case, there were no changes in the system prevalent during apartheid. English, for example, continued to be the language of learning and teaching (LoLT) while the numbers of students who speak languages other than English (LOTE) as home languages was also increasing.

The Constitution of South Africa (Section 6, Act 108 of 1996) acknowledges the previous marginalization of indigenous languages in the country and encourages the development and use of these languages as official languages. The right of access to educational institutions, and accessing education in one's language, if that language is one of the official languages, is also encouraged by the Constitution. There are other supporting legislative documents such as the Languages Bill (2011), the Higher Education Act (1997) and the national Language Policy for Higher Education (LPHE) (2002) that support multilingualism, the equal promotion of the official languages as well as use of multiple languages in higher education institutions (HEIs) to support learning.

The above mentioned policies and legislations may exist to ensure equality and equity, and even though HEIs have become heterogenous, that does not guarantee that the students enrolled in these institutions have equal access to knowledge offered by the HEIs in SA. This research uses the theories of languages and conceptualization; language and learning as well as language planning to show that the students' first languages in learning can assist to facilitate cognition. Terminology development, as part of corpus planning which is the body

of language planning is introduced in this study in the form of bilingual glossaries as an intervention especially for students' whose mother tongue is not English as language used for learning at university for different disciplines tend to be abstract.

The data for this research was collected from the 2014 first year students registered in the Extended Studies Unit (ESU) in the Humanities Faculty at Rhodes University. Research methods such as questionnaires, participant observations, interviews as well as content analysis were used to collect the data. These methods were used to look at the students' use and perceptions of bilingual glossaries as additional resource materials which can assist them in learning. A Political Philosophy I module offered by the Political Science department was used for this research.

This thesis presents a model which can be used for the development of bilingual glossaries in order to facilitate learning. The thesis recommends the use of corpus extraction tools such as WordSmith Tools (WST) that can be used to generate and extract terms and illustrates the use of this tool by extracting terms from an English Political Philosophy textbook. These terms are defined and these are then translated into isiXhosa to provide a sample of the bilingual glossary. This glossary has been designed to illustrate how the bi/multilingual glossaries with terms and definitions can be developed in order for use by students to facilitate learning them. The study also presents a terminology list which consists of Political Philosophy terms that have been generated during the corpus extraction process. It is recommended that further research looks into the development of bi/multilingual glossaries using the suggested model so that the students who are speakers of LOTE can also be able to understand abstract terms which are used at university.

ISISHWANKATHELO

Ngexesha yayingurhulumente wocalu-calulo owayelawula eMzantsi Afrika iiYunivesithi zazahlula-hlulwe ngokohlanga. Emva kokuba kungene ezintanjeni zolawulo urhulumente wedemokhrasi owayesilwa ucalu-calulo, bonke abantu baye banikwa amalungelo alinganayo okufikelela kumaziko kawonke-wonke ayemiselwe ngaphambili ukuba amkele umntu ngokwebala okanye uhlanga lwakhe, navesithi ngenxa yoko acalu-calule abanye abantu kuba bengenawo amalungelo okuwasebenzisa. Kurhulumente wedemokhrasi bonke abafundi baye banikwa igunya lokuthi bafikelele ngokulinganayo kwiiyunivesithi eMzantsi Afrika, abafundi abaneemvelaphi ezahlukeneyo ngokwenkcubeko, iilwimi abazithethayo kunye nohlanga abalululo. Oku kufikelela kwabafundi kwezi yunivesithi kwathi kwabangela ukuba kubekho abafundi abaziintlobo ngeentlobo. Noxa kunjalo, akukho ntshintsho lukhoyo olwathi lwenziwa malunga nenkqubo yokufundisa eyayimiselwe ukulungiselela abantu abasimo sifanayo. IsiNgesi sathi saqhubeka saba lulwimi lokufunda nokufundisa nangona amanani abafundi abathetha ezinye iilwimi ezahlukeneyo kwisiNgesi njengolwimi lwasekhaya ayenyuka

UMgaqo-siseko waseMzantsi Afrika (iCandelo 6, uMthetho 108 ka-1996) uyakuvuma ukungahoywa nokujongelwa phantsi kweelwimi zesiNtu kweli ngahambili kwaye ukhuthaza ukusetyenziswa kwezi lwimi ngokweelwimi ezisesikweni. Ilungelo lokuthi ubani akwazi ukukhetha ukufundiswa ngolwimi aluthandayo nolusesikweni kuRhulumente kuyakhuthazwa nguMgqaqo-siseko. Ikhona neminye imigaqo-nkqubo esemthethweni efana neBhili yeeLwimi zoMzantsi Afrika (2011), uMthetho wamaZiko eMfundo ePhakamileyo (1997) kunye noMgaqo-nkqubo weSizwe weeLwimi kumaZiko eMfundo ePhakamileyo (2002) ezixhasa ukusetyenziswa kweelwimi ezihlukileyo, ukuxhaswa ngokulinganwayo kweelwimi ezisesikweni kunye nokusetyenziswa kweelwimi ezahlukeneyo kumaziko emfundo ephakamileyo ekuncediseni ukuba abafundi bafundisise.

Noxa nje le mithetho imiselweyo ibhalwe ngentla ikhona nje, kwaye namaziko emfundo ephakamileyo enabafundi abahlukeneyo, oko akuthethi ukuba abafundi abakula maziko bafikelela ngokufanayo kulwazi olufumaneka kula maziko emfundo oMzantsi Afrika. Amaziko emfundo ephakamileyo eMzantsi Afrika asathe gqolo ukusebenzisa isiNgesi njengalo londwa ulwimi lobungcali kwimfundo ephakamileyo. Olu phando lusebenzisa

iithiyori ezibonisa unxulumano phakathi kolwimi nengqiqo; ulwimi olusetyenziswayo ekufundeni; kunye nocwangciso-lwimi. Ezi thiyori zibonisa ukuba ukusetyenziswa kolwimi lweenkobe lomfundi xa efunda kungathi kuncede kwenze ingqiqo nokuqonda kube lula. Uphuhliso lwesigama njengenxenywe yocwangciso-lwimi luthi luboniswe kolu phando ngokusetyenziswa koluhlu lwesigama oluneelwimi ezimbini (isiXhosa nesiNgesi) njengendlela ethi ikhawulelane kwaye incede abafundi abangathethi isiNgesi njengolwimi lokuqala kuba isigama esithile esisetyenziswa kwizifundo ezikwinqanaba leyunivesithi siye sibe nzima.

I-*data* yolu phando iqokelelwe kubafundi bango-2014 ababebhalisele unyaka wokuqala kwiYunithi yeZifundo ezOngezelelweyo (*Extended Studies Programme*) kwiFakalithi yeziFundo zoLuntu eYunivesithi iRhodes. Indlela yokwenza uphando ezithe zasetyenziswa kukukhutshwa kwamaphepha anemibuzo, ukubekwa esweni kwabathathi-nxaxheba, udliwano-ndlebe kunye nohlolo lokubhaliweyo. Ezi ndlela yokwenza uphando zithe zasetyenziswa ekujongeni indlela abafundi abalusebenzisa nabalubona ngayo uluhlu lwesigama njengesixhobo esongezelelweyo esingabanceda ukufunda. Imodyuli yeFilosofi yePolitiki efundiswa kwiSebe lezoPolitiko eyunivesithi iRhodes ithe yasetyenziswa kolu phando.

Le thisisi ibonisa indlela engathi isetyenziswe ekuphuhliseni uluhlu lwesigama oluneelwimi ezimbini ukwenzela ukuncedisana nokufunda. Le thisisi icebisa ukusetyenziswa kwezixhobo zokuqokelela isigama, ezifana no-*WordSmith Tools* (WST) ezingathi zisetyenziswe ukuvuna isigama kwimibhalo, ze ibonise ukusebenza kwesi sixhobo ngokuvuna isigama kwincwadi yeisiNgesi yeFilosofi yePolitiki. Esi sigama siyanikwa ingcaciso ze siguqulelwe esiXhoseni njengesiboniso esingumfuziselo woluhlu lwenkcazelo zamagama. Esi sigama senziwe ukubonisa ukuba ezi nkcazelo ziquka amabinzana kunye neengcaciso zingathi ziphuhlise njani ukuze abafundi bakwazi ukuzisebenzisa ekuncediseni ekubeni bafunde ngokukuko. Olu phando lunalo noluhlu olunamabinzana eFilosofi ePolitiki athe aqokelelwa kwinkqubo yoqokelelo lokubhaliweyo. Kucetyiswa nokuba uphando olulandelayo lujonge uphuhliso lweenkcazelo zesigama ezikwiilimi ezimbini okanye ngaphezulu kusetyenziswa lo mfuziselo ubonisiweyo kolu phando ukwenzela abafundi abathethi iilwimi ezahlukileyo kwisiNgesi nabo bakwazi ukuqonda kakuhle iintsingiselo zamabinzana anzima nathi asetyenziswe eyunivesithi.

TABLE OF CONTENTS

DECLARATION.....	II
DEDICATION.....	III
ACKNOWLEDGEMENTS	IV
ABSTRACT.....	VI
ISISHWANKATHELO.....	VIII
TABLE OF CONTENTS	X
LIST OF TABLES	XIV
LIST OF FIGURES	XVI
CHAPTER 1: INTRODUCTION	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND AND CONTEXT OF THE STUDY	2
1.3 THE STATEMENT OF THE RESEARCH PROBLEM.....	5
1.4 THE GOALS OF THE RESEARCH.....	6
1.5 LIMITATIONS OF THE STUDY.....	7
1.6 THE OUTLINE OF CHAPTERS	8
1.7 SUMMARY	9
CHAPTER 2: CONTEXTUAL BACKGROUND.....	10
2.1 INTRODUCTION.....	10
2.2 THE ROLE OF MISSIONARIES IN THE DEVELOPMENT OF INDIGENOUS AFRICAN LANGUAGES.....	11
2.3 THE DEVELOPMENT OF AFRIKAANS DURING THE PRE-1948 PERIOD	15
2.4 LANGUAGE IN EDUCATION DURING THE APARTHEID PERIOD.....	17
2.4.1 The Bantu Education Policy	18
2.4.2 After the 1976 uprising	19
2.5 THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA AND THE NATIONAL EDUCATION POLICY ACT (NEPA)	21
2.6 THE HIGHER EDUCATION ACT (1997)	23
2.7 THE LANGUAGE POLICY FRAMEWORK FOR SOUTH AFRICAN HIGHER EDUCATION (LPF).....	24
2.8 THE SOUTH AFRICAN LANGUAGES BILL	27
2.9 THE NATIONAL LANGUAGE POLICY FOR HIGHER EDUCATION (LPHE)	27

2.10	THE REPORT ON THE DEVELOPMENT OF INDIGENOUS AFRICAN LANGUAGES AS MEDIUMS OF INSTRUCTION IN HIGHER EDUCATION.....	30
2.11	THE RHODES UNIVERSITY LANGUAGE POLICY (2005/2014)	35
2.12	THE RHODES UNIVERSITY-SANTED MULTILINGUALISM PROGRAM.....	37
2.13	SUMMARY	40
CHAPTER 3:	RESEARCH METHODOLOGY	42
3.1	INTRODUCTION.....	42
3.2	SAMPLING.....	42
3.3	THE DESIGN OF THE STUDY	45
3.4	TYPE OF RESEARCH METHODOLOGY	48
3.4.1	Qualitative and Quantitative Research.....	48
3.4.2	The strengths of qualitative research.....	49
3.5	RESEARCH TECHNIQUES.....	50
3.5.1	Participant Observation.....	51
3.5.2	Surveys.....	54
3.5.2.1	Questionnaires.....	55
3.5.2.2	Follow-up interviews	58
3.5.2.3	Content Analysis.....	59
3.6	TERMINOLOGY DEVELOPMENT: TERM EXTRACTION TOOLS	61
3.7	CONSENT TO CONDUCT THE RESEARCH.....	61
3.8	SUMMARY	62
CHAPTER 4:	LITERATURE REVIEW	63
4.1	INTRODUCTION.....	63
4.2	LANGUAGE AND CONCEPTUALIZATION.....	64
4.3	BILINGUALISM AND DEFINITION	71
4.3.1	Aims of bilingual education.....	72
4.3.2	Types of bilingual education.....	73
4.3.3	Bilingual Education and Cognition.....	76
4.4	THEORETICAL FRAMEWORK ON THE RELATIONSHIP BETWEEN LANGUAGE PROFICIENCY AND ACADEMIC ACHIEVEMENT.....	78
4.5	LANGUAGE PLANNING AND TERMINOLOGY CREATION.....	81
4.5.1	The Cognitive Dimension	84
4.5.1.1	Definitions in terminology	86

4.5.2	The Linguistic Dimension.....	90
4.5.3	The Communicative Dimension	94
4.5.3.1	Acceptance, Adoption and Standardization	95
4.6	TRANSLATION AND TRANSLATION COMPETENCIES IN TERMINOLOGY DEVELOPMENT	97
4.6.1	Competencies in Translation.....	98
4.6.2	Methods and Approaches to Translation.....	100
4.7	SUMMARY	102
CHAPTER 5:	DATA COLLECTION AND PRESENTATION.....	103
5.1	INTRODUCTION.....	103
5.2	PRESENTATION OF PRELIMINARY DATA	105
5.2.1	The participants' languages	105
5.2.2	The Participants' experiences during the Political Philosophy module	106
5.2.3	The participants' experiences on the bilingual glossary	107
5.3	PRESENTATION OF THE 'MAIN' DATA	110
5.3.1	Language used by students in formal learning contexts	110
5.3.2	The availability of multilingual resources for students in learning and executing tasks during the learning process	118
5.3.3	The students' perceptions on the role of bilingual glossaries in facilitating learning .	123
5.3.4	The students' perceptions on the role of LOTE as languages of academia	128
5.3.5	The students' perceptions on the role of English in HE.....	132
5.4	SUMMARY	136
CHAPTER 6:	DISCUSSION OF RESULTS.....	139
6.1	INTRODUCTION.....	139
6.2	LANGUAGES USED BY STUDENTS IN FORMAL LEARNING CONTEXTS.....	139
6.3	THE AVAILABILITY OF MULTILINGUAL RESOURCES FOR STUDENTS IN LEARNING AND EXECUTING TASKS DURING THE LEARNING PROCESS.....	146
6.4	THE STUDENTS' PERCEPTIONS ON THE ROLE OF BILINGUAL GLOSSARIES IN FACILITATING LEARNING	150
6.5	THE STUDENTS' PERCEPTIONS ON THE ROLE OF LOTE AS LANGUAGES OF ACADEMIA	155
6.6	THE STUDENTS' PERCEPTIONS ON THE ROLE OF ENGLISH IN HE.....	158
6.7	SUMMARY	162

CHAPTER 7: PRESENTING A MODEL FOR THE DEVELOPMENT OF TERMINOLOGY	163
7.1 INTRODUCTION.....	163
7.2 THE DEVELOPMENT OF THE BILINGUAL GLOSSARY AS AN INTERVENTION TO ASSIST STUDENTS WITH LEARNING	163
7.2.1 Extraction of the corpus	163
7.2.1.1 The Wordlist feature	165
7.2.1.2 The Concord feature.....	171
7.2.2 Defining the terms in English	174
7.2.2.1 Terms defined using intentional definition	177
7.2.2.2 Terms defined using paraphrase definition	177
7.2.3 The translation of the terms and definitions into isiXhosa.....	178
7.2.3.1 The process translating the equivalent terms and definitions	182
7.3 SUMMARY	187
CHAPTER 8: FINDINGS, RECOMMENDATIONS AND CONCLUSION	188
8.1 INTRODUCTION.....	188
8.2 FINDINGS.....	188
8.3 RECOMMENDATIONS.....	191
8.4 CONCLUSION	194
REFERENCES.....	196
APPENDICES	211

LIST OF TABLES

Table 1: Home languages of participants.....	105
Table 2: Responses which participants were to choose from when stating the difficulties they encountered when learning	106
Table 3: Participants' responses on how they used the bilingual glossary.....	108
Table 4. Language mostly used for teaching in high school.....	111
Table 5: Table representing the languages the students used in high school in addition to the MoI.....	112
Table 6: Languages spoken by students at home.....	114
Table 7: Students' ratings on understanding of English as compared to their mother tongues	116
Table 8: Options given to the students regarding the use of additional resources.....	119
Table 9. Students' responses for not using the glossary.....	121
Table 10: Languages spoken by students at home (students who would use the glossary) ..	123
Table 11: Languages spoken by students at home (students who would not use the glossary)	124
Table 12: Student's responses on why they found the glossary helpful	126
Table 13: Students' competencies on English as compared to their home languages	133
Table 14: Students' rated skills on English	133
Table 15: Students' rated skills on their home languages	134

Table 16: Terms with English definitions.....176

Table 17: The created bilingual glossary with definitions..... 182

LIST OF FIGURES

Figure 1.: Participants’ responses on the use of the bilingual glossary	107
Figure 2.: Students' perceptions on additional resource materials.....	119
Figure 3. Students' responses on the use of the bilingual glossary	121
Figure 4. Students’ responses on how they used the glossary	122
Figure 5. Students’ selected options to the statement that “.....	125
Figure 6. Students who are comfortable with English being the MoI at university	135
Figure 7. The screenshot of the extracted text in plain text.	164
Figure 8. Screenshot showing words with high frequency	166
Figure 9. Screenshot showing terms with low frequency	167
Figure 10. Screenshot indicating when the two-word cluster feature was used	167
Figure 11. Screenshot showing two-word terms representing concepts in word-format.	168
Figure 12. Screenshot showing when the three-word cluster feature was used.....	169
Figure 13. Screenshot showing three-word terms representing concepts in word-format. ...	170
Figure 14. Screenshot showing concordance for 'consent'	172
Figure 15. Screenshot showing concordance for 'liberty'	173
Figure 16. Screenshot showing concordance for 'positive conception of freedom'.....	173
Figure 17. Screenshot showing concordance for 'harm principle'	174

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

When apartheid came to an end, all students with diverse backgrounds were allowed entry at universities that were previously linguistically and racially homogenous. Even though that is the case the system in previously white universities did not change; English and Afrikaans continued to dominate as languages of higher educations, while the local indigenous languages remains at the margins of these institutions. That means that the previously disadvantaged students (especially those who do not speak English as a home language) had to find a way to adapt within the system. English is now the common language of learning and teaching (LoLT) in most South African universities. The languages used in higher education is characterised by terms that are usually abstract and difficult to understand, especially for those to whom the language of teaching and learning is not their first language. Research (Batibo, 2010; Cummins, 1979; Vygotsky, 1986; Paxton, 2010) shows that cognition i.e. making sense of knowledge presented by a concept represented by a terms is facilitated better in a language which on understands best.

This study presents the notion, as presented in studies by various scholars (discussed extensively in Chapter 4) that using languages which students understand better can assist in facilitating effective and meaningful learning. The South African context of higher education, where indigenous languages do not play a significant role in learning is presented, and language, it is argued, is one of the causes of underperformance and poor success of students who have these languages as their mother tongue. Therefore, the development and use of bilingual glossaries is recommended in assisting the students with effective learning as the proposed glossaries would contain difficult terms translated and defined in the students' languages.

This chapter provides an overview of the study by presenting the context of the study, its aims and limitations, as well as the exposition of chapters of the study. The first section to be presented is going to be the background and context of the study.

1.2 BACKGROUND AND CONTEXT OF THE STUDY

The use of African languages in South African education goes a long way, with isiXhosa in particular. Before isiXhosa was reduced into print, a form of traditional education existed through oral teaching (Makalima, 1981). IsiXhosa was used for formal traditional teachings where there were certain terminologies that were used in different traditional institutions which existed then. This indicates that there existed, even prior to education as we know it today, of a special vocabulary in each context of learning.

After the arrival of missionaries, oral isiXhosa was turned into written language, with the process being formally entrenched with the first printed words by missionary, John Bennie in 1823. The missionaries' objective was to learn the language of the African people so that they could be able to influence and spread the 'gospel' (Maseko, 2011; Makalima, 1981; Alexander, 1989). The priorities for the missionaries were to learn the local languages and translating the Bible into them, therefore writing them down was one of the easiest ways to do that. Teaching the local people to speak and read in their local languages was going to help the missionaries to accomplish their objectives.

Even though the missionaries had their own motives when reducing the indigenous languages into print, it allowed languages such as isiXhosa to grow as there were literatures developed in these languages. The Bantu languages were primarily written for religious purposes but there are people who continued to write in their own languages. One of the local languages that developed through writing is Afrikaans, the support of Afrikaner nationalism allowed the rise of Afrikaans to be a fully intellectualised language which was used at schools, universities and in other public institutions.

Although indigenous languages were spread and spoken all over South Africa, they were mostly used in primary schooling between 1953 and 1976. The strict apartheid policies which enforced the use of Afrikaans in schools and learning in indigenous languages were associated with 'inferior' type of labour (Alexander, 1989). Even though apartheid and its

policies was atrocious to black groups and their value systems in South Africa, in the context of education there was terminology that was developed in these languages for the school children (Mahlalela-Thusi & Heugh, 2002). Mother-tongue education during this time was enforced on the African children for the first eight years of schooling, even though the intention was to provide them with poor quality of the curricula. According to Heugh (2002) (cited in Alexander, 2003) the performance among the learners was better when they were learning in their home languages.

After the establishment of the new Constitution eleven languages were declared to be official languages and indigenous African languages also could be used in any institutions such as educational and financial institutions. There was widened and increased access in higher education institutions (HEIs) allowing linguistically and culturally diverse students to participate in higher education (HE). There are certain legislative documents such as the Language Policy Framework for South African HE (LPF), (2001) as well as the National Language Policy for Higher Education (LPHE) (2002) which were formulated in order to facilitate the promotion of use as well as the development of the official indigenous languages in universities. These legislative policy documents are going to be discussed fully in the next chapter. The LPF (2001) focuses more on the equal use of the official languages and ensuring the available of materials in other official languages, especially the previously marginalised languages.

LPHE (2002) acknowledges the need to address multilingualism in HEIs and for universities to formulate their own language policies which would enable the development of other South African indigenous languages. The development of learning, teaching and supporting materials such as dictionaries as well as terminology lists in other languages is encouraged in order for the other languages to be used in HE for learning in assisting the students. The creation of such materials would assist so that language does not act as a barrier to access and success in HE for the students who speak languages other than English (LOTE) (which is the common language of learning and teaching at university) as home languages.

With regards to the formulation of individual language policies by HEIs, and for the context of this research, the Rhodes University (RU) language policy which was first formulated in 2003 will be discussed. This language policy has also been fully discussed in the next chapter. Summarily, the policy promotes the proficiency of English which is the LoLT in the university as well as the increase of multilingualism in order to elevate the status of the major languages in the Eastern Cape (IsiXhosa, Afrikaans and English). The policy acknowledges the disadvantage experienced by students learning in language which is their additional language, and urges academic departments to provide students who have English as an Additional Language (EAL) with learning resource materials which will assist them when learning in English. The development of bilingual glossaries is one of the implementation goals of this policy, where technical terms in different disciplines can be made available to the students in their language in order to assist to facilitate learning.

In order to implement the promotion, use as well as the development of other indigenous languages within the Eastern Cape, RU African Languages Section in the School of Languages participated in the South African Norwegian Tertiary Education Development (SANTED) Program which was established by a collaboration between the South African national Department of Education and the Norwegian Agency for Development Co-operation (NORAD). The SANTED Project was carried out through the collaboration of different HEIs (RU; UCT; UKZN and DUT) with the objective of promoting and implementing multilingualism in HEIs. The RU-SANTED Project focused on three programmes, namely; isiXhosa second language acquisition programmes; developing teaching and supporting materials for students who have EAL as well as advancing scholarship in African languages.

Through the development of teaching and supporting materials, according to the RU-SANTED Report (2010), the main objective of the programme was the provision of multilingual materials to support learning in English. This led to the creation of bilingual glossaries for Information and Communication Technology (ICT); Political Philosophy and Geography.

The bilingual glossary with definitions for the Political Philosophy module was developed in 2008 with the intention of assisting students learning this module and who do not speak English as a home language. There are terms that were selected by the Political Philosophy lecturer and had their equivalents and definitions in isiXhosa developed by the translators from the SANTED Project team with the help of some senior Political Philosophy students and the lecturer (Maseko, 2011; RU-SANTED Report, 2010). This research extends on the research that was conducted by Maseko (2011) on the intellectualization of African languages in higher domains and it focuses on the use of these languages to facilitate learning through terminology development. The next section is going to discuss the statement of the research problem with an attempt to briefly outline the theoretical framework of this study.

1.3 THE STATEMENT OF THE RESEARCH PROBLEM

Before the education system got desegregated after the apartheid, university had linguistic, racial and cultural homogeneity. When desegregation took place, the system at universities did not change and that means the LoLT remained the same. The South African HE system continues to benefit mostly the home language speakers of English and language becomes a barrier of access to speakers of other languages (Higher Educator Monitor, 2010). The research which has been done recognises the relationship between language, learning and cognition and how it is important to use the students' languages in learning (Cummins, 2000; LPHE, 2002).

According to the theorists of language and learning (Cummins, 2001; Obanya, 2001; Vygotsky, 1986), language is considered to be a very important factor to facilitate cognition and meaningful learning. According to Boughey (2005) and Simons (1993), meaningful learning occurs when a student participates in existing as well as the construction of new knowledge. As meaningful learning requires the participation of the students, it is difficult to achieve it when the students are not granted epistemic access to university, but only physical access (Maseko, 2011). According to Paxton (2009), epistemic access in South African HE can be facilitated when the language in which a student is most proficient in is used for learning.

Participating in HE requires an ability to work and have competency in abstract concepts that are used in different disciplines (Batibo, 2010). In order for one to express and utter concepts, there are certain terms that they need to use and usually these terms are in ‘superior’ languages which most of the students HE are not mother tongue speakers of. Most students in participating in the South African HE system are not mother tongue speakers of the LoLT, which is English in most universities. It becomes important for the students to understand the terms which represents the concepts in their particular disciplines, it is more important that these students understand these terms in languages which they understand best. This then means that the theories of terminology are also significant for this study as the development of multilingual glossaries need to be considered as an intervention to support students’ learning. The next section is going to discuss the goals of this research.

1.4 THE GOALS OF THE RESEARCH

The goals of this research are as follows:

- To investigate the use of the bilingual glossaries by students in the Political Science 1 Extended Studies (ES) class at Rhodes University: the glossary will be provided to students with the encouragement that they use it. There will also be observations done to see whether the students use the Political Science glossary when learning in class. There are other techniques such as questionnaires and interviews which are going to be used to meet these research goals and these are also going to be discussed.
- To study the students’ perceptions on the terminology created within the RU-SANTED programme; as well as explore further development of multilingual terminology in the Political Science discipline, based on the students’ perceptions.
- To examine terminology development in South African higher education (HE). The bilingual glossary which is going to be developed as a model will be evaluated using content-analysis as a method. Content analysis in qualitative research is defined a method where there are strict systematic set of procedures that are followed for the examination of written data (Cohen *et al*, 2011). This method is going to be used to

evaluate the bilingual glossary to see if the rules of translation and terminology development have been followed while creating the glossary.

- Using a Political Philosophy textbook intended for first year of study at university (to source corpora for the extraction and definition of terms), a model for development and use of multilingual terminology in South African HE is going to be formulated.

1.5 LIMITATIONS OF THE STUDY

With participation on follow-up interviews being voluntary, I only managed to get six students to take part. The students were asked in the questionnaires if they were willing to participate in follow-up interviews. Fifteen (15) students gave consent that they would like to participate in the interviews but when they were contacted to schedule the interviews only eight (8) students stated that they are still available. Different time slots were arranged with the eight students but the two withdrew. Even though the students who participated in the follow-up interviews helped to validate the responses given in the questionnaires, the participation of more students would have helped in getting more responses. The questionnaires helped in answering some questions and get large responses and the observation also assisted, so the follow-up interviews were only made to follow-up if there were any issues that were missed in questionnaires. Even though with observations the participants might adjust their behaviour as they will be aware that they are being observed (Bryman, 2012).

With the methodological approach of this study being a case study, which is going to be discussed in the methodology chapter, it makes it difficult for the researcher to have control over certain events. Yin (2002) and Cohen *et al* (2007) state that sometimes the lack of control over events might lead to the researcher being bias and subjective as they are both participant and an observer. To demonstrate reliability one will have to record or always take notes of events that may be critical to the study. For this study, I had to take notes of the important instances that were happening in class during the observation. Also, that managed to help me in case I forget what has happened.

1.6 THE OUTLINE OF CHAPTERS

This section is going to give an overview of the chapters of this thesis.

Chapter One: this chapter brings an overview of the study where the context, goals and the problem of the research are presented. The limitations of the study have also been discussed in this chapter.

Chapter Two: In this chapter, the background and the contextual framework of the study are discussed. The chapter discusses the background of the study starting from the arrival of missionaries when isiXhosa was reduced into print until to the current policies which acknowledge the importance of multilingualism and use of one's home language for learning. The chapter provides an overview of legislative policy documents which encourage the promotion of multilingualism and use of indigenous languages at university.

Chapter Three: This chapter discusses the research methods that were used for this study as well as the motivation for the research methods that have been selected.

Chapter Four: The theoretical framework which shapes up this study is going to be discussed in this chapter.

Chapter Five: This chapter presents the collection as well as the presentation of the data. In this chapter, the data collection site has been described as well as the participants and their backgrounds. There are two types of data that have been collected in this research and these have been described and presented in this chapter. There are issues that have been emerged during the both data collection processes and these have also been discussed but this chapter focuses.

Chapter Six: The chapter discusses the issues that have emerged on the chapter that has been described above. The theoretical framework has been used and linked to the issues that have emerged in the discussion of the data; this chapter focuses mainly on the main data collected for this study and refers to the preliminary data and other studies conducted by different scholars for comparison purposes.

Chapter Seven: In this chapter, a model for the development of terminology is presented. The demonstration of the development of a bilingual glossary is shown in this chapter. The

presentation of a translation appraisal and the strategies that were used when translating the terms and the definitions, the strategies that have used have been described in this chapter.

Chapter Eight: This chapter concludes the study with the overall findings as well as the recommendations for the study.

1.7 SUMMARY

This chapter has presented the overview of the study by describing the context, aims as well as the framework of the study. The study focuses on the benefits of using one's home language when learning, the use of bilingual glossaries is proposed as a model that can be used in assisting learning. The development of bilingual glossaries through the use of certain available software is described in the study; this chapter also outlines how other chapters have been laid out. The next chapter discusses the contextual framework of the study

CHAPTER 2: CONTEXTUAL BACKGROUND

2.1 INTRODUCTION

This chapter provides contextual background of this study by discussing the policies and the events which can be considered to be a milestone in the development of indigenous languages and their use in higher education, focusing on terminology development. The first section gives a brief description on the role of missionaries in the development of the indigenous African languages including their conversion into print. In this section I also discuss education among the Xhosa people before they were introduced to any form of literacy, i.e. the culture of reading and writing. The development and the conversion of other South African languages, including Afrikaans, into print is also shown and the subsequent section discusses the development of Afrikaans before 1948.

The section on the development of Afrikaans is going to show how Afrikaans was developed into a language of power, as well as strategies adopted by their speakers before it became entrenched as an official language through political power. This section is going to discuss the relationship which existed between the speakers of English and Afrikaans and how each of them fought for power so that their language could be the dominant language in South African society. This section will show how the indigenous languages were perceived at that time by both their speakers and those holding political power, and how they were considered not to be important for use in powerful domains such as education.

The promotion of Afrikaner nationalism, which elevated Afrikaans language and culture while selectively developing indigenous African languages, is also going to be discussed, including other policies specific to language and which were posed during this period, known as apartheid. The Bantu Education Act will be explored under this section, as well as the segregation of universities during apartheid. The transition process will be discussed briefly and the focus will be on the post-apartheid period, which is the main focus of the study.

For the post-apartheid period, this chapter will discuss the policies and guidelines regarding the use of language in education (specifically higher education). The discussion of the post-apartheid policies will start from *The Constitution of the Republic of South Africa* and what it entails regarding linguistic rights in education up to the institutional language policies specifically the *Rhodes University Language Policy* which is guided by other policies which are also going to be discussed. This chapter is started with a broader approach regarding the policies and it is narrowed down from the pre-apartheid period up until to the post-apartheid period of language in education.

2.2 THE ROLE OF MISSIONARIES IN THE DEVELOPMENT OF INDIGENOUS AFRICAN LANGUAGES

This section is going to discuss the role of missionaries in promotions of indigenous languages in education, with specific reference to isiXhosa. Missionaries are acknowledged as the ones that introduced the language into written form and introduced formal education in Africa. This does not mean that before the arrival of the missionaries there was no education among the Xhosa people, The form of education which existed was oral teaching in which focused on transmitting social values and norms including other important aspects of society (Makalima, 1981).

Oral isiXhosa did not only exist informally as language of social communication, but it was also used for formal instruction for traditional teachings. This type of education took place every day in the day to day chores of the people, with adults acting as educators, but focussed teaching occurred during male circumcision and also during *intonjane*, which is a kind of ceremony that initiated girls into womanhood. There are other occasions that this teaching occurred, for an example when the boys were being trained for tribal wars and also during the orientation of a young bride at the groom's family (Makalima, 1981). This shows that education existed with indigenous people even though it is not the type of education which we tend to experience today. During this period there used to be specific terminology that needed to be learnt for each institution of initiation and this was allowing the vocabulary of isiXhosa to expand. One can make examples with the *hlonipha* language which was being used by married women and also the terms which were being used in the initiation schools

(Finlayson, 1995; Makalima, 1981). Makalima (1981) states that the terms which were used during the initiation period at the initiation school were not well known outside the school. This shows that the notion of each discipline consisting of special vocabulary has always been there for a very long time. But there might not be scientific and technical terms which existed in isiXhosa because those are inventions from a different culture, the Xhosa culture had their own terms.

The availability of terms in the language and the richness of the language itself show that there was plenty of source material (i.e. the language itself) that written literature could draw from. Makalima (1981) goes further and states that there was no shortage of topics to write on as the writers would choose what to write about. Before writing came the information used to be passed from one generation to another through oral teachings.

IsiXhosa was reduced into writing upon the arrival of missionaries in South Africa (Maseko, 2011; Makalima, 1981). The early attempts of introducing the written form of the oral language were initiated by the early missionaries and travellers. As soon as the missionaries arrived their priority was to learn the languages of the African people so that they can fulfil their goals of spreading the gospel. The only way which would help the missionaries to learn the languages quickly was to have them written down and that would also help so that they could spread their gospel as quickly as they could (Alexander, 1989; Kaschula, 2008; Maseko, 2011; Makalima, 1981). The priorities for the missionaries were to learn the language, 'convert' the people and translate the Bible (Maseko, 2011; Alexander, 1989). Reading and writing was a priority and there were lists that were spelling lists which were compiled for the people (Maseko, 2011). These spelling lists were arranged according to the number of syllables per words. The spelling lists followed after the alphabet list (Makalima, 1981: 49).

With the missionaries not being fluent in the languages and also because they had not prepared prior upon their arrival for the languages there were certain limitations in the writings (Doke, 1959 cited in Makalima, 1981; Prah, 2009; Maseko, 2011). According to

Makalima (1981: 42-54), because of the nature of African languages, some of the sounds in isiXhosa were not common to their language. Prah (2009: 15) also states that

Missionary translators naturally imported their traditional orthographic preferences, prejudices and biases into the work they produced. The way they write their home languages has invariably affected how they have written African languages. Different missionary groups asserted their rivalries and differences by creating products that orthographically did not match.

Prah (2009: 15-17) also illustrates how other scholars such as Miti and Chanda illustrate the mistakes made by missionaries in other African countries like Zambia; Zimbabwe and Mozambique. The missionaries in South Africa were writing the isiXhosa alphabets in a way in which they were based in their own languages. Even though that is the case, Makalima (1981: 43) states that states that the some missionaries such as John Bennie did pay attention and were aware that African languages are different from Western languages as they referred to the existence of the click sounds in isiXhosa.

It is clear that the main objective of teaching the speakers of Bantu languages isiXhosa in particular was so that they can read and write in their own languages and that would help to convey the “word of God” in the languages which they understood (Makalima, 1981). For this context, one can take note that learning and teaching in the language which one understands helps to speed up the process of learning. Prah (2009: 27) states that

...much as the work of these missionary groups laid the foundations for the literary rendering of African languages; the wider object of African education was not their principal aim. The central purpose of missionary endeavours was to use African languages to win African souls for Christianity.

There are certain distinguished missionaries who attained outstanding accomplishments in converting isiXhosa into print isiXhosa. Makalima (1981) and Maseko (2011) state that Bennie, Appleyard, Van der Kemp and Boyce are among the missionaries who played an exceptional role in laying a sound foundation of converting isiXhosa into a written language. Missionaries like Bennie and Ross facilitates for the first alphabet, texts and terms of isiXhosa to be put into print in 1823 (Makalima, 1981).

As indicated earlier, the main aim of missionaries was to spread the gospel among the speakers of Bantu languages. Alexander (1989) refers to this as “the Christianization of the African people” as the purpose for the missionaries was to extend their interests. Even though they had their own motives, one cannot run away from the fact that introducing writing into the Bantu languages allowed the languages to develop. Even though these languages were only being developed for social purposes during this period without any intellectualization as we know it today, Mbude-Shale (2013) states that the translation of the Bible worked for the development of African languages. These are the dates according to Mbude-Shale (2013) which the complete Bible was available in South African languages:

- Afrikaans [1933, 1983]
- IsiNdebele [1986 – 2012]
- IsiXhosa [1859, 1996]
- IsiZulu [1883, 1959]
- Northern Sotho [1904, 1951, 1998]
- Sesotho [1878, 1989]
- Setswana [1857, 1970]
- SiSwati [1997]
- Tshivenda [1936, 1998]
- Xitsonga [1907, 1929, 1986]

The above discussion illustrates that isiXhosa was the second indigenous language in South Africa after Setswana to be developed and Afrikaans was among the last. Even though that is the case, Afrikaans managed to develop further than the indigenous languages because of its link to Afrikaner nationalism which managed to be in power and when the language was used as LOLT. This then illustrates that language development is directly linked to education, political power and economy.

At first Afrikaans was a language which was used in lowest social functions (Mbude-Shale, 2013; Giliomee, 2003; Prah, 2007), but through the support of Afrikaner nationalism and the Anglo-Boer war it was developed. The next section is going to discuss the rise of Afrikaans as an intellectual language. This section is also going to examine the development of

indigenous African languages alongside the development of Afrikaans during the apartheid period.

2.3 THE DEVELOPMENT OF AFRIKAANS DURING THE PRE-1948 PERIOD

Afrikaans originated after the arrival of the Dutch in the Cape during the 1600s and it emerged from the interaction between the Europeans, slaves and the Khoikhoi people (Giliomee, 2003; Mbude-Shale, 2013). At first Dutch was the language of administration but by 1870 the British conquered the colony and made English the official language even though the majority spoke Dutch (Alexander, 1989; Giliomee, 2003). With all the progress that the Dutch people had made after settling in the country since 1652, English wanted to take over.

There were Anglicization attempts such as requiring education to be conducted in English (Prah, 2007: 6) which meant that the Dutch people had to act. There was more resistance from the Afrikaans people to be anglicised as compared to the indigenous people (Alexander, 2003; Prah, 2007). It was difficult for the indigenous people as they were not literate from the beginning and that made it difficult for them to defend their own languages (Prah, 2007). The Dutch wanted Afrikaans to be one of the developed languages and there were attempts that were made and these are as follows:

- 1870s: pleading for the translation of the Bible into Afrikaans
- Afrikaans books and newspapers were published
- 1875: the first Afrikaans language movement was founded (Prah, 2007; Giliomee, 2003).

Throughout the achievements of developing the language there was still a struggle of using Afrikaans in the face of the English hegemony (Prah, 2007).

With the entire linguistic struggle that was happening, indigenous languages and their development at that time was left to the missionaries and interpreters acted as the mediators between Africans and the colonists (Mbude-Shale, 2013; Alexander, 1989; 2003). With the

hegemony of English, there was encouragement of English immigration which aimed at increasing the English population so that there can be more English speakers than the Afrikaans speakers.

As a response to the actions of the English, there were more Afrikaans movements that were established and the Boers reacted by taking their children out of school and started home-schooling them (Prah, 2007). The language struggle of the Boers and the British according to Alexander (2003) was related to the land struggle. English was being rejected gradually among the Dutch colonists and there was more call on the development of Afrikaans literature (Alexander, 1989; 2003; Giliomee, 2003; Prah, 2007).

More promotion of Afrikaans led to the formation of the National Party, and in 1914 Afrikaans was accepted as the medium of instruction and there were Afrikaans medium national schools established (Prah, 2007). There was more support for Afrikaans and publication of school and university textbooks, literature and newspapers as well as other forms of media. This shows how much a language can develop in different spheres of society. When National Party came into power in 1948, Afrikaans continued to spread and to be could be used not only in schools but also in parliament and in other social and governmental institutions (Prah, 2007; Giliomee, 2003).

With all the developments of Afrikaans there was no effort on cultivating literacy on any of the indigenous languages on large scale (Alexander, 2003). The teaching of indigenous languages during this period was only at lower levels. Most indigenous languages were under missionaries and with their intentions of spreading the gospel; there was no need for them to go as far as higher education (HE) with the languages (Alexander, 1989; 2003). English alongside Afrikaans was seen as a language which people could acquire social value in and it became the status quo that the ones who could speak English were perceived and referred to as the 'elites' (Alexander, 1989; 2003).

The development of Afrikaans to counter English dominance continued and it led to Afrikaner nationalism which presented Afrikaans language and culture and by implication, its people, as superior to any other people and which, one could argue, resulted in the apartheid political system. The next section discusses the apartheid language policies in education, the resistance of speakers of other languages, and how language as a form of oppression was used in education during this period.

2.4 LANGUAGE IN EDUCATION DURING THE APARTHEID PERIOD

During apartheid indigenous languages were spoken in the homelands which were established and set aside only about 13% of the total land in South African for the population speaking the dominant African language in that specific region. The ‘divide and rule’ policy worked for the apartheid regime as it separated indigenous people into different regions which were far from the cities. The thought at that time was to keep the indigenous people as separate from each other as possible so as to avoid unity among them. Even though they were the majority they did not have much effect in decision-making within the country (Prah, 2007; Alexander, 2003).

In terms of education, there were few African children whose parents could afford to give them education which was beyond primary school (Alexander, 2003; Makalima, 1981). Alexander (2003) states that most black people had it infested in their minds that there was “no need” for them to continue with education and be literate as they were destined for unskilled or semi-skilled manual labour. The people who were in power which were the minority manipulated the system which existed then so that they could substitute the languages which existed then with their languages as much as they could through subtractive language education (Hartshone, 1995; Alexander, 2003). Subtractive education means learning an additional languages and losing proficiency in one’s native language. Indigenous languages were used only for initial literacy then afterwards there would be a transition to English or Afrikaans as soon as possible (Alexander, 2003). This happened because there was no intention of developing the indigenous languages further as there would be a need to develop them if there was higher education provided.

According to Alexander (2003); Mbude-Shale (2013) and Hartshone, (1992;1995), there was more call to replace English with Afrikaans language and culture because of the fear that Afrikaans would be replaced by English, even though that could not have worked out because of the global capacities and functions of English. When there was a call for mother-tongue education (MTE) from UNESCO, the apartheid government took that as an opportunity to spread the divide and rule policy further (Alexander, 2003; Hartshone, 1995). One can state that the use of MTE during that time was meant to devalue the indigenous languages rather than to develop them and with no effort on promoting the languages through the provision of new vocabulary it would be difficult for the speakers of those language to see value in them (Bamgose, 1991; Djite, 2008).

2.4.1 The Bantu Education Policy

The Bantu Education Act was enacted in 1953 to control the administration of black education within South Africa (Bantu Education Act, 1953; Hartshone, 1953). This Act legalised certain traits of apartheid through using segregation law which was enforcing racially separated institutions (Giliomee, 2009; Clark & Worger, 2004). According to Bunting (2002) there was an enforcement of separating institutions of learning according to different race. The universities were also separated according to races as there were universities “non-white” and for whites (Bunting, 2002). The people from different races were not allowed to cross the racial borders of these universities and study in other universities unless they had special permissions and the courses were not available in their ‘designated’ institutions (Bunting, 2002).

After the passing of the Bantu Education Act, there was a strict rule on the language policy where there was more enforcing of Afrikaans and reducing English by introducing Afrikaans as a subject in schools and colleges (Hartshone, 1992). There were several oppositions against the policy as there were many boycotts and some teachers were even resigning as they were opposing the policy (Alexander, 2003; Hartshone, 1995).

The apartheid system somehow helped isiXhosa to develop, even though the agenda of using the indigenous languages during this period was to marginalise them. According to Mahlalela-Thusi and Heugh (2002: 242), there were textbooks in African languages throughout the period of primary schooling in the Bantu Education schools. There were language boards which were established and were responsible for the standardization of the orthographies of the Bantu languages. There was progress made in the publications of orthography and terminology lists in Bantu languages until there were A-Z lists of school subjects such as Science, Geography, Nature Study, Health Education and History (Mahlalela – Thusi & Heugh, 2002: 249).

2.4.2 After the 1976 uprising

Mbude-Shale (2013) argues that the uprising that occurred in 1976 can be considered to have been “costly” for Afrikaans as since then one could argue that there was rather a fall of the language. Giliomee (2003) and Alexander (2003) perceive Afrikaans to have the stigma of apartheid attached to it as a language. As for the indigenous languages, they also have their inferior stigma which is attached to them as they were seen to be inferior, dormant and without value. It can be argued that these languages were not valued because learning them was associated with unskilled and semi-skilled labour, even though there was terminology which was developed for them (Mahlalela-Thusi & Heugh, 2002) but the prestige still resided with English (Alexander, 2003).

From 1977 onwards mother tongue education was reduced from the first eight years to the first four years of schooling, and in most black schools there was single medium of teaching and learning and this was chosen as English. According to Heugh (2002) (cited in Alexander, 2003), the learners were performing better during the time where MTE was for eight years, even though the curriculum was not good. This supports the view that there is effective learning when one learns in one’s home language as compared to a language which is not their first language. It is argued that this also facilitates them to have enough knowledge of the second language which they eventually will have to switch to (Mbude-Shale, 2013).

One can argue that there was nothing wrong with the eight years of mother tongue education, but the intentions behind it, i.e. competition between English and Afrikaans and the notion of Afrikaner supremacy, were the actual problem, as well as the poor quality of the curricula which was being taught to the learners. Heugh (2000) (cited in Maseko, 2011) states how MTE for black pupils which was extended to eight years with the Extension of Mother tongue Act in 1953 helped to develop indigenous languages. Even though this system developed the languages, the languages were not given a chance to grow and develop further as they were still not being used beyond primary school and in high-function domains. One can state that if that can be regarded as the *status quo* then it will be difficult for the indigenous languages to develop further as there would be no value seen in them even by the speakers of these languages. Terminology development could be a start and the use of the languages in educational institutions is important as well as they will help to facilitate learning.

Literature generally views 1976 as the turning point in the South African politics and language policy and planning in South African education. Having introduced the Extension of the Mother Tongue Act in 1953, the next crucial policy in the Bantu Education during apartheid was the introduction of Afrikaans as the medium of instruction for some subjects. Contrary to popular belief, it is not the indigenous African languages or Afrikaans per se they were revolting against, but it was the introduction of Afrikaans as a sole medium of instruction in some subjects (Alexander 1989). During the period of political transition and negotiations there are legislations and policies which were formulated by the government to achieve equality within the country. These policies are meant to redress the past injustices and to make everyone equal socially, politically and economically. The next section discusses the post-apartheid legislation for education (specifically HE) in South Africa, starting from the Constitution up to the institutional language policies.

2.5 THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA AND THE NATIONAL EDUCATION POLICY ACT (NEPA)

This states the language provisions of the Constitution as well as those of the National Education Policy Act (NEPA). The Constitution is the supreme law within the Republic of South Africa (RSA) and any laws that go against it without justifiable reasons are considered invalid (Constitution of SA, Act 108 of 1996). It was formulated after the achievement of democracy in South Africa in 1994, and it acts as a way of redressing past discrimination through transforming public entities within the country. It states the official languages of the Republic of South Africa, as well as language rights of all the people residing in RSA.

The NEPA was established in April 1996 to provide for the purpose of the national education policy and the consultations that needed to be done before the implementation of the national education policy. This includes certain bodies that would be used for the consultations with the appropriate bodies and legislation on the formulation of the national education policy (NEPA, 1996: 5). One of the goals of NEPA (1996) is also to provide for the implementation of the national education policy and to monitor and evaluate education.

The official languages of South Africa recognised by the Constitution on section 6(1) are Sepedi, Sesotho, Setswana, siSwati, Tshivenda, Xitsonga, Afrikaans, English, isiNdebele, isiXhosa and isiZulu (Constitution of SA, Act 108 of 1996) which nine of these are indigenous languages that used to be undermined. Section 6(2) states that with regards to the indigenous languages the state acknowledges their disadvantaged past, and that there must be practical measures taken to uplift the status and advance the use of these languages. This means that there is a need for language planning which would allow indigenous languages to develop and, consequently enable their use in domains that were reserved for English and Afrikaans only in the past. This would be a way of redressing their minimal and orchestrated development in the past.

Section 29(2) of the Constitution (Act 108 of 1996) states that everyone has a right to receive education in an official language of their choice in any public institution and where that education is reasonably practicable. This Section goes further and states that for ensuring effective access and implementation of the right to education, there are reasonable educational alternatives that need to be taken into account. These include: equity, practicability as well as the need to redress the results of the past laws and practices especially regarding equity of access and success to and in all social institutions (The Constitution of South Africa, Act 108 of 1996). Section 4(a) (ii) of the NEPA (1996) emphasises the provisions of the Constitution that every person has a right to basic education and equal access to educational institutions. It goes further on (v) that every student can be instructed in a language of their choice where it is reasonably practicable.

One can question the notion of ‘access’ stated above. It can be argued that physical access is not epistemological access, i.e. the ability to understand and engage with different knowledge presented in the learning process. So, the fact that students can access education does not mean that they have access to information and epistemological access according to Boughey (2005) and Morrow (1994) is when a student contributes to the construction of new knowledge to transform the existing knowledge rather than perpetuating reproduction of old knowledge. Badat (2014) emphasises on this by stating the “enrolment is not the same as attendance”. Language plays an important role in learning and it helps to facilitate meaningful learning which leads to epistemological access. The relationship between language and education exists and it is significant for learning (Obanya, 2004; Bamgbose, 1991; Cummins, 2001), in order for students to have epistemological access in HE it is important that they are taught in a language which they understand better and are more proficient in (Paxton, 2009).

The practical measures for students learning using the language of their choice as stated in the Constitution and NEPA can be implemented through terminology planning. This will not only facilitate learning but will also help to intellectualize the previously disadvantaged languages.

2.6 THE HIGHER EDUCATION ACT (1997)

The Higher Education Act was approved in November 1997 and began to be effective in December 1997. The Act has been formulated to regulate HE in South Africa; to establish the Council for Higher Education (CHE) and look over its functions; to provide quality assurance in HE and also to provide for transitional arrangements and repeal of certain laws that governed HE before 1994 (Higher Education Act, 1997).

The key goals for the Higher Education Act (1997) for this context are as follows:

- To restructure and transform programmes and institutions to respond better to human resource, economic and development needs of the Republic. With the injustices that have occurred in the past the HE system is set to pursue goals of transformation and acknowledge the obligations of the Constitution.
- To redress past discrimination and ensure representivity and equal access. This refers to both physical and epistemological access and also that no one is discriminated for entry in HE because of their language, sex, race or gender.
- To provide opportunities for learning and meaningful participation in the creation of knowledge.
- To respect and encourage academic freedom. This is related to section 4 (a) of the Constitution which emphasises the right to receive education in the language of your choice as well as equal access to academic institutions.
- To pursue excellence and promote full realization on every student. This refers to appreciation and acknowledgement of diversity within the student body.
- To contribute to advancement of all forms of knowledge (Higher Education Act, 1997).

The Higher Education Act required the CHE to draft a language policy framework for HE which would attend to, and advance the development of language policy for HE (LPHE, 2002). The Cabinet decided in 1999 to make the development of the language policy framework a priority and in 2001 the report on language policy framework for HE was submitted to the Minister. The next section discusses the provisions of the language policy framework for HE.

2.7 THE LANGUAGE POLICY FRAMEWORK FOR SOUTH AFRICAN HIGHER EDUCATION (LPF)

The Language Policy Framework for HE in South Africa (2001) advocates for multilingualism in HE, and defines multilingualism as where one has an ability to speak more than one of the country's official languages. The foundational values of the post-apartheid South African society are constituted by the development and promotion of respect for all languages which are used by the citizens of the country. In other words, respecting and promotion of all languages equally within the country is considered as one of the fundamental aspects of a democratic South Africa.

The objectives for the language policy of South Africa according to the LPF include facilitating individual empowerment and national development and this can be done by promoting reasonable use of all official languages, particularly those whose use in powerful domains is still lagging behind. This will ensure that all citizens can to use their languages in different contexts, when presented with an opportunity to do so. This means that people have a right to use their own languages also in high-function domains such as education and that would facilitate access information and knowledge. With regards to “developing and promoting” the official languages of South Africa (LPF, 2001), this refers to equal use of the languages and making materials available in these languages so that they can be used. This could mean developing or using translation as an activity to create educational texts in various indigenous African languages which can then be used to facilitate epistemological access for students speaking them as home languages.

According to The Working Group on Values in Education's report to the Minister of Education (cited in LPF, 2001), multilingualism is one of the foundational values that need to be promoted throughout the system of education. The Working Group on Values in Education (2000) proposes MTE, or that the students' home languages should be used in conjunction with English when learning. According to this report, the use of African languages in schools and tertiary institutions will not only assist students with learning but also it will promote multilingualism, which is required for redevelopment of the country.

English is the medium of instruction (MoI) in most universities in the country except for a few other universities such as Stellenbosch University where Afrikaans is used as a medium of instruction (LPF, 2001). According to the survey that was conducted in April 2000 in universities and technikons in the country, there is barely any promotion of the use of indigenous languages (LPHE, 2002) even though research (Kapp, 1998; Paxton, 2009; Dalvit, 2010) shows that in some universities these languages are informally used during tutorials.

According to the LPF (2001) there are few universities that have the development of African languages as a policy objective. There are universities and one technikon which argue to be committed in pursuing the use of African languages in high-function domains such as using them as languages of tuition at tertiary level (LPF, 2001). As of today, there are other institutions which are taking action in the promotion of African languages through the creation of study materials and introduction of these languages in the university (Madiba, 2010; 2014; Maseko, 2010; 2014; Sibula, 2007; SANTED, 2010).

The LPF (2000) drafted recommendations for the South African Languages Bill and these recommendations were divided into three classifications: measures that can be implemented immediately; measures that can be undertaken in short term and proposals for medium to long term implementation.

Measures that could be implemented immediately included requiring higher education institutions (HEIs) to submit statistics on the LoLT and formal academic languages over the past three to five years starting from 2001 (LPF, 2001). All HEIs were required to submit a language policy document which would show how they were planning to play part in taking measures which would promote language proficiency and epistemological access for speakers of languages other than English (LOTE) the common MoI of HE. There was also a requirement that the Ministry of Education would have to make available to all HEIs a list of documents that correlate with language education policies in the HE sector.

Measures that would be implemented in the short term included HEIs participating in facilitating and promoting the goal of national language policy which is to develop all South African Languages so that they could be used in high-function domains, including their use at academic level.

There are other policies and reports such as the Rhodes University language policy and the SANTED Multilingualism Projects report which are discussed below, that will show how development and promotion of indigenous African languages, specifically isiXhosa, has been undertaken at Rhodes. HEIs are required to ensure meaningful access which will result to effective learning to all students; this was set to be done through drafting policies which acknowledge that learning is facilitated through language. So, in order to achieve effective learning there would be a need for additional materials which would be used to support students who are speakers of LOTE.

The long term plans included the institutions formulating development and implementation plans for each indigenous African language appropriate and relevant in their regional context and decide how the languages could be used within the institution. This entailed putting proposals on how academic literacy was to be facilitated for students speaking LOTE. Centres for Language Development were established and located within certain institutions and their responsibility was to undertake research in order to enhance the indigenous South African languages. Academic and administrative staff would also be encouraged to learn the relevant SA languages so that they could develop and strength communication with the students and the community of their institutions. The policy also requires that there be methodologies that are adopted for teaching in multilingual contexts (LPF, 2001). Using terminology development can be considered as one of those methodologies as the students would be supplied with supporting materials which would facilitate their learning. Such terminology planning would be accompanied by suggestions on teaching models to use in contexts where multilingual glossaries developed as part of terminology development, could be used to facilitate epistemological access.

2.8 THE SOUTH AFRICAN LANGUAGES BILL

The Bill was formulated to guide and observe how official languages are used in the country by the government for official purposes and also by national departments; public entities to adopt and follow the provisions of the national language policy (SA Languages Bill, 2011). Another purpose of the Bill is to facilitate the formation and tasks of the language units which are under the national departments; national public bodies as well as national public enterprises. The bill also serves to facilitate the coordination of language policies between government departments and to monitor and report matters which are related to the official languages of the country.

The Bill is set to apply to all national departments; public entities as well as national public enterprises, so this means that this act also applies in universities. It provides for the establishment of a National Language Unit by the Minister of the Department of Arts and Culture. It further states that the Unit should be provided with all necessary resources that will assist it in performing duties such as advising the Minister on policies and strategies for the regulation and monitoring of the use of official languages by the national government for government purposes (SA Languages Bill, 2011: 4). It further provides for the establishment, within the national departments, of language units, these language units be responsible on how language policy of that particular department can be implemented; monitor compliance of the language policy and also they should assess and evaluate the use of official language by and within the department. It is important according to the SA languages Bill (2011) that all official languages are promoted and enjoy equal treatment and respect within the national government and department.

2.9 THE NATIONAL LANGUAGE POLICY FOR HIGHER EDUCATION (LPHE)

The LPHE (2002) at first acknowledges the divisions that used to be among our languages in the past as linguistic diversity was used as a tool to perpetuate division, oppression and control. The different languages were used to legitimise the apartheid policies and the languages in South Africa were not all given equal status. The values of democracy in the

Constitution where the citizens are to work together and show reciprocation are also reflected, this has been stated in the policy that it can also be done through where different languages are promoted through use. The Constitution (1996) is quoted in the policy where it states that it is acknowledged that the indigenous languages of South Africa in the past used to be marginalised and that there are measures that need to be taken to promote the status of these languages.

The LPHE also quote the Bill of Rights, which is Chapter Two of the Constitution (1996) that everyone has a right to use a language which they prefer, and also a right to practise any cultural life which they choose but that must be done in a manner which follows the provisions of the Bill of Rights (cited in LPHE, 2002). It is also granted that everyone has a right to receive education in a language of their choice in any of the public institutions where education is “reasonably practicable” (LPHE, 2002). So in other words, when there are means one can learn in a language of their choice as this would be redressing the past segregation policies and ensuring equality in the form of education as well as language. The policy acknowledges that language is a barrier to access and success in HE as indigenous African languages are not developed enough to be used in high-function domains and also as there are students who are not proficient enough in English and Afrikaans (LPHE, 2002). The policy states that one of the challenges that is facing HE is to ensure the development of multilingualism where all languages are developed and promoted as academic languages and there are ways which are proposed by this policy to address the language issues within HE in SA.

The LPHE (2002) acknowledges that the students’ population in South African HE is linguistically diverse with many home languages in a single institution. It is illustrated in the LPHE (2002) that according to the Higher Education Management Information Systems (2000) fifty percent of students in HEIs have indigenous African languages or other languages as a home languages that are different from the common LoLT in HE. According to the Council on Higher Education (2009) in 2007 the percentage had increased to sixty-three percent. This shows the increase in diversity within HE and there is, thus, a need for multilingual education to accommodate the speakers of other languages especially the students who are not proficient enough in English and Afrikaans.

The policy acknowledges that it is important that South African languages are used as areas of academic study and research (LPHE, 2002). This will help the languages to develop; this would also show a sense of reciprocation and diversity among the people within the country. Developing the indigenous languages can promote them so that they can be used in high function domains and add value to learning and this would also strengthen the culture of the speakers of these languages as the culture is usually embedded on a particular language (Prah, 2007; Ndebele Report, 2003; Kaschula *et al*, 2009). The LPHE at the point of production, multilingualism had not yet been addressed fully by HE, and it cautions that when multilingualism is not promoted fully other languages suffer and do not get the respect which they deserve, which is emphasized on the Constitution (LPHE, 2002). The disrespected languages tend to be indigenous African languages.

One of the strategies to address multilingualism according to the Language policy framework for HE is the development of other South African indigenous languages so that they can be used as MoIs (LPF, 2001; LPHE, 2002). If these languages are to be developed it is important that there is a development of learning; teaching and supporting materials such as dictionaries and terminology lists which would be created. The policy realises that this development cannot be done without human and financial investment (LPHE, 2002).

One of the commitments stated in the policy is to make sure that language does not act as a barrier to access and success in education, therefore HEIs are encouraged to develop measure which will promote proficiency in the language of instruction in that particular institution (LPHE, 2002). It is important for one to note that with this provision it does not mean that other languages should be ignored, and it can be suggested that another alternative could be strengthening the language abilities of home languages and develop learning materials in that particular language to facilitate learning.

With regards to other languages in South Africa, the policy acknowledges how language is important in order for one to appreciate and access the culture of other people, especially in a

linguistically and culturally diverse country (LPHE, 2002). There is a commitment in the policy which states that the Ministry will over some time, through planning and financial commitment, encourage institutions to develop learning programmes that are in South African languages (LPHE, 2002). RU has responded to some of the provisions of the policy by designing and offering some vocation-specific programmes to promote linguistic and cultural proficiency appropriate to that particular vocation, as well as undertake some terminology planning. These started in 2007 and are isiXhosa for Law, Pharmacy, Education and Journalism (mother tongue and non-mother tongue) courses and they are part of the curriculum offering that vocation programme or degree training (Kaschula, 2014; SANTED Report, 2010). The RU African Languages Studies has also, since 2007, undertaken initiatives to develop bilingual glossaries to support learning in Earth Sciences, Computer Science and Political Studies, These initiatives were consolidated when the African Languages Studies in the University's School of Languages was also awarded a National Research Foundation (NRF) South African Research Chair Initiative (SARChI) research chair in 2013 on *Intellectualisation of African Languages, Multilingualism and Education*. The Chair focuses on three 'critical research areas' namely, linguistics and applied language studies; second or additional language studies and literary studies (Kaschula, 2014). Also, on an RU Language Committee meeting held in April 2012 the Committee submitted a proposal for consideration by Senate, that research proposals and theses be submitted in LOTE. The Senate accepted the proposal (RU Language Committee Report, 2012).

2.10 THE REPORT ON THE DEVELOPMENT OF INDIGENOUS AFRICAN LANGUAGES AS MEDIUMS OF INSTRUCTION IN HIGHER EDUCATION

The issues which were raised in the LPHE include using all South African languages in academia and high-function domains, promoting multilingualism in HEIs, developing the indigenous languages as the languages of instructions in HEIs as well as the study of foreign languages. The development of indigenous languages as mediums of instruction in HE (Ndebele Report) is a report which was compiled by the Ministerial committee in September 2003 upon the request of the Minister of Education for the development of indigenous South African languages for use as MoIs in HE (Ndebele Report, 2003). This report serves as a guideline for the implementation of multilingualism in HE focussing on the use of indigenous

African languages as MoIs. The Report gives a contextual background and motivates for development of indigenous African languages as MoIs. It further makes practical recommendations on how HEIs can systematically undertake the task of developing these languages. These are going to be discussed below.

The first part of the report discusses the historical background of languages in Africa and how the languages were used in the past before colonialism took place. The Report acknowledges that languages that are found in Africa have their cultures richly embedded in them and these languages before colonialism were used for communication in societies. One can say that with the languages that were being used at that time, the communities were managing to interact together regardless of the languages that were being spoken. The report confirms this and states that in traditional societies knowledge was being transferred and gathered across generations through the languages that were available the (Ndebele Report, 2003).

With the introduction of western written forms there are enormous changes that occurred to oral African forms which somehow were replaced by western culture (Gerard, 1981; Ndebele Report, 2003; Alexander, 2000). For the restoration and the development of indigenous languages the report (2003) admits that it is impossible to replace the western culture with the pre-colonial European culture, but rather states that there must be a way where these two cultures are integrated so that they can complement and work together with each other in a complementary manner. So, instead of assimilation of other cultures there should be linguistic and cultural pluralism.

Scholars in the field of language policy and planning support this view. Linguistic and cultural pluralism or multilingualism is about different languages working together within a society (Alexander, 1989; Bamgbose, 1991; Kaschula *et al*, 2009; Terzoli *et al*, 2005). If the indigenous languages could be integrated as part of teaching and learning in HE there could be more appreciated diversity within the institutions, and this would make the speakers of other languages also feel respected when their languages are being used (Kaschula *et al*, 2009; Terzoli *et al*, 2005). This would promote linguistic and cultural tolerance, as well as

promote equity of access which are the primary ideals of the Constitution, as discussed above. The use of different languages in societies should play a major role in institutions such as education. According to Bamgbose (1991) education is important for national development, and with the mode of transmitting knowledge in the learning process being language, this makes these two to be very important.

MTE is encouraged in this report (2003) and it states that learners who are taught in a different language other than their mother-tongue are disadvantaged especially if it is not the language which they know best (Ndebele Report, 2003; UNESCO, 2010; Bamgbose, 1991). The Ndebele Report (2003) states that MTE is more effective when there is terminology and there other resource materials that have been developed for education purposes. In this context, it would be a unrealistic and optimistic to call for MTE as the LoLT in university in the immediate future. Rather one would call for the development and use of terminology in students' mother tongue which they can use to facilitate learning in English, the common LoLT in university.

The Report (2003) primarily advocates for the use of other indigenous languages in HE and it states that the growth of indigenous languages would happen when they are being used and that would encourage more provision of resources to support learning. Technology and science perceived as significant disciplines in the Report and for that reason the Report recommends that African languages should be developed in these subjects. Specifically, it suggests that terminology in the areas be developed in the previously disadvantaged languages. According to the report (2003), the Harare Declaration (2007) encouraged African countries to promote technological use through their own national languages as this would help to overcome the challenges that are currently being faced (Mutasa, 2002 cited in the Ndebele Report, 2003). The use of indigenous languages in high-function domains such as technology and science, and in HE will allow a sense of respect and pride from the speakers of the languages to be created (Kaschula *et al*, 2009).

The Report suggests that within the country there are departments and structures such as the Department of Arts and Culture (DAC) which constitute bodies like the National Language

Service (NLS) and the Pan South African Language Board (PANSALB), that had been established with the purpose of fostering and promoting multilingualism as well as developing the indigenous African languages of the country (Ndebele Report, 2003; Mawonga *et al*, 2013). There are other structures such as the National Lexicography Units (NLUs) and the National Language Boards (NLBs) that are under PANSALB and these bodies have different roles which they play in assisting the government to promote indigenous languages through terminology development (Ndebele Report, 2003; Mawonga *et al*, 2013).

The Ndebele Report (2003) proposes criteria (discussed further below) that need to be followed when selecting and developing languages that can be used in HE. It is stated in the report that provincial language policies should provide a guideline for the language policies of institutions that are geographically located in that province in the country. So, the provincial language policy will assist the institutions in making decisions regarding the functions of different languages in each institution. In this regard, the report (2003) states that an institution should select an indigenous African language that has a major distribution at provincial level, as suggested by the provincial language policy, and develop it further so that it can be used as MoI.

RU is located in the Eastern Cape Province and the objectives of the Eastern Cape (EC) language policy framework (2011) include promoting all eleven official languages in South Africa and taking into account the dominant languages in the province namely, isiXhosa (84%); Afrikaans (10%), English (4%) and Sesotho (2%). The policy also states that it aims to redress the previously disadvantaged languages, which according to the provincial language policy are isiXhosa and Sesotho. Promoting good language management is also stated in the policy, this goal is more viable when there is terminology available so that there can be translation services that will assist in translating some terms. The primary objective of this research is to suggest strategies that could facilitate students' learning in HE, specifically those who have LOTE as home languages, through use of languages which they know best, and the suggested strategy is terminology development. In the process the language itself is going to be developed and that will also help the speakers of indigenous languages outside HE see that their languages are capable of being used in high status fields.

The disturbing decline in student enrolments for study of indigenous African languages in HEIs in South Africa is concern in the Report as this might hinder the progress of the development of the languages (Ndebele Report, 2003). Therefore, there is a need for planning and motivations for students to see value in enrolling in these languages in order for them to develop.

There are recommendations that are made on the report (2003) regarding the development of indigenous languages so that they can be used in HE. The report states that there is a need for national strategizing which would work for national, provincial and local level which would allow for the support and provision of resources for development of indigenous languages (Ndebele Report, 2003). The Report suggests that this can be done through the support of the government entities that already exist such as PANSALB, NLUs and NLBs. Also it would be important to acknowledge the work done in HEIs by academics.

As suggested above, the Report recommends 'regional and locality-specific' criteria that can be used by HEIs when selecting indigenous African language/s to develop. There is also criteria which is recommended for formulating policies with in the institutions. The criteria for selecting a language to develop include:

- Regional and locality-specific criteria: this refers to the region and the language that is spoken in that particular community.
- Concentration of speakers and students: this refers to the majority language spoken by the students as well as the staff members within the institution.
- Availability of expertise: the availability of skills and experts who can teach in the region-specific languages. This would also depend on the policy of each institution as there would be departments within the institutions which will have responsibilities of carrying out the implementation of the policy to assist in developing the language.
- Affordability and the availability of infrastructure: this includes the availability of resources and financial resources to support this development.

Each institution is expected to have in their language policies short, medium and long-term goals demonstrating which indigenous African language/s they have selected for development, and how those goals are going to be met. Such goals should take into consideration the suggestions of made in the Report, e.g. translation of critical texts, terminology development in critical disciplines, training of staff in proficiency in indigenous African languages and research on multilingual teaching methodologies embracing multilingualism. The ultimate long-term goal recommended in the Report is that indigenous African languages should be used as MoIs. There are other recommendations that are made in the Report regarding the development of indigenous languages such as competency in an indigenous language as a prerequisite for employment for first language speakers of English but those are not important for the context of this research.

As suggested above, the HEIs are advised to identify an indigenous language of their choice, in alignment to provincial language policy, for development as medium of instruction. With Rhodes being geographically situated in the Eastern Cape with the majority speakers of the isiXhosa (Maseko, 2011; Kaschula *et al*, 2009), isiXhosa is the indigenous language which is targeted by the Rhodes University language policy (RU Language Policy, 2005 revised in 2014). The RU Language Policy is discussed below.

2.11 THE RHODES UNIVERSITY LANGUAGE POLICY (2005/2014)

As discussed above, it is stated in the LPHE (2002) that all institutions are required to formulate their language policies that demonstrate how they would implement multilingualism in their teaching, learning, research and other practices. The Rhodes University (RU) language policy was formulated in 2003 and as suggested in the LPHE, the policy is supposed to be reviewed every three years. Following the recommendations made by Maseko (2007) that observed that the policy had not been implemented nor reviewed since its adoption, the policy was revised between 2012 and 2014. The primary objectives of the policy related to this study are as follows:

- Promotion of multilingualism in teaching and learning, so as to nurture the linguistic and cultural diversity on campus

- Promotion of academic literacy in English for speakers of LOTE
- Development of multilingual teaching materials in line with the official languages of the institution
- Development of isiXhosa as an academic language
- Promotion of awareness on issues around multilingualism

The objectives stated above are going to be discussed in the next section.

The policy states that the LoLT of the university is English even though the university is supports multilingualism and aims to ensure that language does not act as a barrier to equity of access and success (RU Language Policy, 2005/2014). The multilingual nature of the university community is recognised by the policy and there are strategies which are planned to promote multilingualism in the institution where speakers of less powerful languages would feel respected. In other words, the Policy states that diversity will rather be appreciated rather than assimilating those who speak LOTE, and students will not be excluded because of the language which they speak, and that students will be given a chance to participate in the academic environment of the institution through appropriate language intervention strategies.

The objectives of the policy include promoting academic literacy in English and increasing multilingualism where the status of major languages in the Eastern Cape namely, isiXhosa, Afrikaans and English is uplifted. These provisions of the Policy seek to ensure that no one is excluded in part-taking in academic activities of the university on the basis of race and language, and it also states that other languages that are not stated in the policy will also be promoted to promote linguistic and cultural pluralism on campus. The university encourages the use of other languages as official languages (RU Language Policy, 2005/2014).

The university is seeking to implement its language policy by finding ways which will put measures into place for improving students' competence in English (RU Language Policy, 2005). Academic departments are urged to provide students who have English as an Additional Language (EAL) with learning resource materials which will assist them in continuing using English as a LoLT, as well as their mother tongues. Creation of bilingual glossaries is one of the implementation strategies to realise this specific goal of thee policy.

The School of Languages carries the responsibility of recruiting students into isiXhosa and Afrikaans. Academic vibrancy of these departments means that they can directly influence their development (in the case of isiXhosa) and their use in general academic acts of the university. Development of isiXhosa would mean creation of technical terms and their definitions in different disciplines, and make them available to staff and students as this will assist in learning. As suggested above, language is important for effective learning and learning in one's home ensures this effective learning and consequently, creates valuing of one's language and culture (Obanya, 2004; Paxton, 2009). This does not only promote multilingualism and but contributes directly to the development and intellectualization of indigenous African languages.

The role played by language in learning is acknowledged by the policy and constructive debate about bi/multilingualism on campus is encouraged (RU Language Policy, 2005/2014). The use of additional resources such as glossaries and dictionaries is also encouraged and also that these resources should be made accessible. RU sees language as an important tool in enabling students' epistemic access and success learning. Arguably, it is with this in mind that programmes that support the creation of teaching materials in languages other than English are established (Maseko, 2011). The South African-Norway Tertiary Education (SANTED) Multilingualism Project at RU was established in 2007 and played a critical role in initiating the developing programmes that allowed the use of glossaries in isiXhosa and English to support students speaking LOTE in learning.

2.12 THE RHODES UNIVERSITY-SANTED MULTILINGUALISM PROGRAM

The SANTED Program was established by the national Department of Education and the Norwegian Agency for Development Co-operation (NORAD), in collaboration with some HEIs to assist in the promotion and implementation of multilingualism (RU-SANTED Report, 2010). Rhodes University was also one of the institutions which SANTED collaborated with, and the African Languages Section in the School of Languages received a financial grant from 2007 to 2010 from the Program. The purpose of the RU-SANTED

Multilingualism Project was to promote multilingualism within the university with isiXhosa playing a critical role (Maseko, 2011; RU-SANTED Report, 2010). The project was inspired by the RU language policy which acknowledges English to be the LoLT while it promotes the use and development of other indigenous languages within the Eastern Cape.

There were three programmes that the project focused on. These were isiXhosa second language acquisition programmes, developing teaching and supporting materials for students who have EAL and promoting scholarship in African languages (RU-SANTED Report, 2010).

The isiXhosa second language acquisition programmes focused on vocational programmes where students who have isiXhosa as a second language in the selected professional disciplines were taught the language so that they can interact with the community during their service learning programmes and as professionals when they complete their studies. The second language acquisition courses were offered in Pharmacy, Law, Journalism and Media Studies and Education (RU-SANTED report, 2010).

On the development of teaching and supporting materials the target was those students who speak English as a second language (RU-SANTED Report, 2010). The main objective with this initiative was to provide materials in isiXhosa to support learning in English. The materials which were created were bilingual glossaries and they were created for Information and Communication Technology (ICT); Political Philosophy and Geography/Earth Sciences.

The ICT terminology development project also started in 2007 and focused on students who study Computer Science and Computer literacy and who have EAL in the Computer Science Department. They were being provided with learning materials such as bilingual glossaries and bilingual computer literacy booklet (RU-SANTED Report, 2010; Dalvit, 2010).

The creation of the bilingual glossaries is encouraged by various theories on language and learning which state that learning in language which students are more competent in, especially their mother tongue, is more effective (Batibo, 2010; Bamgbose, 1991). This initiative would not only help the students but also allow the language to be used in high-function disciplines. The promotion of the use of isiXhosa, specifically, gives students speaking isiXhosa on campus and who are a majority (see Chapter ??? discussing student linguistic composition at RU) an opportunity to also gain access to knowledge and that would facilitate to effective learning and, therefore, success of these previously disadvantaged students (Dalvit, 2010; RU-SANTED Report, 2010; Kaschula *et al*, 2009).

There are certain outcomes that were produced by the project and they are as follows:

- Bilingual Computer Science glossary booklet: this was provided to isiXhosa speaking students who were in the ES programme.
- Translation of the RU email system: the translation took place from the collaboration of RU, University of Fort Hare and a South African Software localisation organisation, Translate.org.
- Bilingual Computer literacy course: the course was offered to in-service teachers who were doing Advanced Certificate in Education (ACE) in the Faculty of Education and the teachers would use the course in their schools with their learners. The course was also offered in school learners in Grahamstown and at Dwesa.
- Human language Technology (HLT) courses in isiXhosa were also designed and taught to students in undergraduate to honours programmes at the department of African Languages (RU-SANTED Report, 2010).

The development of a bilingual glossary with definitions in Political philosophy started in 2008 when the lecturer teaching in the course observed under-performance of students who speak isiXhosa in her class. She wanted to explore the possibility of developing bilingual (English-isiXhosa) support materials for learning (RU-SANTED Report, 2010; Maseko, 2011). The material was in the form of a glossary of terms that were developed were selected by the lecturer and students. These were terms which were considered to be the key terms from the point of view of the lecturer (important and difficult to understand in English). The

development of the glossary was done by translators from the RU-SANTED team with the help of Politics senior students and the lecturer. The glossary was appended in the 2009 edition of the textbook *Puzzles of Contemporary Philosophy: An Introduction* (Louise Vincent) which is prescribed for the course. They were also made available online on RUCConnected (a university online learning resource facility) (Maseko, 2011).

According to the RU-SANTED Report (2010) it was not only students who speak isiXhosa who benefitted from the glossary. But with the results of the data that was collected after the completion of the glossary, other students who speak indigenous languages also reported to have benefitted from the glossary. This must be caused by the fact that indigenous languages are related and Nguni languages especially are mutually intelligible (Alexander, 2003; Miti, 2003; Maseko, 2011; Kaschula, 2014). It is also stated in the report (2010) that there was no monitoring of students' and academic staff use of these glossaries, and no evaluation on the appropriateness of the translated terms. This research seeks to respond to that challenge.

2.13 SUMMARY

To sum up, indigenous African languages were a vibrant means of educating society before the arrival of missionaries. Missionaries, however, played a huge role in converting these languages into written form, and initiated their development. This chapter, therefore, has discussed the development of indigenous languages in education starting with the missionaries as pioneers in this regard, as well as their oppression and selective development during apartheid. But then, even though they were oppressed, terminology development occurred systematically but in an orchestrated and selective manner during this time in different subject fields and at lower levels of education. This development used, as a basis, oral knowledge from these languages. For an example, during the times of oral education there were terms which were known in certain institutions by certain people and these terms were created for these contexts. The MTE which was enforced for a certain period through the Bantu Education Act played a role.

It has also been shown and discussed that mother tongue education which was enforced during the apartheid period not to develop the indigenous languages or to make them progress

somehow inadvertently developed these languages, and consequently managed to play a role in the learners' progress as the results were known to have improved when MTE was implemented for a longer period (Heugh, 2003).

In this chapter the way in which the HEIs were linguistically and racially segregated is discussed. The chapter also discussed the period of transition to democracy, including its policies starting from the Constitution and also focusing on the language policies guiding HE, up to the institutional policies. The main focus in the legislation of the post-apartheid period is to ensure equality and equity, and adopt strategies and use of available resource materials to guard against language becoming a barrier of access and success in HE. There are certain policies which have been discussed that show how terminology development can be adopted as a strategy to help to facilitate students' learning. The chapter ends off with a discussion on the Language Policy of Rhodes University, in the context of national language legislation, and gives details on language intervention strategies that the institution introduced in response to policy, as well as scholarship on bi-/multilingual education. Rhodes University is the University on which this research is based.

The next chapter presents the methodology that was used in this study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter provides a contextual background of the study focusing on legislated and voluntary language planning activities that have taken place since the beginning of print in African languages and isiXhosa to be specific. The context discussed focuses more on legislation that include HE and RU is given more attention as it is the site in which this research has been conducted in. In line with research that supports mother tongue in facilitating effective learning, the main objective of the study is to investigate the university students' perceptions on the use of bilingual glossaries as a means to facilitate bilingual teaching and learning in the context of a multilingual South African HE. This chapter evaluates the methods that are used in investigating the research problem of this study in order to achieve its objectives, as presented in Chapter One. The research methods and techniques will be presented and discussed in relation to their suitability in achieving the different research objectives.

The first part of this chapter discusses the sampling for the study, the second the research design of the study, while the third part discusses the type of research methodology and the research methods adopted in the study. The methodological implications for the research design, methodological and research methods selected will also be discussed

3.2 SAMPLING

Sampling is defined as a systematic way of selecting the participants that one intends to investigate or study (Baker, 1988; Cohen *et al*, 2011). This is when the research informants are identified to expand on the features that they might have and the features which are going to be studied. There are different types of sampling available in social research. Some of these are purposive sampling, snowball sampling, quota sampling as well as convenience sampling. The type of sampling which is going to be used for the study is purposive sampling. Silverman (2010) and Baker (1988) describe purposive sampling as where a certain

case has been chosen because of the manner in which it illustrates some features which the researcher is interested in. Berg (1998) states that researchers use their special knowledge about the group which they want to select their participants from. Also, the researcher uses certain similar features when selecting participants (Silverman, 2010). There are certain features and characteristics that the participants have, that are significant in the realisation of the objectives of a study, which then encourage the researcher to use this type of sampling. In the context of this research, there are features such as the LOTE being the home language of the students, the socio-economic background of the students, and students having attended ex-DET schools.

The first participants of this research from whom the preliminary data was collected are the students who studied with the researcher in the Politics and Sociology ES class in 2009 at RU. In November 2013, ten of these students were sent emails and were requested to take part in the study. During this time, six of these students were still in the university. The students were requested to take part in the study by filling out questionnaires that were sent to them by email. Out of the ten students, nine of them responded consenting to take part but only five of them filled in the questionnaires. The students were selected because as indicated above, the researcher was in the same class with them and all used the glossary in the Politics module. Because of our schooling background, we were enrolled in the ES programme and the similar features we have relevant to this study is that we all used the glossary when we were enrolled for the course, and speak LOTE as home language, and therefore, English as a second language. The students were also selected because I wanted to see if they encountered the same language-related and conceptualisation problems as those of the current students.

The second participants of the research are the students from the Extended Studies Unit (ESU) and were enrolled in the ES programme in 2014. The Politics and Sociology class consists of thirty-nine (39) students with different schooling background. As discussed above, the students have been put in the ES programme because of the features that they share. These features are as follows:

- Most students in this class speak LOTE as their home languages. Further, most of the students, largely because of their schooling background (mostly ex-DET schools) where they are taught in both their mother tongue and English are, considered not to be sufficiently prepared for the academic demands of a university.
- The students have not met minimum university entry requirements but portray potential of succeeding (Tanyanyiwa, 2014; RU Extended Studies website, 2014).
- Students who are coming from disadvantaged schools and social backgrounds (Dalvit, 2010; RU- SANTED Multilingualism Project Report, 2010) with no adequate resources but portray potential.

The students were sampled because of their almost homogenous features as has been stated above, and the research is on the use of bilingual glossaries that could be used to support learning. In other words, because of the students' schooling background where epistemic access is a challenge, the study investigates language support, particularly use of multilingual glossaries in facilitating learning. It is argued that that students with such challenges need adequate support to facilitate their learning in order for them to be able to participate in the construction of new knowledge (Maseko, 2011; Dalvit, 2010). The students were suitable as participants because they are a manageable group and because of their linguistic composition. The students have also been chosen because in the ES programme the classes are small, which makes it easy to observe and interact with students, and not to treat them as the 'other' or as 'subjects'. According to Dalvit (2010: 88)

“Foundation programmes are strategically important for South African universities at the moment, given the emphasis from the government on access to higher education for members of marginalised communities. Students in such programmes are therefore the focus of much research in a number of disciplines, ranging from Education to Sociology, from Linguistics to Economics.”

This means that I had to be careful during the time data collection period and interact with the participants as much as I could so that I can be able to always keep a good relationship with them throughout the study.

The planning of this study occurred prior to it being undertaken and this was done to minimise errors due to poor planning. Prior to undertaking the study, the Dean responsible for

teaching and learning at the University was consulted to give permission to do the study. It is therefore the requirement of the University to consult the Centre for Higher Education, Research, Teaching and Learning (CHERTL) under which her portfolio falls, if one conducts research on students that are enrolled on the ES programme. The Political Science lecturer who teaches the Political Philosophy I module in the ESP was also consulted about the module, particularly her teaching plan in the first term of the semester of 2014 when the researcher was to collect data. Permission to do the research was also sought from the current ESP students. The researcher wrote a letter requesting permission to gather data from the students during the course of the module (see Appendix A). In the letter, the students were also ensured about the confidentiality of their responses and that they may withdraw from taking part in the study whenever they want to.

3.3 THE DESIGN OF THE STUDY

The methodological approach which this study is going to take is a case study. A case study is defined as an approach that investigates or tests thoroughly a research problem under study to understand its response to real-life stimuli, using relevant theoretical frameworks (Cohen *et al*, 2007; Berg, 1998; Yin, 2002; Silverman, 2010). This study examines theories that illustrate that learning using one's home language is beneficial for conceptualisation and effective learning (Cummins, 1986; Batibo, 2010; Bamgbose, 1991). Therefore, it is important that one's home language is maintained and developed for as long as possible in learning. Given the South African context, where mother tongue education only benefits a minority of learners and students whose home language is either English or Afrikaans, access of students speaking African languages to learning resources in their home languages is a big challenge in SA HE, and this has an impact of students conceptualisation, and by implication, success in their studies (Madiba, 2010). Some SA HEIs are starting to develop bilingual and multilingual learning resources, where at least one of the languages is an indigenous African language and as indicated in the previous Chapter, RU is one of those institutions.

In the context of this research, this study seeks to investigate whether the students in a particular course use bilingual glossaries or not. It seeks to study the motivation behind their

use or disuse, as well the manner in which they use them. Further, the study will also investigate whether the students find these resources to be helpful. Because this study investigates real life events, the researcher has no control over certain events and is often required to adjust to the situations which she might find herself to be in. In other words, the researcher would have to adapt to the research environment when it is changing as there is no control over the situations. Cohen and others support this view by stating that a case study investigates a unique and dynamic interaction of events in unique contexts (Cohen *et al*, 2007). This means that things could change within the research anytime, even though the structure is usually given but there might be change within the setting (Berg, 1998). With this kind of setting, usually the researcher has no control over the events. In the context of this study, for an example, the research field is a university classroom and in this context classes could be cancelled, which means that there could be a delay in the data collection process, students' participation in class could also be influenced by a task that they are required to undertake on the lesson of the day on which the data is being collected, and their participation might not be reflective of everyday class proceedings. But as stated above in the definition, a case study is a suitable research design for the theoretical framework that supports this study because in systematically observing students' behaviour over an extended period of time, as a researcher I will be able to investigate trends in students' behaviour in use of learning materials available in languages other than English.

Over and above the uncontrollability of participants' behaviour, the characteristics of a case study research design include analysing empirical situations by investigating and making sense of the unique and dynamic interaction of participants in unique contexts. These characteristics render this study fitting in this research design because it seeks to investigate the use of multilingual resource materials in a classroom setting where, because the main language of teaching and learning in the classroom is English, use of other languages is not structured, and can occur involuntarily amongst participants. The students in the ES Programme enrolled for the Political Science 1 course have similar characteristics. They are placed in the ES Programme because they have been differently-prepared in terms of schooling background than most students in main stream of study at university and do not meet the minimum university entry requirements even though they portray a potential of succeeding at university (Tanyanyiwa, 2014). Further, most of them have English, the

common MoI of HE, as a second language. In other words, they share common characteristics in terms of schooling background, language background and race.

The ESP programme of the Humanities Faculty at RU has two subject combinations, Journalism and Anthropology, as well as Politics and Sociology. At first year student who are enrolled in the ES Programme in the Humanities Faculty are allowed to choose between the Journalism and Anthropology or the Politics and Sociology combinations. As indicated earlier, The ES Programme is meant for students whose schooling background, amongst other things, does not prepare them sufficiently for academic demands of the university, and therefore, do not have enough entry points required for university, specifically RU, but show potential to succeed (Tanyanyiwa, 2014; RU Extended Studies website, 2014). Most of these students come from former DET schools. During their first year, students in the ES Programme receive extra tuition in small classes where they are given extra skills necessary for participating in HE such as skills on academic writing and referencing. The aim of the bilingual Political Philosophy glossary developed in the SANTED Project was one of the intervention strategies to assist the students. This study, therefore, investigates whether the provided bilingual glossary (English-IsiXhosa) is used in the Political Philosophy 1 class, how it is used and if not, why it is not being used. The students' use of the glossary in the classroom is going to be observed. In a case study research, the researcher is allowed access into the real life context so that they contribute to existing knowledge of a phenomena and this is what this study is also intending to do.

This study intends to investigate issues around language and epistemic access for students who are underprepared for university because of their schooling background which limits their meaningful participation at university in the construction of knowledge. According to Boughey (2005), Paxton (2009) and Simons (1993) epistemological access refers to instances where students participate in the construction of new knowledge; this is when a student participates in the transformation of new knowledge rather than perpetuation reproductive conception of learning. The study also carries an advantage of providing home language intervention strategy in assisting students to acquire good quality education as, according to the theories of language and learning (Cummins, 2000; 1986; Batibo, 2010; Bamgbose, 1991; Vygotsky, 1986), home language can be used in facilitating meaningful learning. Lastly, the

use of isiXhosa through terminology development will also contribute to language development as the language will be used in creating technical and subject-specific terms that are used in Political Science. The research goals discussed in the first chapter clarify what the study is intending to do and this motivates why a case study approach has been adapted.

3.4 TYPE OF RESEARCH METHODOLOGY

The research is using a qualitative research methodology in collecting, presenting and analysing the data. As compared to quantitative research methodology, qualitative research methodology is considered to be a relevant methodology in describing people's behaviour, attitudes and experiences about a certain phenomenon (Taylor & Bogdan, 1998; Bryman, 2012; Berg, 1998). The comparison between qualitative and quantitative research is provided in the next section.

3.4.1 Qualitative and Quantitative Research

According to Bryman (1988) and Silverman (2000), quantitative research measures quantity and amount of data through statistical analysis. This type of research methodology is known to measure frequency of the occurrence of a certain phenomenon instead of why it happens and uses surveys, amongst other things, to collect data. One of the primary techniques for collecting data in qualitative research is participant observations and interviews (van Maanen *et al*, 1982; Silverman, 2000)

Qualitative research deals with meaning of events and it seeks to understand an identified research problem from the participants' perspectives (van Maanen *et al*, 1982). In the context of this research, the study seeks to investigate the use of bilingual glossary in the Political Philosophy I class, and whether the bilingual glossary and the reasons for its use, as put forward by the students. The researcher will then discern whether its use is to facilitate learning. The strengths of this research methodology are going to be briefly discussed below.

3.4.2 The strengths of qualitative research

According to Mason (2002); Bryman (1988) and Berg (1998) qualitative research uses methods that are sensitive and flexible to the social context and this is so because qualitative research is usually about real-life contexts. This allows the researcher to understand their subjects and connect with them as they interact in real life situation. In this study, the researcher will be able to engage with the participants in their learning and teaching environments in an attempt to gain trust from them through using certain research methods. The research methods are discussed below.

Qualitative research is known to be more practical, so they are able to provide empirical evidence to support or refute the theoretical framework of a particular study. For an example, the theories of language and learning are brought into practice in this study where it is illustrated that using one's home language when learning can be more beneficial. Also in this study, the theories of terminology development, especially around the creation of terminology to produce knowledge (Antia, 2000) will be put into practice through the creation of a Political Philosophy bilingual glossary.

- Mason (2002) states that qualitative research has methods that provide balanced contextual understandings because of the detailed data it generates. In other words, qualitative research manages to take the researcher through the research process and allows the researcher to become part of it. This, according to Bryman (1988), allows the researcher to provide detailed descriptions of the research participants in a social setting which they are investigating. In other words, they go behind the describing phase but also analyse the contexts which they are studying.
- The flexible and unstructured nature of qualitative research allows detailed analyses of the context and this allows more room for any possible unexpected events (Bryman, 1988; Berg, 2001).

Qualitative research is known to be able to describe how a certain phenomenon impacts on the lives of the research informants. In the context of this research, variety of techniques such as participant observation, questionnaires and interviews methodology

are going to be used in assessing how students perceived and experienced using multilingual glossaries as an intervention to facilitate learning in HE, as well as motivation behind their perceptions and experiences. These techniques are going to be used as a tool to reach the goals of the research. The data of the research is going to be collected at ESU where the students will be attending the extra classes.

The tool which is going to be used in extracting data in the last stage of the research uses both qualitative and quantitative research. This tool is going to be discussed further under the corpus extraction tools. The quantitative methodology is going to be used during the corpus extraction process when a Wordlist frequency feature will be used to determine the terms with higher frequency from the text. According to Davies (2007: 9-10), the purpose of quantitative research is to discover answers by using scientific applications. The use of the corpus extraction tools to measure the frequency of the terms is going to be used for this purpose.

The software for the extraction of data will also use qualitative methodology. This is when the terms selected will be defined but to ensure their accuracy in terms of the context which they are used in, the Concordance feature is going to be used. The purpose of the Concordance feature is to look at the use of the term in different contexts and this tool is going to be discussed in detail in chapter seven when discussing the process followed when extracting the terms. The next section is going to look at the research techniques used in this research.

3.5 RESEARCH TECHNIQUES

This section is going to discuss the research techniques that were used and their viability in collecting the data. Research techniques that will be used in this study are participant observation, questionnaires as well as interviews and these will be discussed in this section.

3.5.1 Participant Observation

Participant observation is defined as a research technique where the researcher joins and interacts with the research participants in the social setting of participants to collect data (Taylor & Bogdan, 1998; Baker, 1998; Cohen *et al*, 2011). With participant observation, the researcher might be a stranger to the scene or an actual member of the group which is being observed (Baker, 1998). In observing the participants in their social setting, the researcher tries to understand the behaviour of the participants in their existing setting by immersing him or herself within the field and becomes part of it (Cohen *et al*, 2011; Baker, 1998). In this study, I was considered as a stranger by the students as I was not attending the same class as them. This made it very important for me to be part of the group and make them as comfortable as possible. Cohen *et al* (2011) see observation as a method of gathering live data from naturally occurring events. One can say that the researcher gets first-hand information of what is happening within the setting and they do not have to rely on second-hand accounts.

For this study, semi-structured observation was followed. This refers to where there is a certain agenda of issues that the observer is looking for but they might not necessarily follow the structure that they had in the beginning on how they would carry out the observation. The observer usually comes to the research field with an agenda of issues in mind uses an unsystematic manner to collect data that will highlight the issues (Cohen *et al*, 2007). Documenting the events systematically will allow the researcher to identify trends and behaviour of participants under certain contexts. The use of this type of observation for this study is motivated by the methodological approach of the study which is a case study. As it has been stated above, case studies usually determine their own direction as they occur in empirical settings which make it difficult for one to follow a strictly structured plan. Participant observations are recommended for case studies because researchers manage to witness the on-going behaviour at the time it happens and this allows them to take notes about the features which they have noticed. In this study, I attended the ES Politics 1 classes with the students where I systematically observed and described students' behaviour regarding the use of LOTE in a classroom context, especially the use of the multilingual glossary.

During the observation I observed whether the students use the glossary which they were provided with, which language they were using when they were learning in class with the lecturer and also when they were discussing issues among themselves. With the linguistic composition of the students, it was interesting for me to see which language the students use when the discussing the school work among themselves and with the lecturer. This also helped me to see if there were any other concepts that were in English that the students struggled to understand. Cohen *et al* (2011) states that observation also helps the researcher to see things that participants might not freely talk about in interviews or answer them on questionnaires. This method has helped me to see if the students used the glossary in class and confirm some of the responses that they gave in the questionnaire. Observing ES Politics 1 classes benefitted me to get a full image of the class rather than only getting a description which was given by the participants during interviews and in the responses of the questionnaires.

In participant observation the observer is not only able to look beyond perceptions about certain context, but also gets a chance to gather data on several settings. Morrison (1993) (cited in Cohen *et al*, 2011) states that observation allows the researcher to gather data on physical setting; human setting; interaction setting as well as programme setting.

To explain these types of settings in the context of this study:

- The physical setting refers to the environment and how it is organised (Morrison, 1993). The researcher will be able to see how the class is organised and the way the students are grouped or sitting in within the class during the lecturer.
- The human setting according to Morrison (1993) refers to the characteristics that the people have among the group and the features that make up the group itself. This would refer to the schooling background or home language of the students in the class.
- The interaction setting refers to the type of interaction which takes place. With this type of setting, the researcher might look at how the students interact, which language they use when they interact together with the lecturer discussing the content of the

module, and also which language they use when they are discussing together without the lecturer.

- The programme setting refers to the resources which are being used within the organization and how they are organised (Morrison, 1993). This setting is important for this study, because it includes the use of resources that are available for the students when learning and yet the study also seeks to gather information about the use of the resources such as glossaries that are available to facilitate learning.

Even though participant observation is very useful to the researcher in terms of gaining first-hand information, there are certain weaknesses that this method carries. Cohen *et al* (2011), Ostrov & Hart (2012) and Berg (1998) discuss some of the disadvantages of participant observation as follows:

- Attention deficit is defined as when the observer gets distracted, looks away and misses an event while observing (Cohen et al, 2011; Baker, 1998). The purpose of the observation in this research was to look at the use of resource materials when learning and also whether the students use LOTE in the classroom context. The questionnaires and interviews were used to also confirm with the students individually the events that occurred in classroom while learning, and in a way these other techniques mitigate against the shortcomings presented by the participant observation technique.
- Ostrov & Hart (2012) and Cohen *et al* (2011) state that another disadvantage of participant observation is reactivity or participant reactivity. This is when the participants change their behaviour because of their awareness that they are being observed. When this happens, the participants tend to behave in a way which they think that the researcher wishes them to act in. In this study it would have been difficult for students to change how they behave as they were in a classroom setting and were expected to act in a manner which will allow them to participate in learning activities that are done in class. In most classes, the students were expected to interact with one another as well as the lecturer. Therefore, there was no time for them to “act” for the researcher while they were busy with their tasks. Ostrov & Hart (2012) state that when reactivity occurs the observer should remain with neutral expressions and not show response towards the participant.

- Cohen et al (2011) notes that many observations carry with themselves the risk of bias from the observer. It is possible that the observer might enter the field with subjective knowledge and with their own interests and choose ignore other issues. In this research, I have used questionnaires and follow-up interviews to pick on issues that might have been missed during observations. The next section is going to use surveys that were used during the data collection process.

3.5.2 Surveys

Surveys in qualitative research are defined as methods of collecting data with identical questions and with an intention of describing the nature of existing conditions (Cohen *et al*, 2011; Baker, 1988). In this study, surveys have been used to investigate the past as well as current students' experiences on the use of the bilingual Political Philosophy glossary. The surveys were used for the past students in the form of questionnaires, then with the current students and these were the first data collection method to be used in this research followed by semi-structured interviews.

Interviews according to Berg (1998) are known to be the most liked “digging tool” by social researchers as social scientists rely on verbal accounts of the subjects' experience of the phenomenon being researched, and the interviewer also gets to gain first-hand knowledge regarding what people say. This method assisted in following-up and complimenting the information that was given on the questionnaires. Bryman (2012) states that there is a need for interviews to follow-up because of less reliability of questionnaires as participants see the all the questions before they answer, so their standpoints might change as they see each question.

The type of questions that were asked on the follow-up interviews were sometimes guided by some of the responses which were provided on the questionnaires. Some of the questions during the interviews were similar to those on the questionnaires. This happened because the interviewer needed to confirm some demographic information such as the respondent's home

language. Some questions on the respondents' experiences on the use of the bilingual glossary were also repeated so that the answers given can be probed when necessary.

There were also some preliminary surveys that were done prior to the collection of the main data. One of the main reasons for conducting preliminary data was to observe whether the same problems that the previous students encountered when using the glossary would be the same as those of the students the research is focusing on. The next section is going to discuss questionnaires with a brief introduction on how this research method was used in the preliminary surveys.

3.5.2.1 Questionnaires

As indicated under the section on Sampling, a call was made to past students and nine responded. Questionnaires were sent to the students by email and were asked to take their time when replying and they did not have to answer and send them immediately. Only five students replied back the email with the questionnaires. As the survey was done only to look at the overall experience of the glossary from the people that had used it after it was disseminated, the number of the people who responded could not affect the results of the research.

Questionnaires were used to find out whether the students used the glossary during their time of study and also their overall experience with the glossary. According to Weisberg *et al* (1996) and Aldridge & Levine, (2001) (cited in Cohen *et al*, 2011), most surveys in qualitative research combine nominal data with other scales such as attitudes; opinions and experience. The questionnaire included questions which were enquiring about the respondents' mother tongue; whether they used the glossary and their experience of the glossary.

Babbie & Mouton (2001) define questionnaires as a document that contains questions which aim at finding written answers or information from the participants in a particular survey. According to Baker (1988); Berg (1998) and Cohen *et al* (2011) there are two groups of questions that are usually posed on questionnaires and there are factual as well as subjective questions. Factual questions are usually asked to acquire background information about the participants such as their gender, age and the language which they speak. Subjective questions on the other hand refer questions which obtain information about the participants' experiences, beliefs and opinions (Cohen *et al*, 2011).

Questionnaires were used in this study to obtain information about the students' home languages; the language which was used when learning in high school and their experiences on use of the bilingual Political Philosophy glossary. The information on the students' general perceptions regarding the use of additional materials such as bilingual glossaries and dictionaries to facilitate learning and the use of English as language of learning were obtained using questionnaires.

Both close-ended and open-ended questions were used in the questionnaires. Close-ended questions are where the participants are provided with different options where they get choose an answer which they think will express their opinions or sometimes provide short answers to the question being posed to them (Silverman, 2010; Cohen *et al*, 2011). Open-ended questions allow the respondents to elaborate on their experiences and perception freely (Silverman, 2010). Close-ended questions were mostly used where the students were asked about their use of the glossary, the languages they were taught in high school and the languages they learnt as subjects in high school. Open-ended questions were used to investigate the students' use of the bilingual glossary, its usefulness and the students' opinions on the use of LOTE at university.

There were two sets of questionnaires that were distributed to the participants. The first set of the questionnaires was distributed to the students at the beginning of the term when they are starting with module. The purpose of the first set was to gather students' perceptions about the use of multilingual resource materials as well as the use of LOTE to facilitate learning at

university. This helped to get the students' viewpoints and understand their high school experiences compared to what they were experiencing in their first year at university.

Most questions that were used in the first set were close-ended and factual questions. As stated above, factual questions enquire about the respondents' background and other factors such as gender, age and marital status (Cohen *et al*, 2011). These close-ended questions are used when respondents are expected to select one response from multiple answers that they are given (Cohen *et al*, 2011; Baker, 1988; Silverman, 2010). In this set of questionnaires, close-ended questions were also used in the form of "rating and semantic differential". This is when the participants are given structured response categories and they have to rate their responses on scales such as from 'strongly agree', 'agree', 'disagree', 'strongly disagree'. These types of questions were used to gather students' opinions about the use of multilingual glossaries as well as LOTE at university. There are also other questions that required 'yes' or 'no' answers and these form under close-ended questions.

The second set of questionnaires was distributed in the middle of the term. This is when the students had access to the bilingual glossary as it was distributed to them. The purpose of the questionnaires was the students' experiences of the bilingual glossary whether they used the glossary; they found it useful and their general opinions about the terms that were in the bilingual glossary. Some questions in the questionnaire were asked to help the researcher with deeper understanding of certain issues that the students might have regarding multilingual glossaries. Open-ended questions were used for this purpose as Silverman (2010) states that they help to understand one's opinions and experiences. Also, they helped and gave space to the participants to answer the questions and give meaningful responses for each question that was asked. The respondents according to Silverman (2010), when answering open-ended questions elaborate and give meaningful, unexpected and explanatory responses. This is when the researcher gets to probe initial responses with questions such as "why" or "how" (Silverman, 2010). Follow-up interviews were used to complement some of the responses given by the students. These are going to be discussed below.

3.5.2.2 Follow-up interviews

Interviews are defined as question-based conversations between the researcher and the respondent (Mason, 2002; Cohen *et al*, 2011; Berg, 1998; Baker, 1988). Interviews according to Berg (1998) can either be face-to-face or over the phone. Face-to-face interviews were conducted in this research as I requested the participants to meet up for individual interviews. The interviews were held between the 14th and the 16th of May 2014 in the RU main Library. The interviews were held at this time as they were following up on the questionnaires and they were set to be conducted when the Political Philosophy I module was over, so that the participants can reflect on their experiences and their use of the bilingual glossary. The students that were selected for the follow-up interviews were those who had indicated in the questionnaires that they had used the glossary. The students who stated that they did not use the glossary were not interviewed because they had stated in the questionnaires their reasons for not using the glossary. The main purpose of the follow-up interviews was to get students' experiences on the bilingual glossary.

There are three types of interviews that have been acknowledged by many scholars (Silverman, 2010; Taylor & Bodgan, 1998; Baker, 1988; Berg, 1998; Mason, 2002). These are structured interviews, semi-structured interviews as well as unstructured interviews.

Structured interviews are guided by certain scheduled guidelines that the interviewer is set to strictly follow (Silverman, 2010; Berg, 1998). In structured interviews the interviewers are expected to ask respondents to answer each question in the sequence that the questions have been planned. According to Babbie (1995) (cited in Berg, 1998), this is done so that the interviewer can be able to compare the answers given by the respondents. Researchers come to the interview with complete ideas of what they would like to ask their respondents.

Semi-structured interviews according to Berg (1998) are used when there are questions which are typically asked and they might be constant but the researcher is allowed to probe beyond the answers which they are given and ask other questions to clarify issues and get

more information. This will allow the interviewer to ask the respondent any question which will be guided by a response that the interviewer found interesting. The respondents in semi-structured interviews are given a chance to express their viewpoints even though the interviewer is still guiding the interview.

An unstructured interview is where there are no schedules or guidelines of questions (Berg, 1998; Silverman, 2010). Respondents in an unstructured interview get a chance to express their opinions fully as they provide an extensive response. According to Schwartz & Jacobs (1979) (cited in Berg, 1998) in order for the interviewer to develop appropriate questions they must generate probing questions through the answers that are given by the respondents.

Semi-structured follow-up interviews were used in this study. There were questions that were drawn from the responses provided in the questionnaires. These questions were used as a guideline for the interviews, but I allowed the respondents to elaborate further on certain issues that kept on coming up during the interviews. Semi-structured interviews allowed the interviewer to ask the respondent any question while guided by a response that was given and which the interviewer found useful.

The semi-structured follow-up interviews also encouraged the participants to reflect more on language issues such as the use of LOTE at university in order to facilitate learning. For an example, I could ask a student about a certain issue such as the use of English being the only language of teaching and learning at university and the student would get to express their opinions about the issue while bringing up other issues such as understanding the language but not understanding other terms which are in the language.

3.5.2.3 Content Analysis

Content analysis is defined by Krippendorff (1982) as a method that is used to analyse communicative texts to evaluate meaning contained in the texts. Cohen *et al* (2011) defines

content analysis as set of procedures that are followed for the examination of the contents of a particular written data. The content usually consists of written documents, transcriptions of written or verbal communications (Berg, 1998; Baker, 1998). Content analysis focuses on the linguistic features; language as well as the meaning in context and that, according to Cohen *et al* (2011), is easy to verify. Because the data being analysed is text and is in permanent form, Cohen *et al* (2011) states that this allows possible chances for re-analysis as well as verification.

As the purpose of content analysis is to evaluate the appropriateness of the meaning within the text, content analysis is going to be used in this study to compare some of the terms and definitions in the bilingual glossary created during the RU-SANTED Project to those with the terms that are going to be developed for the bilingual glossary. The terms are going to be developed through translation, therefore, the theory of translation equivalence and competency is going to be used. This theory with the methods and approaches used in translation are going to be discussed in the next chapter.

Content analysis is going to be used paying particular attention to the term-creation strategies employed in the development of this glossary. This technique will be used for the purpose of a theoretical appraisal of the terminology and explanations which will be contained in the glossary. The terms which are going to be developed are going to be translated from English with their definitions and then evaluated to see whether equivalent meaning has been maintained between the English and isiXhosa definitions. According to Newmark (1981), it is important that when translating the target text replaces the source text. When evaluating text which has been translated the theories of translation are employed in order to evaluate whether equivalent meaning has been reached. Therefore, this method is going to be used to examine if the meaning from the source text (English) has been transferred appropriately. There are term extraction tools which are going to be used in the development of the bilingual glossary. This is a part of the study where a model for terminology development in isiXhosa in HE and this is going to be discussed.

3.6 TERMINOLOGY DEVELOPMENT: TERM EXTRACTION TOOLS

The last part of the study is development of a model for the development of isiXhosa glossary to support bilingual education in HE. The data will be extracted from the prescribed textbook *Puzzles in Contemporary Political Philosophy: An introduction* (2008) with the permission of the lecturer. The selection of the terms is going to be through the students' manual selection of terms as well as frequency through using WordSmith Tools (WST). WST is going to be used as the corpus linguistic tool to extract terms. The WST is considered to be one of the best software tools that assist in extracting terms and it can be used when creating glossaries, dictionaries and other terminology lists (Taljard & de Schryver, 2002). WST is used to show the pattern of frequency and concordance of terms that are available on corpora (Scott, 2004).

Selecting terms through frequency refers to where a wordlist of terms is generated using WST. The words are selected in a manner of sequence in which they have been used frequently (Taljard & de Schryver, 2002). However, according to Maseko (2011) and Taljard & de Schryver (2002) words with high frequency in a text are not necessarily concepts but are usually conjunctions, possessives and pronouns, and therefore do not represent concepts. The wordlist will be "cleaned" and words that represent concepts are going to be selected and those that do not will be discarded. The selected words are going to be generated into concordances. Concordances as allows one to list words in different sentences where they appear in the text and with this one is able to deduce contextual meaning so as to generate appropriate and accurate meaning of the terms. With my background of Political Science and having majored in the discipline, the use of various Political Philosophy textbooks and dictionaries I will be able to provide meanings and definitions of the terms. The last stage is going to be the translation of the terms and definitions into isiXhosa.

3.7 CONSENT TO CONDUCT THE RESEARCH

The research was proposed to, and approved by the Rhodes University's Humanities Higher Degrees Committee (HHDC) in 2013. The HHDC consists of faculty members from various departments and they hold meetings about certain research proposals and recommend to the

Faculty board for approval if the research seems viable. Before the proposal was submitted to the HHDC, it was approved by the Head of School of Languages.

It is often the recommendation of the HHDC that if research involves human beings, that ethical clearance or consent to do research is sought from those from whom data would be collected. In accordance to this, the students who participated in the surveys that were preliminary to the “main” data collection process were also requested to give consent to participate in the research, particularly in filling in the questionnaires which were distributed among them. The students were made aware that their participation and responses would be kept confidential, their identity would be kept anonymous and that their responses would be used only for the purposes of this study.

The Political Philosophy lecturer was also contacted and requested for permission to use her textbook, *Puzzles in Contemporary Political Philosophy: An introduction* (2009) which is the prescribed textbook for the Political Philosophy 1 students to extract data.

3.8 SUMMARY

This chapter has discussed the objectives of this study; the research design; research methodology as well as the research techniques that have been used to achieve the objectives of the study. The qualitative research methodology that this study has adopted has been discussed as well as the research techniques. This study used qualitative research methodology; this type of research methodology has been discussed with its strengths and weaknesses while it has also been compared to quantitative methodology. The research techniques that have been used in this study have also been discussed and motivated. These research methods include questionnaires; participant observations; follow-up interviews as well as content analysis. The next chapter is going to discuss the theoretical framework which this study is based on.

CHAPTER 4: LITERATURE REVIEW

4.1 INTRODUCTION

This chapter presents and discusses work by respected scholars on the relationship between language learning. The main focus is bilingual teaching and learning, using terminology development. The first section is going to be on language and conceptualization and it is exploring the relationship between language and conceptualization. This section shows that thought and language are related, which is why the language which one thinks in (usually the language which a person was nurtured in) should be the same language which is used for learning. There are various theorists that are going to be used to illustrate the relationship between language and conceptualization and that it is important for one's first language to be used for learning as that will facilitate their cognition.

After the relationship of language and conceptualization has been illustrated, it will be shown that this theory is not applied in some SA HEIs because of the language of teaching and learning. Concepts of bilingualism and bilingual education are also introduced and discussed. This chapter will define bilingualism, its aims and objectives will be given to show how one can benefit from bilingual education. It will also be shown that bilingualism and bilingual education help with cognition when bilingual education has been applied. The theory on language proficiency and academic achievement is going to be discussed. This theory shows how one's competency in a certain language can help them to learn effectively. This theory does not guarantee success but it will be shown that language competency play a critical role in one's learning.

Lastly, the theories of language planning, terminology development as well as translation are going to be discussed. This section encourages the use of additional languages for learning as it would enable epistemic access for students which will eventually lead to success. Boughey (2009) defines epistemic access as where the students will have access to knowledge and that will enable them to contribution to construction of knowledge within the university. Terminology development can be one of the strategies that can be used for enabling epistemic access and this will be illustrated through the use of creating terminology. The theory of

terminology development will be discussed and how terms can be created for different high-function domains. The relationship between language and cognition and terminology development is going to be illustrated and how terminology development can aid for effective learning. The first theory which is going to be discussed is the one of language and conceptualization and how these two are related.

4.2 LANGUAGE AND CONCEPTUALIZATION

The ability to understand and speak a language is performed through having an internal representation of linguistic knowledge and this linguistic knowledge is the one that allows one to perform in both academically undemanding and demanding situations. One would have to acquire, convey and store what is said using language (Pederson & Nuyts, 1997: 6). There is a need for internal representation of knowledge about the world, not only to know about physical world but social and psychological world. This means that humans need conceptual knowledge about certain things and that knowledge can be articulated through language. So, one is aware of what is happening and have conceptual knowledge. Therefore, in order to express themselves externally, humans need the language.

According to Levinson (1997: 14-15) there are theorists who do not see a distinction between language as well as conceptual representation and he calls these theorists “lumpers”. There are also those who separate the two (language and conceptualization) and he calls them ‘splitters’. Theorists who see language and thought to be related, Levinson argues, also assumes that ‘language of thought’ is an entire part of our biological legacy. In other words, it is seen as a skill that we are born with and Levinson (1997) finds this assumption problematic because of the nature of semantic diversity. Levinson (1997) states that it is important to acknowledge that some elements of conceptual representation are inescapably identical to those of linguistic representation. One would explain this argument with the fact that anything one says first thinks about it and speech acts as a representative of what one is actually thinking, so in a way language is related to conceptualization or thought. Language is used for the purpose of producing speech where one finds ways of putting ideas together and when the language has not yet been provided with their lexical items it is called

conceptual representation (Levinson, 1997). In other words, one has inner speech which is thought and when this speech has not been produced externally without any lexical items it is called thought and once it is carpeted with the lexicals then it changes into speech. But the main question is whether the way we think in corresponds suitably with the representations that encode linguistic meanings. Levinson (1997) says it is important to also note that there are non-linguistic thoughts that could not relate to linguistic meanings. He makes an example of certain visual images and also an appreciation of a smell. These examples show that somehow not everything which is in our minds can be produced into speech or language.

The question of the relation between language and thought can be rather asked as ‘is the way in which we think in reflected on how we speak?’ Most theorists and those who support the argument that there is no distinction between language and conceptualization would argue that there is a relation between these two but there are those ones who do not agree and this part will show the reason why they might not agree. When ‘splitters’ separate these two they argue that the language has certain accidental gaps that need to be paraphrased in order for them to make sense and these does not happen in conceptualization (Levinson, 1997: 28). For an example, English does not have a word for ‘sister of my mother’ or ‘sister of my father’ and both of these are referred to as aunts. So, these two can be paraphrased and be made explicit depending on a context that they are being used in even though when one thinks they have an idea of what they are talking about but when it comes to represent it externally it changes. So for splitters that makes them separate. Another example would be where isiXhosa does not have a word for ‘blue’ and a term which is usually used is ‘*luhlaza*’ which means green so, when one is talking about something which is blue when they are expressing they would say “*eluhlaza njengesibhaka-bhaka*”.

These theorists say that there are other notions that cannot be explained even though one does have an idea in their mind. Levinson (1997) makes an example of where one says “the ball is on the left of the tree” and says that in other languages there might not be a term for left and also a term which will show a direction that assumes a triangulation between an observer, the ball and the tree. So, when these organising systems are not being used in a certain language while the speaker has an idea of what they are talking about, it would be difficult to say language and thought are related.

There are also instances where one cannot be able to articulate certain properties and shapes. An example is where it is hard to provide a linguistic expression for faces, smells and so on (Levinson, 1997: 33). Splitters argue that these expressions can only be shown when using a certain language of thought which cannot be shown in words and this 'language of thought' is part of mental representation in which we think in. one can argue and say that the fact that there is 'language of thought' that exists shows that language (speech) somehow is related to thought and language represents one's thoughts, even though there might not be language to express some thoughts but one in a way thinks and conceptualize using a language.

Levinson (1997) introduces the problem of indexicals where he says that these (indexicals) make language to be distinct from thought. From the context in which he speaks in one can define indexicals as words which are used with their reference that shift from one context to another. For instance, words like 'I' 'today' 'she', these words change depending on the context that one is using them in. Levinson (1997) says that indexicals leave a huge space between what people say and what they think, and these indexicals need to be clarified using more thoughts which might also contain more indexicals. This according to the author does not lead to any progress and they need to be substituted with expressions which keep cognitive closeness (Levinson, 1997). His argument is based on the fact that a sentence that contains indexicals cannot be categorized as part of thought but rather than that of language and that means that thought and language are distinct in a way that each has their own vocabulary. To make this clear, when saying "tomorrow I am going there", the speaker has an idea of 'there' which they are talking about and the person who has to conceptualize this would have to acquire what 'there' is referring to before they understand what the speaker is talking about.

To argue against what Levinson is saying, one would say that even though the vocabulary is distinct but there is some relation between the two. In order for one to understand what the speaker is talking about they have to conceptualize the speech of the speaker. So, the speaker might say "I am going 'there'" without being specific to where they are going even though they (speaker) have an idea that for an example they are going to town. The person who is

communicating with the speaker will capture 'there' and understand what the speaker is referring to because of the conversation that they are having.

Another basis of Levinson's argument that language is different from thought is where he says that languages are public representations and thoughts are private ones (Levinson, 1997: 16) and he says that language has to be learnt and its structure contains certain restrictions. He makes an example of vocabularies which have to be learnt in order for these representations to be shared. Thought and language are also said to be distinct because not all thoughts can be translated into language (Levinson, 1997). Also he says that there are crucial dissimilarities between the representations of thought and those of language, thoughts are seen to be endless but language changes depending on the indexicals which makes them more flexible and change from one context to another.

Levinson (1997) also accepts that there is some relation between language and thought as we think in a language. In other words, there is a language that one thinks in and thought act as vocal representatives (which are internal). Even though there might be a possibility that thoughts are a rehearsal of speech. Jackendoff (1983) (cited in Levinson, 1997: 19) says that if these two are compatible and are related then the information coming from both of them should be brought together through a common process, when not treating both of these independently one would leave out an essential overview of how the mind works. Levinson (1997) rejects this argument with the claims that language is not chastely a mental object but a public representation which has external constraints that differ from those of internal representation. It is important for one to take note that language would not be expected to be exactly the same as thought because of characteristics and features that language carries and this is what differentiates them in the first place. But it is wrong to say that these two are different based on this argument, and as for Jackendoff, these two can be compared commonly it is possible as long as one bears in mind of their differences.

The argument that one can bring to support that language and thought are related is the argument that it is hard to distinguish between the two purposes which these two are meant to serve. If one claims that they are distinct it is important to acknowledge that they are

somehow related regarding the function that these two have. The fact that one can convert thought from language or language into thoughts shows that there is a relation somehow. So, denying that there is no distinction at all would be making a mistake as these two are related in one way or the other.

Davidson (1997) agrees that language is a convenient tool which allows us to communicate with one another, and he also says that without language we would not see things as we do. According to theorists such as Pinker what is important is an internal language which is the language of thought rather than the apparent existence of universal linguistics (Davidson, 1997). This language is not learned but it comes up as part of our biological inheritance and it precedes any spoken language. The development of spoken language depends on the language of thought, with in relation to the universal grammar the interconnectedness of words shows the relation of ideas in the language of thought. In other words, in order for one to acquire proper grammar in certain language first there should be that connection within their ideas that exist in the language of thought or they should be able to conceptualize certain ideas which they have. This according to Davidson (1997) helps to transfer the thoughts which are in the mind and translate them into words. So, this shows that as opposed to what Levinson was stating thought and language are and they work with one another.

One question which is always asked is whether we think in a spoken language or is there a certain language of thought which Davidson (1997) and Pinker (1995) refers to as the “mentalese” in which we think in and then we put the thought into words when we want to communicate. Pinker (1995) states that we use the “mentalese” and that this happens most of the times when we want to say something which is in our minds but we fail to put in into words and we end up saying what we did not intend to say (Davidson, 1997; Pinker, 1995). This can happen in most of the times when one is not competent enough in a certain language which is different from the one that they were conceptualizing in and it is possible that they would not be able to articulate themselves properly.

Davidson (1997) agrees with the above argument and states that a language of thought is part of us and the spoken language acts as a link between our thoughts and what we want to

communicate using spoken words. He also goes on and states that arguments about the language of thought and that it exists independent and before the socially spoken languages, are unsound. The fact that sometimes it happens that we cannot find words for what we want to say has a different explanation than the assumption that it is because of language of thought which pre-exists and that cannot be encoded into words (Davidson, 1997). In other words, there is always a way of uttering our thoughts. In the context of this study, it has been assumed by many people that some technical concepts cannot be translated into African languages because there are no terms which represent the concepts. Davidson (1997) and Pinker (1995) believe that when one cannot articulate a certain idea it does not mean that they will not say it, but rather that they will find a replacement for such word or saying or would think of new way to articulate themselves. This also applies to the example of technical terms in African languages made above, because of the lack of terms in African languages; it does not mean that the idea (concept) would not be articulated. There is always a way of articulating ideas (concepts in the context of this study) and another way of doing this is through translation. So, this also means that when one cannot understand certain concepts represented by terms in a different language; it does not mean that they cannot be able to have access to those concepts at all. But there is a need to have the concepts articulated in a way in which they will be understood better, for example, in a language in which one understands.

According to Davidson (1997) we come into the world prepared with ability to access language and we know about the constraints that we might have and also have ways of dealing with them. The fact that there is a need for a skill in which we can use to deal with linguistic constraints in order to access certain language for articulation has nothing if not little to do with what is in our thoughts or expressions. Davidson (1997) continues and says that what we are born with is not constraints in semantics but in syntax. In other words, it is not the logic in which we are having a problem with but rather a way of articulating ourselves in order for us to create well-formed sentences that will make sense.

There is no reason to assume that thoughts and concepts are natural if this means that people have languages that reflect the needs and interests on humans (Davidson, 1997). It is also not surprising that thoughts and expressions are related up to a certain point since the extent to

which we manage to articulate ourselves is limited. This according to Davidson (1997) does not mean that there are no limitations in semantics which may be generated by those of syntax. The main argument that Davidson is trying to point out is not that what we think and say is not limited by what we are born with; it is the shakier argument to say that we are not born with anything like a language which does not have content. Growth or development allows us to be fit for our environment but it does not provide us with concepts. But rather it is nature that decided which concepts would come naturally but this does not mean that the mind knew in advance what nature would be like (Davidson, 1997).

Different theorists bring different views regarding the relationship between thought and language. Some of them like how Levinson has shown support the thought that there is no relationship between the two but rather they are independent. Levinson (1997) seems to be portraying a different view from other theorists who argue for and against the relationship between language and thought. Pinker (1995) introduces the mentalese which he states that it is separate from language but that these two are in a way related. Davidson on the other hand also agrees and supports the view that these two are mutually dependent and it is not really possible for language to exist without thought. From the theorists' perspectives it is shown that language and thought are related as language helps to transfer thoughts which are in the mind and also helps in communication.

If language helps in communication, then this means the language which one uses for conceptualization is the best language to learn in. This would help so that they can be able to articulate their thoughts properly and also to communicate efficiently and be able to understand what they are being taught. Bilingualism and bilingual education is one of the models that have been proposed for efficient learning in education and the next section is going to talk about that and also whether it facilitates cognition.

4.3 BILINGUALISM AND DEFINITION

Bilingualism can be defined differently in each context; different scholars (Cummins & Swain, 1986; Paulston, 1978; Baker, 1993; Baker & Jones, 1997) argue that there are different dimensions which are involved when defining bilingualism. Baker (1993) and Baker & Jones (1997) state that these dimensions include the fact that one can acquire the languages in many different ways. An example is where one can be fluent in speaking one language while they can only write and read the other. Also one for an instance can speak both languages but cannot be able to read and write in the second language.

Rather than focusing on bilingualism itself, this section is going to focus on bilingual education. The main aim will be mother tongue bilingual education, but at first bilingual education is going to be discussed. Bilingual education according to Baker & Jones (1997) and Garcia (1997) would simply be explained as where two languages are used in the classroom or at school, but there are other factors that need to be taken into consideration. With the factors that need to be considered when defining bilingual education, Baker (1993) earlier discusses also aspects that bilingual education is based on. With regards to the definition of bilingual education, according to Baker & Jones (1997) the main factor would be the *use* of the two languages which are in the classroom. For an example, one should ask whether these two languages are both being used in the classroom by all students or is the aim to teach a second language through the first language. It is important for questions like that to come up as there are different contexts which bilingualism can be exercised in, as it has been stated earlier.

It is important also, according to Baker, (1993) to look at the aspects that bilingual education is based on. Such aspects would include different available forms of bilingual education with its aims and outcomes and also how the second language is acquired in the classroom (Baker, 1993). Unlike this study, Baker (1993) focuses on bilingual education which is based on second language acquisition but his theory can be applicable to bilingual mother tongue based education. Baker & Jones (1997) differentiate between a school where there are bilingual children and where bilingualism is promoted. In most educational institutions there

are multilingual and bilingual learners and in some of these institutions the aim would be to ensure that the learners are competent in the medium of instruction (Baker, 1993; Baker & Jones, 1997). In the Rhodes University context the only difference would be that the other minority languages which the students speak are also being supported through policy and promoted but with limited intervention strategies (RU Language Policy, 2005). Another type of bilingual education is where learners get taught two languages as medium of instruction so that they develop full bilingualism (Baker, 1993; Baker & Jones, 1997). There are aims that each institution or school has when it undertakes bilingual teaching or bilingual education and these vary from one context to another.

4.3.1 Aims of bilingual education

According to Ferguson *et al* (1977), (cited in Baker & Jones, 1997: 465; Baker, 1993: 152) the aims of bilingual education vary and there is multiple of these aims that one can think of. The first aim is to integrate people into the mainstream society and to encourage them to socialize and participate fully into the society where the other language taught plays a crucial role. This aim for an example is where there are minority language groups in a community and in order pluralism and domination of those groups, so that the minority language groups can also be appreciated and fully participate in the community.

The second aim stated is to unify the society which is multilingual so that that there can be unity while the society is diverse (Baker & Jones, 1997). This is related to the aim which has been stated above where people will unite and participate together on any social issues in a community and also this would help in education as well, as the gap between school and community would not be too wide.

Bilingual education also enables people to communicate with the outside community or the outside world. This provides the people to be considerate and reciprocate when it comes to other cultures as well. This would help where the speakers of the minority language (minority

in the sense that it is a low status language) are equipped with a high status language which is mostly used in the market.

Other aims which have been listed include the preservation of ethnic and religious identity, reconciliation between different and political communities, spreading the use of colonializing language and so on. The aims of bilingual education have been listed to show that there are other objectives besides the use of more than one language in the classroom, and sometimes the use of those two languages does not necessarily mean that both of those languages will be used equally with the intentions of teaching. This is advocated by the different types of bilingual education which are available. Bilingual education also plays a role in facilitating cognition as it allows the speakers of minority languages to be able to learn using their own languages which they understand better. This is going to be discussed later in the section that discusses bilingual education and cognition.

4.3.2 Types of bilingual education

With the aims that each bilingual education sets to achieve there are also different types of bilingual education that exist. Baker (1993) argues that it is important to differentiate when talking about bilingual education between a type of education that promotes and fosters the use of two languages in the curriculum as well as the type of education where there are language minority children but the curriculum enforces the use of the majority language. These two types can determine the types of bilingual education which will be stated in detail below. There are two forms of education which represent the types of bilingual education; they are 'weak' (subtractive) and 'strong' (additive) forms (Baker, 1993). The weak form is where there are only bilingual children but monolingualism is still practised at the school while the strong form is where students will be encouraged to be bilingual and biliterate proficiently (Baker & Jones, 1997). According to Sayers (2012) (cited in Rhor, 2012) being biliterate is an ability to read and write in two languages and being literate in both languages that a child can speak creates room for more success in their schooling in the future.

Under weak form of bilingual education there is submersion, segregationist, transitional and mainstream bilingual education programs (Baker, 1993; Baker & Jones, 1997; Faltis & Hudelson, 1998). The aim of these types of bilingual education is to transform from minority to majority language and also to move “from home culture to the culture of those with most and power status” (Baker & Jones, 1997: 469). This type of form of bilingual education has an objective which assimilation where the language minority joins the majority making them competent and proficient in the powerful language. According to Baker (1993) and Baker & Jones (1997) this type of education aims at incorporating children into main schooling to provide equal opportunity. The language of teaching is usually the majority language as the child is expected to communicate and be competent when working in the curriculum in the majority language. An example would be where children are taught in English even if they are second language speakers of the language and they would be expected to participate into the learning process using the English language only.

This research focuses on bilingual education where the strong form of bilingual education is exercised, so more details will be provided in this form and its available types. In strong forms of bilingual education the language of the classroom usually differs and the aim of the strong form is to make learners bilingual as well as biliterate. Using both languages the majority and the minority language allows multilingualism within the society and the child, so that they can also see their language to be of value (Alexander, 2000; Baker & Jones, 1997; Garcia, 1997; Paulston, 1978). Strong forms of bilingual education consist of immersion, language maintenance, dual language and mainstream bilingual education. These are going to be discussed fully and it will also be specified which one this research recommends.

As stated earlier, in weak forms bilingualism is not fostered and it is considered as ‘bilingual education’ because there are children which are bilingual but bilingualism does not become the outcome of the program. The first type of strong form of bilingual education which is immersion bilingual education according to Baker (1993); Cummins & Swain (1986) and Baker & Jones (1997) started in the 1960s in Canada where parents wanted their children to be fluent in French and reach normal achievement levels in the curriculum while they would also not be slacking in the English language. Another aim with this type of bilingual

education would be to make sure that the cultures of both languages are being appreciated. With this type of bilingual education it is suggested that the children when learning both languages they do not sacrifice another language for the other, but rather they gain a second language and there are only benefits from learning another language.

Language maintenance occurs where the learners are using their home language in the school as medium of instruction and the objective is to reach full bilingualism (Baker, 1993; Baker & Jones, 1997). With this type of bilingual education the development of the majority language does not happen at the expense of the minority language, but rather the minority language is still maintained. This according to Baker (1993) usually happens where children of the minority language are taught in a school that has majority language; majority language would also be present in the curriculum. This is when the child's native language is protected and developed along with the majority language. There are certain challenges that this type of bilingual education usually faces and these include some experts who oppose teaching in minority languages because of the practical difficulties that they usually state such as lack of official status and lack of support (Baker & Jones, 1997). This is what causes the students to support and be influenced by the majority language especially in higher education where courses would all be available in the majority language.

Dual language bilingual education is where both minority as well as majority language learners are present in the school (Baker & Jones, 1997; Baker, 1993). The curriculum of the school is offered equally in both languages and the outcomes are usually that the learners become bilingual and biliterate with literacy having been acquired in both languages (Morrison, 1990; Garcia, 1997).

In mainstream bilingual education, there are two majority languages and they are both used as medium of instruction (Garcia, 1997; Baker & Jones, 1997; Baker, 1993). Garcia (1997) makes an example where in Brunei the Malay-speaking children were instructed in both Malay and English and both those languages were majority languages and the students were of majority. In this type of bilingual education bilingual and biliteracy is guaranteed (Garcia, 1997; Baker & Jones, 1997; Faltis & Hudelson, 1998).

With the types of strong form of bilingual education that have been given in detail above, the type which the research is proposing would be immersion bilingual education. This type of the proposed bilingual education would be considered to be mother-tongue bilingual education as some of the students would get to use their mother and some of them the language which they are familiar with and might understand easily than the second language. The next section is going to argue on cognition on bilingual education.

4.3.3 Bilingual Education and Cognition

Cummins & Swain (1986) state that according to research the relationship between bilingualism and cognitive functioning exists. One question one would have to ask is whether this type of relationship is a negative or a positive relationship, and also what kind of impact it would have on overall education of a child. According to Cummins & Swain (1986) and Baker & Jones (1997), there are studies that had been conducted before 1960 and they represent bilingualism not being successful when verbal and intelligence tests were done. The reports that had been provided show that the learners had no fluency in any of the languages that they learnt (Cummins & Swain, 1986). Baker & Jones (1997) state that during a lecture in Cambridge University, a professor once said that bilingualism will not double intelligence but rather make it partial. Many negative implications that have been reported on bilingualism seem to have been taken from research that has been done using IQ tests (Cummins and Swain, 1986; Baker & Jones, 1997). When these tests were being done during the early research the bilinguals would be given the test in their weaker language and also there would be only one basic language ability (writing, reading, and speaking) which would be used for classification of learner abilities (Baker & Jones, 1997). This for example gives a view that, in the South African context, even if a bilingual is fluent and has all language capabilities in Afrikaans and they use English (which is the language the bilingual is weaker in) for testing and speaking (weaker capability as well for the bilingual) for classification then it would mean that the bilingual would fail the test because they do not have adequate skills to function in that particular language.

With regard to the effectiveness of bilingualism, creative thinking is one of the factors that bilingualism seems to increase. According to Baker & Jones (1997) and Cummins & Swain (1986) there is a link between creative thinking and bilingualism as acquiring more than one language allows fluency, flexibility, originality and expansion in thinking. This is explained by Cummins & Swain (1986) where they state that there is more development of positive linguistic effects and it allows the bilinguals to have an ability to see things differently. For an example, one can also manage to differentiate object semantically and have different labels for objects.

There are other positive effects of bilingualism and bilingual education which have been raised by scholars. Cummins & Swain (1986) state that bilingual education lead to positive linguistic effects and one's linguistic input increases. Also, there is more analytic orientation among bilingual in language and also research which exists shows that they are considered to have flexible cognitive functioning then bilinguals (Cummins & Swain, 1986).

There has been little research on language and thought in bilingual education (Paulston, 1978; Cummins, 1979) and according to Cummins (1979) there is no report on cognitive development of bilinguals. Paulston (1979) states that social factors were used as an explanation for all educational difficulties that a child might have. So, the justification used to always be non-linguistic factors or it would be factors which are related to the school program because the results were poorly controlled when testing bilingualism and cognition. The recent studies show that bilingualism can influence academic and cognitive functioning and these two have associated advantages.

When talking about bilingual programs which failed or made progress it is important to note that the failure or the progress of each bilingual program will depend on the context. Paulston (1979), Cummins & Swain (1986), Baker (1993) and other scholars argue that there no precise definition of bilingualism but rather the definition depends on the context. Paulston (1979) takes this further and says that the same applies when reviewing a bilingual program, its success will depend on the context in which it is used because bilingualism has different assets and the same applies when looking on the writings of bilingualism. In other words,

what works for one country might not work for the other country because of the features that it may have and its context which it was developed for. So, when one is assessing learners' capabilities on language in a bilingual program it is important that they take note of the context which they are using especially if their model has been used on a different context. It is important to take note of the language competence and cognition as that would also determine academic achievement. There is also the relationship between language proficiency and academic and cognitive variable which exist across all general language skills (listening, reading, speaking and writing) (Cummins & Swain, 1986).

4.4 THEORETICAL FRAMEWORK ON THE RELATIONSHIP BETWEEN LANGUAGE PROFICIENCY AND ACADEMIC ACHIEVEMENT

Cummins (1984) states that the failure to develop a proper theoretical framework in order to seek a relationship between language proficiency and academic achievement leads to confusion when dealing with language proficiency assessment. It becomes very difficult to develop criteria for bilingual programs or to design testing procedures to assess the criteria if there is no theoretical guideline (Cummins, 1984). There needs to be a guideline and also this would help to see to what extent is there a relation between language thought in bilingual education.

Cummins & Swain (1986) argue that language proficiency has been confused with mental retardation when students are not performing well. In other words, being fluent in a language is taken as if students can progress academically in that language. Therefore, it is important to differentiate and see the importance between face to face communicative skills and language skills and also their relation (Cummins & Swain, 1986). During interpersonal oral communication the listener gets to access a range of contextual and paralinguistic information which can enable them to interpret the speaker's intentions thoroughly and the meaning is partially dependent on the linguistic forms used by the speaker (Cummins & Swain, 1986). On the other hand, with written text it is an independent representation of meaning, only linguistic cues are available in the printed reader. There are no other available intentions

besides those in the text (Cummins & Swain, 1986). So, one can capture the meaning during oral communication through the speakers gesture and so on.

Another factor which has been mentioned above that need to be taken of is that it is important to differentiate between processing of language for informal contexts and also processing for formal academic contexts. There are different demands when reading an abstract academic text as opposed to when having a casual conversation (Cummins & Swain, 1986; Cummins, 1984 & 1979).

Cummins & Swain (1986) argues that the first language and second language have interdependent aspects and this interdependence is usually shown on academic related language proficiency. This can be started off by introducing briefly Cummins' argument about BICS (basic interpersonal communicative skills) and CALP (cognitive-academic language proficiency). There are many written texts about these two language proficiency aspects (Cummins, 1984; 1979; Cummins & Swain, 1986; Baker & Jones, 1997; Paxton, 2009). The distinction between these two aspects was made to justify a situation where for an example one would be fluent in a language (English) but find it difficult to understand or perform well in a non-verbal academic test. The explanation is that the students might only have communicative skills for the language and they do not have any capacity to deal with the demanding abstract and academic content in the language (Cummins, 1979; 1984; Cummins & Swain, 1986; Baker & Jones, 1997).

There is interdependence between the first language and second language at deeper levels of academic and conceptual functioning (Paxton, 2009; Cummins & Swain, 1986; Cummins, 1984). So, it is important for one in order for them to have conceptual understanding on the second language that they have had it first in their first language. Without any cognitive understanding of certain concepts of a discipline in a first language it becomes very difficult to grasp those in the second language. Ouane & Glanz (2010) argue this point by saying that learning in one's first language lays cognitive and linguistic foundation for learning additional languages. So, additive bilingualism helps as one would learn a second language and things would be easier for them when it comes to grasping concepts which are available

in their languages. Obanya (2004) also says “first language lays a foundation for learning”. The points that have been made are not arguing that the students should learn in their languages, but it makes sense if there is some integration between the language of teaching and their first language where there will be a provision of certain concepts in their languages in order for them to understand the concepts easily.

When students get exposed to new concepts and ideas it is ideal to introduce these in the language which they understand best as that would be a proper supportive tool for comprehension (Batibo, 2010; Kaschula, 2013; Maseko, 2011). Kaschula (2013) says that it is undoubtedly that one understands concepts properly in their primary language and Batibo (2010) also argues that if this does not happen it leads to learners not being confident enough and they tend to fail to articulate themselves properly during the process of learning. Boughey (2009) refers to this as epistemological access which is where learners also participate in construction of knowledge and they do not only become passive participants who would not challenge and would reproduce the same knowledge.

Mother tongue education seems to be complicated at this point especially at tertiary level even though it is agreed by most scholars that mother tongue education should be at the core of bilingual education (Alexander, 1995; Banda, 2000; Ball, 2011). The poor results in matric and at tertiary level among second language speakers of English have been linked to English being the medium of instruction in the country (Heugh, 1995; Banda, 2000). Ball (2011) argues this further and says that high rates of failure are also a result of the use of international languages as languages of instruction at school as that confuses and places a challenge to learners because they cannot relate the curriculum to their everyday experiences. With that being the problem, there is also another issue of language attitudes where the disadvantaged group wants on the other side wants English. According to De Klerk (1996) the preferred language of instruction is English and that might be caused by the apartheid legacy. Mother tongue education in South Africa also seems to be leading to being preferred because of the multilingual nature of the country (Banda, 2000). Banda (2000) in his article shows that mother tongue education has its own problems. So rather, there is a need for a proposal such as mother tongue-based bilingual education as suggested by Alexander (2000) as mother tongue education seems to be distorted, especially in higher education. Mother

tongue-based bilingual education is defined by Alexander (2000: 2-3) where English will continue being the LoLT alongside with the home languages of the learners (isiXhosa in this case) and where the home languages will be given expanded lexical function and a chance to participate in high function domains. There are different ways, in which this can be done (Alexander, 2000), but this research proposes the use of multilingual glossaries to be used to assist to facilitate learning.

Bilingualism and bilingual education seem to be complicated when it comes to defining them. The way these terms can be defined depends on the context in which they are used in. One of the reasons behind this “complication” is that there are many contexts in which bilingualism can occur, depending on the languages which are being used and how they are being used. Bilingual education has also been described in regard to its different types which serve different purposes. Nonetheless, the relationship does exist between bilingual education and cognition as there are studies that have been done. But it is important for one to note whether this relationship is a negative or a positive relationship. Whether the relationship is negative or positive can be determined by the effects which it might have on learning. Also, the failure of the progress on bilingual education can be depended on the context in which bilingual education is exercised under. There is no report on the relationship between language and thought in bilingual education and whether it affects cognition, and also the different criteria which have been used to assess this and most of them seem to be social. There is also a theory which has been provided on the relationship between language proficiency and academic achievement. With mother-tongue education seeming to be problematic to achieve at this time bilingual education is encouraged as the first language can act as a supportive tool for learning. Through all of that, mother-tongue based bilingual education is encouraged through the use of terminology to help students with learning.

4.5 LANGUAGE PLANNING AND TERMINOLOGY CREATION

The use of indigenous African languages within the university is advocated to promote bi/multilingual education and also to help to develop and promote these languages as advised, for example, by the LPHE (LPHE, 2002) and institutional policy (in the case of RU). Using

indigenous languages which are part of the students' mother tongue will also help to enable epistemic access which will contribute to success of the previously marginalised groups of students (Maseko, 2011; Kaschula, 2013), as the students will also be participating in the construction of knowledge within the university (Boughey, 2009). There are certain ways in which these languages can be used and promoted, and language planning and terminology development is an important area to focus on regarding the use of indigenous languages in higher education. Language planning is defined by Kaplan and Baldauf (1997) as where there would be rules and regulations which would be considered and which can be followed to transform language use and development. Language planning is known to have three categories and these are status planning, acquisition planning as well as status planning (Cooper, 1989). Status planning according to Cooper (1989: 32) is when a language is recognised by the government and is given a function such as, for an example, an official language or medium of instruction. Corpus planning is defined as where the internal body of the language itself is reformed or modified including creating new terms, orthography and vocabulary expansion (Kaplan & Baldauf, 1997; Cooper, 1989; Ngcobo, 2007). Acquisition planning is defined by Cooper (1989: 33) as "language spread". This is when a language is made available to its users and this can be done through reading in, writing and speaking the language to make it develop further.

Even though there are benefits of using African languages as additional languages of instruction in HE there has been lack of terminology produced in African languages for HE. Corpus planning in African languages has been available only for basic education (Heugh & Mahlalela-Thusi, 2002). Terminology development falls under corpus planning and it assists languages to be efficient to function and acquire new roles (Antia, 2000). Sager (1990) states that terminology can be drawn back in the earliest days but it has been only claimed in the twentieth century to be an independent discipline

According to Sager (1990), the literature that can support terminology as an independent discipline is not available but rather it features in other disciplines such as linguistics, information science or computational linguistics. Terminology is known to be an interdisciplinary field of knowledge, where various disciplines are involved (Steurs, 2013). It involves studying the way terms are and how they are used. Terms are defined as words that

are used in certain contexts and are given meanings based on that particular context. Terminology is described by Oeser (1994) as a set of concepts in a subject field that contain linguistic labels (terms) assigned to them (Antia, 2000). Terminology is known to be the main factor that contains knowledge in a certain field as well. Sager (1990) also describes terminology as the study which is concerned with the collection of terms. It is not only the collection which is involved but rather describing, processing as well as presenting these terms. Usually these terms belong to certain disciplines or areas of specialisation in which they are created for. With regards to terminology, concepts; terms as well as areas of specialisation are important. One can interpret these definitions by assuming that terminology is also used for transferring knowledge within specific fields. Terminology according to Antia (2000) can be described as a tool which is used for accessing and transferring knowledge and competency within a specific subject field.

It is no doubt that terms which are used in higher education are very abstract terms which are designated for certain disciplines. Terminology is usually used as a way of accessing and transferring knowledge within a specific field (Antia, 2000). This is usually done through the use of terms which are designated for that particular field. Terms are defined according to Sager (1990) and Antia (2000) as linguistic labels or names for concepts that belong to a specific discipline. Concepts are defined as mental units which do not exist but only in the mind of humans (Sager, 1990; Maseko, 2011; Taljard, 2013). The connection between terms and concepts is found through providing definitions for the terms (Sager, 1990). Definitions help to connect the concept to the term and usually definitions bring out the characteristics of terms which have already have been descriptive of the concept. The connection between the term and a concept leads to the establishment of a relationship to other concepts which are within the knowledge structure of the discipline (Sager, 1990). In other words, this helps to formulate thoughts and also to enable communication within the discipline using the concepts. There are certain guidelines and principles that need to be followed when creating terms for the concepts in a specific discipline.

Before looking at terminology for specialised discipline, it is important for one to visit the theory of terminology creation used in this study. There are three dimensions which are

presented by Sager and which are available in the theory of terminology, these are going to be discussed.

4.5.1 The Cognitive Dimension

The cognitive dimension brings the relationship between linguistic forms and conceptual contents and shows how these two are related in the terminology creation process (Sager, 1990; Taljard, 2013). This has already been shown in some parts when discussing the relationship between language and thought and this part is going to continue with that. Each subject has certain language which is only specialised for that subject, there are certain terms which are used and those terms represent different connected concepts. When looking at terminology through cognitive dimension it is important for one to understand how knowledge is structured as that will help to comprehend and appreciate the relationship between concepts and terms also with how they interact with one another (Sager, 1990).

When terminologists try to determine the terms which are relevant for a specific discipline they first start with examining the available fields of knowledge and work with creating concept multifaceted arrangements which will end up corresponding (Sager, 1990). A significant feature in doing that as described by Sager (1990) is the effort of working with the structure of knowledge because of the variability of conceptual systems as these units are always changing. In other words, the concepts are always changing so much that it gets difficult to keep up and the only thing that helps with that is if the terminologist is also an expert in that particular field as that would help them to be up to date with what is happening within the field. If the terminologist is not an expert in the field it is rather important that they conduct adequate research in the field or get an expert involved in the terminology development process. This means that terminology development cannot necessarily have terminologists only involved, other parties such as the field experts and linguists can be needed.

When transferring the knowledge it is important for one to note that there is language for general purposes (LGP) and there is also language for special purposes (LSP). LGP contains full lexical items of a language and it is used for everyday conversations, containing “ordinary” words (Antia, 2000). In other words, this is the type of language that everyone can understand and it is used for communication purposes. LSP on the other side focuses on specialised contexts and it contains terms which are only related to specific fields (Antia, 2000). LSP is only used on certain contexts and cannot be understood by everyone, but only the people who are experts in certain fields. Taljard (2013) also differentiate between these two by stating that for LGP, **words** are used, yet for LSP, **terms** are used for communication. For an example, LSP is used for communication in certain domains like science and technology.

Some of the words that are used in LSP can be available in general communication. According to Antia (2000), some of the terms in LSP can be used in LGP as LSP is a subsection of each particular language. For an example, the term ‘credit’ may be a term which belongs to the field of economics but it can also be used by non-experts in everyday communication. This means that these terms can be available in general language dictionaries even though there are those terms which are only used by experts only and such should be found only in specialised dictionaries.

Terminology is involved with the concept only on the part of providing enough explanation on how terms are formed and also for the provision of basis on how vocabularies are structured effectively (Sager, 1990). There are three basic tasks that the theory of terminology is known to have, this includes interpreting certain parts of concepts as separate units of the structure of knowledge. Also it has to explain the parts of organized linguistic units which are in one way or another related to concepts which are part of cognitive principles (Sager, 1990). Finally, the theory of terminology has to find a way in which concepts and terms are connected and this is usually done by providing definitions of the terminology.

4.5.1.1 Definitions in terminology

According to Picht (2000) definitions describe a concept and reveal how each concept is different from others and its uniqueness within a particular subject field. In other words, a certain term can be used in different disciplines and contexts but carrying a different meaning, depending on each subject field and the meaning will be shown through defining the term. This usually refers to homonyms, where a certain term would have different meanings and be used in different contexts. An English example would be the term 'frame' might refer to solid boarder made up of wood to protect a picture or it can mean to incriminate someone falsely. An example for isiXhosa would be the term *umthombo* which can mean a source or a fountain. These terms can either be distinguished through using a definition or by a particular field in which they are used in.

When providing a definition a term gets connected into a concept but only through linguistic means and this leads to the establishment of a relationship to other concepts which are within the knowledge structure (Sager, 1990). Concepts are used in order to enable communication with others and also for the formulation of thoughts by working through linguistic means only Sager (1990).

When a concept has been formed it is expected to be engaged into a structure of knowledge of its own which will demarcate and restrict the concept and in terms of its reference the concept would have to be named. The definition of the concept will help in order for it to be clear and be a fixed item of knowledge. The concept will have to be described by definition, in terms of how it relates with other existing concepts and this will be done depending on the conceptual structure and the linguistic forms, then lastly, the concept would also have to be described by linguistic forms which will allow the concept to be use when communicating (Sager, 1990).

When defining terms, Sager (1990) says they are seen as symbols that signify concepts. So, concepts exist prior to terms and the only way in which the concepts can be used socially is

after they have been named. One can refer to terms as “labels” of concepts as they exist and represent the concepts. The process of concept formation is where one’s ideas or their sensible thoughts are gathered and well-organized differently into nonrepresentational sets. The way in which Sager (1990) describes the whole process at first he says that the objects which have shared properties or features are grouped together, then these features would be intellectualised so that one can reach into categories of the objects. For an example, all the objects that have a certain number of features such as being made up of wood and have four legs and being used for people to sit on might be grouped and be labelled as tables. Then further, these objects might be groups with other items which are made up of wood and are within the house and may be called furniture. There are many separations and categorizations which may be done such as that there would be categories for indoor and outdoor furniture depending for instance, on the material or the features that the furniture has. This according to Sager (1990) is where the concepts are defined as paradigms of human thought processes which help in the classification of objects.

The characteristic of concepts are usually distinguished as crucial as opposed to the non-crucial ones and they help in order to identify the concept and these might be seen on each object (Sager, 1990). For an example, the material of the chair and what it contains might not be important. These characteristic might only be important when classifying and creating another concept, such as office chairs or dining room chair as these require more thorough features. Observable features may be used to explain broad concepts in order to simplify them if they have few characteristics (Sager, 1990). Characteristics of concepts are seen as their properties and it is how they are seen in terms of their relationship with other concepts. So, characteristic of concepts refer to the features which uniquely describe them and it is important for these concepts to relate to those in which they are close to and can be differentiated in terms of their features and their capabilities.

When using a definition, it is where the meaning of a concept is explained linguistically using a number of characteristics that the concept has. Definitions according to Sager (1990) depend on the manner in which they are presented in. There are general definitions which describe a concept in a very broad easily understandable manner where all functions of the concept are presented and also subject specific definitions which require competency in a

specific discipline in order for one to be able to define the concept. Also, concepts which are found on subject specific fields are only the ones which belong to a specific discipline (Sager, 1990). For an example, the term “state” is defined differently in the field of politics as compared to psychology or any other discipline. The definition of term brings an exclusive identification of a concept which it places in the conceptual system in which it is part and the concept would be categorized within that system (Sager, 1990).

Definitions are needed for certain terms which are not clear enough and which require more clarification (Sager, 1990). There are also other terms which require clarification because in the form of extended breakdown and these are usually required where the terms are part of a certain criteria and there is a need to distinguish between those. The definition alone does not provide enough connection between term and concept but there should be essential set of conceptual relationships. The method of the definition to provide clarification would be where there is more explicitness on the features of the concept in which it has in common with the others and how it is distinguished from other concepts. Also by comparing the relationship between the concepts and what connects them (Sager, 1990). One can notice that defining helps to strengthen the relationship between term and concepts and also it helps terms to be consistent within the structure of knowledge in which it is used in. Definitions also bring the acknowledgement of the existence of other terms and it avoids unnecessary clustering of terms that would impose on the other terms which already exist. The type of a definition which is required for a certain term depends on the term itself as long as the definitions do not confine the suppleness of the language. When terms are defined strictly according to the features of the concept it helps to avoid the clustering of the term banks as well as dictionaries with unnecessary terms. There are different kinds of definitions that are distinguished by terminologists and these are going to be described below.

- Intentional definition

This definition according to Gouws and Prinsloo (2005) describes the intention of the concept. The concept gets categorized through its use and its unique characteristics are distinguished from other concepts, these characteristics are usually limited to that particular concept and are used to define it. An example of defining a train using intentional definition would state that ‘it is a form of *transport* which is *operated on the rail tracks* with a *series of carriages* used to transport passengers’.

- Extensional definition

Extensional definition refers to naming of the objects that the concept is referring to. This type of definition according to Taljard (2013) helps when it comes to clarifying the concept and an intentional definition is usually supplemented with extensional. An example of an extensional definition of the term ‘planets of the solar system’: planets of the solar system are Mars, Venus, Earth, Mercury, Jupiter, Saturn, Uranus, Neptune and Pluto.

- Contextual definition

When using contextual definition, a concept is defined by making an example or using the concept in context where the concept will be described. For an example, **borrowing**: the term *idemokhrasi* has been borrowed and adapted into the linguistic elements of isiXhosa.

- Partitive definition

Partitive definition is used when the parts which make up a particular concept are enumerated. For an example, a body is made up of a head, neck, arms, chest and legs.

- Synonym definition

This is when a synonym or different term of a particular concept is used. According to Gouws and Prinsloo (2005) this type of definition is not adequate to use it solely as it becomes more abstract for people who are not experts of a particular discipline. For example, if someone is not an expert on electricity when defining the term ‘bulb’ by using the synonym ‘globe’ might confuse the person further.

- Definition by paraphrase

This is when a description of a certain concept is given. Usually this definition is used to define **verbs**, as opposed to intentional definition which is used for defining **nouns**. For example, the definition for ‘freeze’: is when a substance moves from a liquid to a solid state. This example differs from the intentional definition which has been stated above.

- Ostensive definition

Ostensive definitions are used when a certain concept is defined through the use of illustrations, pictures or diagrams. This definition is usually used to supplement other definitions Taljard, 2013).

Another important dimension on the theory of terminology is the linguistic dimension and it is going to be discussed in the next section.

4.5.2 The Linguistic Dimension

The linguistic dimension looks at the terms as independent linguistic objects and the way in which they happen under the discourse of language and its relationship with culture when they are compiled in dictionaries and glossaries (Sager, 1990). This dimension also looks at the equivalent term which has been created to represent the concept whether it follows the rules and structure of the target language such a morphology, syntax and semantics. It is important for one to notice that there is a difference that exists between lexicography and terminology. The difference between these two depends on the position of a lexical item. In other words, the terms which are collected and processed is the difference as the lexicographer collects all words in a certain language and sort them out according to their meanings. The terminologist on the other side only looks on words which belong to a special language or discipline and this requires a knowledge structure which will prove the existence of the language and also figure out which words are more important than the other (Sager, 1990). With regards to Sager's (1990) argument, it seems as if it is important for a terminologist to first look at the meaning then the term, as opposed to a lexicographer which will look at the term first then give out a meaning.

The approach which terminologists use which is first considering the concept of the word and then finally naming the concept is called the onomasiological approach (Sager, 1990). This approach looks at those who already has a concept and has to find a name for their existing concept. Terminologists usually arrange the terms that they have found by relating them to the theoretical systems which they have created together with someone who is competent in that particular subject area. For an example, when one is creating terms in isiXhosa for Political Studies they might have to look at the concept in which the term in the source language already have, then encode it the concept of the target language (which is isiXhosa in this case) with the help of the subject specialist then they might find the correct term. When the concept of each specific term has been found it becomes easy for a terminologist to name

the concept. This type of approach is mostly used in technical bilingual glossaries and dictionaries as the term and concept already exist in the source language and what is only needed would be a term which would match the concept in the target language (Sager, 1990).

In order for a language to develop there is a need for terms to be created for that particular language in all disciplines and that requires research. The only way this can happen according to Sager (1990) is if language planning has been acknowledged on how important it is in terminology with considering the pragmatics and how much possible it is to influence the formation of terminology. This helps so that anyone can acknowledge that terminology which is technical and scientific is not only found in English but it is possible for these terminologies to be developed in other languages as well. Even though it requires time for these terminologies to adjust into the target language at the end of the day it brings intellectualisation into the language and the possibility for the language to be found in other domains as well.

There are certain guidelines that need to be followed in terms of term creation and Sager (1990) became very explicit when it comes to those. The guidelines are sometimes found according to certain languages that need to be followed and the basis of the guidelines sometimes which is unplanned and what is important is for the terms to be created fulfilling established circumstances. The guidelines which Sager (1990) has provided are for the vocabulary that is already in existing as well as for the one which is still to be created. Sager (1990: 89) says that it is important for one when creating a term that the term must relate to the concept and express the concept precisely. Maseko (2011) simplifies this by explaining that the term should represent the concept where it would in a way articulate the functions and all other features of the concept.

It is important for a term to conform to the rules of the way in which words are formed in the language (Sager, 1990). In other words, the term must be created in a way that will follow the structure of that particular language where it will follow the orthography, semantics, syntax as well as morphology of the language. Also it is important for terms not to be repetitive. This means that there should be another meaning which is being produced by the term, rather

than a term duplicating what has been established but rather in a different way as that will cause confusion on when it comes to using these terms. As it is terms and not definitions which are being created at this stage, Sager (1990) suggest that terms should be as clear as possible and also brief and short without any information which is not needed. It is better to create new terms when they are needed and not creating terms which already have synonyms or homonyms. The meaning of the terms should not be the same as the meaning of other terms and it should be separate from the context in which it is used in.

The guidelines which have been provided above are for general term creation and there criteria for the selection of terms for African languages might be different. Maseko (2011) demonstrates the principles and criteria which can be followed when creating terms. Besides the fact that when one creating a term they have to rather name and describe the concept, Maseko (2011) introduces the sources that can be used when creating terms. In the case of African languages, it is important for one to start looking for an equivalent and borrow from the dialects of the target language, then from there look in the “sister” languages, and so on. For an example, if one is looking for a term in isiXhosa they should look from the dialects which are isiBhaca, isiMpondo then if there is no term available they can look in other Nguni languages such as isiZulu or Ndebele. One can go further and look into the languages which are available in that particular country such as SeSotho, sePedi or TshiVenda. It is important to also look within other African languages for a term before looking into European languages which are foreign (Maseko, 2011).The reason for starting with internal sources when looking for a term to name a concept is because most African language are mutually intelligible and have similar terms. Also it is easier to indigenise these languages into the target than when using foreign languages.

The criteria which Maseko (2011) demonstrates which can be used when selecting terms and these can be used when other terms already exist. Maseko (2011) derives these criteria from Batibo (2009, 2010) and they should be viewed as significant when selecting terms. At first it is important to use terms that already exist within the language before one select other terms and also these terms should be ones which are being used by the majority. This will help so that they can be accepted easily because after terms have been created it is important for them to be accepted by the people so that they can be used. Secondly, a term which will be easy to

remember will be accepted easily, instead of people having to resort into using the terms from other languages. But when it is an easy term, it will be used frequently and this is described by Batibo (2010) (cited in Maseko, 2011) as a term which has few syllables and also clear. Most terms in African languages are known to be descriptive and this is one of the requirements when selecting terms that it should be a term which is relevant and that relates to its concept.

Maseko (2011) says that a term which does not have socio-psychological inhibitions should also be selected and given priority. The reason for this is because when one selects a term which inhibits the people from using it or a term which has stigma; it will not be accepted or used by the people. For an example, *inkazana* (lit. means one who is a female, old and unmarried) is no longer accepted and when used it is now considered as a derogatory term which is insulting and has a different meaning as compared to its original meaning. A term which is also appropriate according to educational levels should be used when selecting terms (Maseko, 2011). For instance, when one is using creating terms for lower level of education it is advised to use terms which are descriptive as compared to when creating terms for higher level where a borrowed term can be used. There are required methods that a certain term should adapt after it has been borrowed (Maseko, 2011). In other words, as terms are borrowed from other languages, they should follow the structure of the target language and be indigenised properly. For an example, the vowels between consonants should be inserted if there is a need and so on.

The linguistic dimension of terminology creation include following the rules of the target language when creating terms. This includes making sure that the terms adapt in the structure of the target language and it provides proper meaning of the concept. There are other guidelines which have been provided under term creation which include the sources which one can use for their new terms and also how a term should be presented. There is also an approach which has been shown which is used in term creation. This approach is referred as the onomasiological approach which looks at the naming of the terms. This approach emphasizes that the stage of term creation is the one in which the concept is already there and all that is needed is to find a proper “name” for the concept. This dimension is different from the cognitive dimension because it deals with the language that can be used for the concept while

the cognitive dimension looks at the function of the concept. The last dimension on theory of terminology is the communicative dimension.

4.5.3 The Communicative Dimension

The communicative dimension looks at the term and how appropriate it is in order for it to relate with the subject field in which it is used, as well as its target users. This part is where the theories become more practical, as the concepts and the terms which have been created in the cognitive and linguistic dimensions are put into effective practice. Terminology is seen as a clear system with concepts which are organized differently. The way concepts are invented and then structured leads to term creation, so that they can be named and not just be created as it would be impossible for these terms to be used if they would not be named (Sager, 1990). It means that these terms would only be available on one's thoughts and would not be expressed and articulated through speech, when they are articulated the language in which they are articulated includes the use of their terms.

Terms according to Sager (1990) are presented in a language after a new concept has been created or they are introduced as labels for the concepts so that they can be used in a particular field. It is important that the target users of the terms get the intention of the concept which has been created for the term, in order for this to happen, the target users should also have some conceptual knowledge and understanding of the term. After the terms have been considered to be legitimate they get established within the community in which they are intended for and there would be a certain way in which this could happen whether it is through glossaries, textbooks or manuals (Sager, 1990). Batibo (2010) refers to this process as 'dissemination' and it is where the terms are published through various sources so that the people can have access to them. The terms get published also in publications such as brochures and newspapers and the people get encouraged to use and write in these new terms. The next section is going to discuss the process of acceptance after the terms have been disseminated.

4.5.3.1 Acceptance, Adoption and Standardization

Sager (1990) introduces the term 'standardization' which refers to a process where the terms are established for public use and also that particular term would be adopted to be used in a certain subject field. There would be a need for standardization of a certain term if there are other terms which are competing with that particular intended term or if the terms are associated with the same concept. Before a term is standardized there are certain choices that need to be made among the terms which are competing, whether the term is expansive enough to be depends on it being accessible to the people within its language and also if the term is appropriate then it can be standardized (Sager, 1990). There are other reasons which motivate the standardization of terms and these include whether the term is more manifested as compared to the other terms; whether the term is more precise and does not cause ambiguity and also if the term is seen to be more appropriate and does not contain any inhibitions (Sager, 1990).

Standardization occurs when there is a contradiction regarding which terms should be used, and this is after the new concept has been named and there are other competing names which exist. When this happens the need for a choice comes up and it is where the authorities would have to choose for a more acceptable term. When the more names are involved for one concept the need for the terms to be put into practice and tested on whether which one should be chosen arises. When this happens it would be easy to choose as other terms would have been successfully established and standardized and they might end up being the words which are used. Sometimes standardization does not help to avoid ambiguity and the alternative terms continue to exist and it is usually the dominance of the use of certain terms which determine the failure or realization of these terms (Sager, 1990).

Standardization of terms is preferred because of the effect which it has and it is a step further for a language to be used accurately and effectively in order for it to develop. Standardization helps in order for terms to reach clarity and also establishes an equivalent term which can be used for a particular concept. When coming to terms with the standardized terms it is important for one to put aside their independent analyses of terms and use the one which has

been agreed upon and standardized (Sager, 1990). In comparing the effectiveness of standardized terms one would have to also have to look at the disadvantages of standardization of terms.

One of the disadvantages of term standardization would be that it threatens the natural creativity of the language (Sager, 1990). In other words, it is possible for terms to be created by the people through use, but when there is standardization people get constrained into using the standardized terms. This is why people would sometimes reject the term which is presented to them and continue using their own terms and this usually leads to more standardization of the same terms. There is a need for an agreement among the users of the terms and the users should also be included in the process of the standardization of terms. Standardization according to Sager (1990) should be used to attain assistance from the users in order for them to achieve an appropriate use of their languages. Standardization should be an objective to enable communication and passing through information and this can be regarded as the process of language development.

There are circumstances under which terminology can be standardized. According to Sager (1990) the way in which language works entails its use to be managed and this works properly when the social norms have been followed. It is important for standardization of terminology to signify an additional reduction of rules which are applicable to naming systems or practice (Sager, 1990). The rules which are available on the standardization include the spelling, punctuation and morphology of the terminology. While terminology development is important in order for one to access knowledge, translation also plays a role in transferring knowledge especially if it is in a different language. The next section is going to briefly discuss the competencies that are required in order for one to produce a successfully translated text.

4.6 TRANSLATION AND TRANSLATION COMPETENCIES IN TERMINOLOGY DEVELOPMENT

Munday (2010) defines translation as a product (an end-product or the text that has been translated), a process (the act of translating) and a discipline (a field or an area of study). Translation can also be defined as interlingual, intercultural as well as interdisciplinary because in a way it acts as a mediator between languages; cultures and disciplines. This is where different cultures, languages and disciplines stop seeing and describing one another as the “other” but rather communication gets facilitated in a way in which understanding between different groups is built. With translation as a process there are factors that during the act need to be taken into consideration in order for one’s translation to be successful and also for the meaning to be conveyed from the source text (ST) to the target text (TT) properly, this is called reaching equivalence.

Newmark (1981) defines translation as a special technique in which a text that consists of the same meaning is transferred from one language to another. There are factors which sometimes lead to a loss of meaning within the translation and usually that happens when there has been an increase on what has been added on the translation or when there has been many omissions. Therefore, according to Newmark (1981), within translation there are certain factors that lead to loss of meaning and equivalence can never be fully reached without any losses. Nababan (2008) defines equivalence as the production of the same meaning in the target language text as the one that was intended by the original author of the source text. It is important that when translating the meaning should be transferred from one language to another and also that the translator should stick to the linguistic norms of the target language. In the context of this study, it is important that when translating the definitions of the terms that equivalence is reached. In order for one’s translation to be successful and that they reach equivalence there are certain competences that the translator needs to acquire. The competencies in order for one to carry the act of translation are going to be discussed below.

4.6.1 Competencies in Translation

In order for one to reach full equivalence in translation it is important that they possess certain competencies that are required so that they can commence the act of translating. This refers to what enables translators to be able to carry out the act of translation successfully and competence means the knowledge and skills required for one to be able to communicate (Albir, 2010). The types of competencies which are required for translation are linguistic competence; communicative competence; cultural competence as well as domain-specific competence.

Linguistic competence refers to the ability for one to know and understand the language including the grammar (Albir, 2010). In translation it is important that one knows both languages that they will be working on and that they are competent in them. It is important to know the grammar and the rules within the language on how to use it including orthography, phonology, semantics, syntax and morphology for both languages. This knowledge is important for source language (SL) as well as target language (TL) and also that one should also know the metaphors that are usually used and the idioms including their meaning. In other words, it is important to know proper ways of writing on a TL in which the sentences would be constructed according to the language rules and also to know relevant idioms and metaphors for that language.

A language is not only a tool for communication but there are certain linguistic rules and cultural values that are embedded within it. Different people who speak different languages have different cultures and their cultures are represented by their languages. Culture according to Snell-Hornby (1988) in the context of translation refers to the way people interact in a particular society also in the ways that are accepted for a particular society for people to live. It is important to know one's cultural systems and understanding them and ways in which a particular group of people maintain their characteristics and also how they interact with the world. This refers to cultural competence and it includes knowing the belief systems, norms and values of the people of the TL (Albir, 2010: 58). There are ways of doing things which are acceptable within a certain society, these things include the way people

dress, speak and also how they address each other. For an example, there is a way in which children address elders in a Xhosa culture and when one is translating it is import to use this way and not translate literally but follow the culture of the language. This shows how important language is because it is embedded to culture so these two aspects always go together.

Like the glossary to be created for this study, not all texts that are translated are literary texts; there are also technical texts which are used in different disciplines. When translating it is important to note that different disciplines have different terminology and one needs to be familiar with the terminology that is used in these domains. Different domains may use terms which one could be familiar with but the concepts become different and it is important to know the meanings of these concepts when translating. What can also make one's translation successful is the thorough understanding and knowledge of the domain including the concepts that are used within that specific domain. It is important for a translator to do a research about the discipline or the domain that their translation is based on if they do not have sufficient knowledge about what they are translating on. Insufficient knowledge about the domain may lead to an illogical end-product and the loss of meaning may occur (Albir, 2010). To avoid loss of meaning and to reach equivalence one must have sufficient knowledge about the domain and also that would help to make their translation successful.

Communicative competence refers to one's knowledge and understanding of the rules that are within the language which can be used socially. People do not communicate the same way in all languages and there are certain things that are meant to be said during certain times in all these different languages. It is important to know how to use the language completely including other strategies that are used within the language in different social contexts. There are certain things that cannot be said in some contexts and this is common in most languages where one would notice that there are things that cannot be said in certain contexts and that might vary from one context to another. It is important that all these competencies a translator has them to make the translation successful. Also like in terminology creation, there are certain approaches and methods that one should use as resources when performing a translation task.

4.6.2 Methods and Approaches to Translation

Approaches that are used to translation refer to the manner in which translation is executed and it is important that the end-product should have the same theme as that of the ST. What the author of the ST has said should be seen in the TT and also approaches that are used in translation refer to the techniques that the translator is going to use when converting the text. There are three approaches which are important on translation and are usually used and they are free approach, literal approach as well as functional approach. Free approach refers to where the meaning of the ST would be translated in an attempt to achieve equivalence. What is important in this approach is to transfer the message of the ST using sense-for-sense approach (Barbe, 1996). In other words, the ideas and forms that are contained in the ST are transferred and this approach manages to move the audience. That might happen because this approach usually uses idioms and metaphors and it is used mostly in literature and poetry.

Literal approach refers to the translation of words from SL to the TL and usually the word-for-word approach is used. It is where each individual word is replaced by the other and this approach is usually used on scientific and technical texts. When using this approach there is nothing that gets changed as there is not even a need for certain figures of speech to be used and the reader would get familiar with the author's writing (Albir, 1996). With functional approach it is where the translation of meaning according to a certain culture, values and context of the TL. It is important to transfer the meaning that fits the culture of the TL and usually there are figures of speech that are used if necessary and the structure of words and how they are placed do not matter. Ideas, culture and meaning are important in this approach and this shows the importance of expression.

With methods that are used on translation there is domestication and foreignization. Domestication refers to changing everything which in the SL to the culture and values of the TL. Nida is known to be the representative of domestication and he argues that this method helps the receptors to get the message and also it is easy for them to appreciate a text which is in their language (Yang, 2010). Foreignization is known to be only changing the language

and the values and the culture of the ST are kept. Lawrence Venuti is the one who is associated with this method and he speaks about how foreignization helps to introduce new values of the ST to the TL and also it “send the reader abroad” (Yang, 2010). This means that the reader gets to learn about the “other” and also it preserves the formal features of the SL.

Both these methods have different critiques that have brought to them such as the fact that with domestication when it is used the values and the culture of the SL get omitted as they are not represented on the TT. With foreignizing, it may be hard for the target audience to accept the translation and appreciate it as they would not be familiar with the context within the translation and also they might not get the clear picture. Also, there is language dominance involved with foreignization because the SL will be carrying its cultural values and it might be hard for the TL to be acknowledged with its features.

Newmark’s (1981) definition of translation talks about how it is between two languages and it is not easy to reach equivalence fully because of certain factors that might hinder that. Also, there are other definitions of translation that have been provided by Munday (2010) in which he sees translation as a mediator between languages and cultures. Both definitions of Munday and Newmark are correct because it is important that one follows the theory or the guidelines of translation successfully in order to reach equivalence although there is a possibility of loss of meaning. When translating the source text is transferred to another language and one would have to recreate the text using new linguistic forms in new cultural settings. It is important to note that meaning should not be lost totally and to avoid that there are methods and approaches that one can use as guidelines in order for them to preserve the meaning. This theory of translation is going to be used in this research during the translation of definitions of the glossary. The different translation methods and approaches that have been mentioned above are going to be used.

4.7 SUMMARY

This chapter has dealt with the theoretical framework that shapes up this study. The theory of language and conceptualization has been discussed to show that in order for cognition to be successful language also plays a major role. In the discussion of this theory it has been shown that there is a connection between language and conceptualization. Because of the importance of language and conceptualization, the issue of bilingualism and bilingual education has also been discussed as sometimes the language which is used for teaching at schools and universities is not the same as the home language that the students and learners tend to speak.

When there is a diverse body of students or learners it is important that there are language policies formulated for the particular education institution and the theory of language planning for this purpose. As corpus planning is part of language planning terminology development as well as translation has also been discussed on how it can play a role in assisting in language policy formulation for the diverse student body. The next chapter discusses the process of data collection and the presentation of data.

CHAPTER 5: DATA COLLECTION AND PRESENTATION

5.1 INTRODUCTION

As stated in in the first three chapters, the preliminary data was collected from former students who were registered in the RU ES Politics class in 2009 and the ‘main’ data was collected from the 2014 first year students who are registered in the same programme in the Humanities Faculty. The Faculty has two ESP groups: the Political Science and Sociology group as well as the Journalism and Anthropology group. The Political Science group is the one that formed part of this research, and there were thirty-nine (39) students in this group.

The study seeks to introduce the use of bilingual glossaries as an intervention to assist in facilitating learning, specifically for students who are speakers of LOTE, in formal learning contexts in HE. Further, it probes whether students use and see the value of multilingual glossaries in facilitating understanding of concepts in a Political Philosophy module offered in Political Science during the first term.

The data was collected using different research techniques namely, participant observations and surveys using questionnaires and follow-up interviews. In participant observation the researcher becomes part of a social setting that contains the participants which they would like to observe (Baker, 1998; Cohen *et al*, 2007). This techniques according to Cohen *et al* (2007) allows the researcher to observe detailed information about individuals under study by making themselves part of the research community. Participant observation was used in this research to see whether the provided glossary was being used by the students. As stated earlier, the bilingual English- isiXhosa glossary was developed in 2008 during the SANTED Project for students who are second language speakers of English and has always been made accessible to students on RUCConnected. Observation was also used to confirm the language used by students when they are having discussions in in class. This method has been selected to confirm the information that has been given on the questionnaires and follow-up interviews.

The questionnaires were used in the research to first gather information regarding the students' schooling background and the language which they speak at home. The students' general perceptions regarding the use of LOTE at university in certain disciplines, the use of additional materials to assist them and English as a language of teaching and learning were also gathered using this method. The questionnaires were also used to gain an understanding of certain issues that the students might have with using multilingual glossaries, for example, whether they used the glossaries in learning in the specific subject and the reasons for not using them if they did not use the glossaries. The questionnaires were also used to investigate the students' perceptions on the use of indigenous languages at university. Some responses in the questionnaires were used to guide the follow-up interviews.

Semi-structured follow-up interviews were used to follow up on the questionnaires. There were six students that participated in the interviews. Semi-structured follow-up interviews are generally used in research to collect more ideas, experiences and opinions of the community being studied on the phenomenon being studied (Baker, 1998). In other words, it is used to collect more useful information that might have been missed with other research techniques, i.e. questionnaires in the context of this study. The follow-up interviews allowed the researcher to get in-depth information about the students' experiences the use of their home language and English on their learning in school. Also, the students' perceptions on LOTE and the use of multilingual resources were being investigated further using the follow-up interviews.

This chapter is divided into two main sections, namely, the presentation of the preliminary data that was collected from the former students by using questionnaires as well as the section which presents data the 2014 ES students. The next section presents the data that was collected in the preliminary surveys.

5.2 PRESENTATION OF PRELIMINARY DATA

The data that was collected on preliminary surveys using questionnaires is going to be presented. There are five participants who took part in filling in and returning the questionnaires. The objective of collecting the data was to compare the current students' experiences to the former students who were the first to use the bilingual glossary. Three issues about the participants who took part in the preliminary surveys are going to be presented. The first one is the participants' languages (home languages and whether they studied any indigenous African languages in high school). The second issue are the experiences (difficulties) that the participants might have encountered when learning during the Political Philosophy module. The last issue are the participants' experiences on the bilingual glossary.

5.2.1 The participants' languages

The participants had different home languages and the following table is going to present their home languages.

Participants' home languages	Number of participants
IsiXhosa	3
Xitsonga	1
Setswana	1

Table 1: Home languages of participants

Out of the five participants, there are three participants who stated that they studied African languages in high school. When the participants were asked to compare their understanding of isiXhosa to English, four participants stated that they understand English better than isiXhosa. The next section is going to present the participants experiences when learning during the Political Philosophy module.

5.2.2 The Participants' experiences during the Political Philosophy module

In this section the data on how the students experienced learning during the course of the module is going to be presented. In the questionnaires, the participants were asked to state any difficulties that they may have encountered during the course of the module. There were options that the participants were given to select from, also they were given a chance to state if there is any other difficult that was not mentioned and they might have encountered. The difficulties that were given to the participants to select from are as follows:

- Difficulty in understanding lecturer's use of English in the lectures.
- Difficulty in understanding keywords during lectures.
- Difficulty in understanding keywords when learning on your own.
- Difficulty in relating key words with what you know in isiXhosa.
- Other (specify) _____

When answering this question, some of the participants selected more than one answer. The responses that the participants provided are presented below.

Responses that participants had to choose from	Number of responses by participants
Difficulty in understanding lecturer's use of English in the lectures	2
Difficulty in understanding keywords during lectures	2
Difficulty in understanding keywords when learning on your own	1
Difficulty in relating keywords with what you know in isiXhosa	3
Other	0

Table 2: Responses which participants were to choose from when stating the difficulties they encountered when learning

As shown above, most participants stated that they experienced difficulty in relating keywords with what they know in isiXhosa. There is an equal number of responses between

experiencing ‘difficulty in understanding the lecturer’s use of English in the lectures’ as well as ‘difficulty in understanding keywords during lectures’. From the information given above, the most difficulties that were experienced by the participants during their time of learning the module was understanding the keywords that were required in order to master the module as well as language difficulties. The next section is going to present the participants’ experience of the bilingual glossary.

5.2.3 The participants’ experiences on the bilingual glossary

This section is going to present the participants’ experiences on the bilingual glossary. The participants’ experiences include whether they used the bilingual glossary; how they used the bilingual glossary and their overall experience on the bilingual glossary (whether the bilingual glossary was helpful or they found the glossary to be easy to use).

The first data for this section to be presented is on the use of the bilingual glossary, the chart below shows the percentage of participants who used and did not use the bilingual glossary.

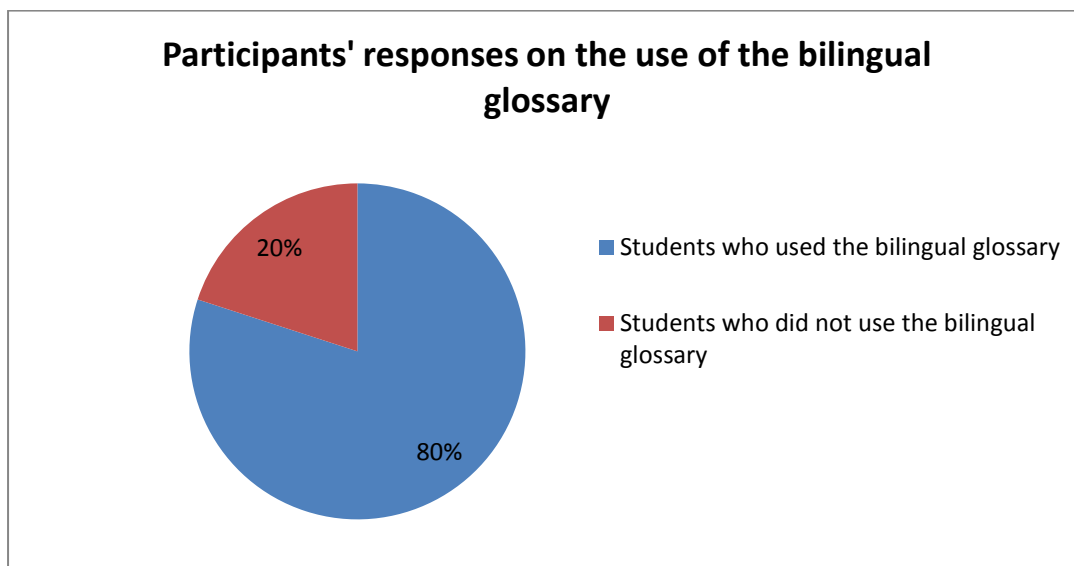


Figure 1: Participants’ responses on the use of the bilingual glossary

When the participants asked how they were using the bilingual glossary, there were options that the participants were requested to select from. These are presented in the table below:

Participants' responses	Number of participants
To help understand keywords not understood in English	3
To help them learn more	0
Because the glossary was there	0
Other (Specify)	1

Table 3: Participants' responses on how they used the bilingual glossary

The one participant who selected the 'other' option stated that they used the bilingual glossary to help them "understand the terms better and simplify them." The participants who responded that they used the glossary stated that they found the glossary to be useful. Also, the participants stated that the bilingual glossary helped them to understand things which they did not understand in class and/or in tutorials. All the participants that stated that they used the glossary also gave commented that the terms that were on the glossary were not enough as there are words they looked for but could not find in the bilingual glossary.

The participant who stated that they did not use the bilingual glossary did not provide a reason for not using the glossary.

There are general comments that the participants provided regarding the bilingual glossary. The comments that the participants provided were on the usefulness of the glossary and the least useful features that the bilingual glossary had. The following are some of the comments that the participants provided when they stated that they found the bilingual glossary to be useful. The participants quoted below stated that they speak Xitsonga and Setswana as a home language and they found the bilingual glossary to be helpful.

"I could relate some of the words with my own language."

"Some terms were understandable from the definition given in the glossary"

There are some participants who stated that they understood the terms because they were in their own language.

“Word, definitions as well as English-to-IsiXhosa translations [were useful], because some people tend to understand certain words & phrases when explained in the language they understand most.”

The comments that the participants provided on the least useful aspect of the glossary were on the amount of terms that were in the glossary.

“It did not contain most of the words in the book.”

Another comment that was raised by one of the participants was the manner in which the terms and definitions were provided, that it was not illustrated how one can use the terms.

“I don’t think it gave ways of how the word could be said or used in context.”

The data presented above is the preliminary data that was collected before the ‘main’ data of this study was collected. This preliminary data was collected on former students who were in the first Politics/Sociology 1 ES class where the bilingual glossary for the first time was appended to the textbook *Puzzles in Contemporary Political Philosophy: An Introduction* (2008). The objective of collecting the data was to investigate whether the former students used the bilingual glossary and their experiences on the glossary, if they did use it. There were five participants that filled in and returned the questionnaires. The overall results even though it is a small number of people who participated, show that most participants who took part on filling in the questionnaires did use the bilingual glossary and found it to be useful. As presented above, the participants stated that they found the bilingual glossary to be useful with terms and definitions that were easy to understand even though the terms were not enough as some of the terms that the textbook contained were not made part of the bilingual. As stated above, this data was collected to investigate if the former students used the bilingual glossary. The former students’ experiences; comments and responses presented above are going to be compared to those of the current students who participated in this study and will be discussed later in the next chapter. The next section presents issues that came out during the collection of the ‘main’ data.

5.3 PRESENTATION OF THE ‘MAIN’ DATA

In searching for answers to the main research question, this section presents issues that emerged from the data collection process. These issues are linked to the research sub-questions and these are:

- the languages used by students in formal learning contexts
- the availability of multilingual resources for students in learning and executing tasks during the learning process
- the students’ perceptions on the role of LOTE as languages of academia
- the students’ perceptions on the role of English in HE
- The students’ perceptions on the role of multilingual glossaries in facilitating learning.

These key issues are presented and discussed below.

5.3.1 Language used by students in formal learning contexts

Starting off this section, the statistical information regarding the languages that were used as MoI in high school for the students is going to be presented. This information is going to highlight how students experienced learning in high school and the roles their home languages and MoI played in the learning process. The information presented in the table below shows that the students were mostly taught in English.

Language mostly used for teaching in high school	Number of students
English	26
IsiZulu	2
SiSwati	1
IsiXhosa	1
Afrikaans	1
None	2
TOTAL	33

Table 4. Language mostly used for teaching in high school

Even though the table illustrates the dominance of English as an MoI in high school, the information gathered from questionnaires indicates that in high school the LOTE were used as supporting languages to the MoI. To indicate that the students are not used to English only used as the MoI, there are other languages that the students have indicated were used with the MoI (which is English) in high school. During interviews some students who were taught in their home languages in high school stated that:

“I am used to talking SiSwati...I did it at school in all my subjects, now it is like my first time I learn in English. If for an example they were explaining ‘Global Warming’ they would explain it in Swati.”

“...*xa ufundiswa ngesiXhosa* you understand quicker. *Kanti xa ufundiswa nge-English kukho amagama* which you assume *ukuba athetha ntoni libe lingathethi loo nto*. *Xa ufundiswa ngesiXhosa ufumana* much more information than English.” {lit. when you are learning in isiXhosa you understand quicker. But when you are taught in English there are words which you assume what they mean. When learning in isiXhosa you get much more information than English.}

Some students responded in the questionnaires that:

“I think it would be better for people to understand certain things better if they were in their own language.”

“I wish them to be used to assist us because we did not have the opportunity to speak or learn in English at an early age. So it will help to understand English better.”

The following table illustrates statistical information on the number of languages used in high school to support English, the MoI, which was not the home language of the students. The data retrieved from the questionnaires is as follows:

Language used in addition to MoI in high school	Number of students
English	4
IsiZulu	1
SiSwati	1
IsiXhosa	10
Afrikaans	8
None	9
TOTAL	33

Table 5: Table representing the languages the students used in high school in addition to the MoI

The above discussion looks at the experiences of the sample of the students interviewed regarding the languages used as MoI and to support MoI in their high school education. The following section presents data following probing their language use and other experiences regarding language in formal learning contexts in university, specifically RU.

The language used by students in formal learning contexts here refers to the language which the students use to communicate with the lecturer and with each other in dialogue during the learning process in a classroom environment. It is important to contextualise this within the provisions of the institutional language policy; RU's language policy (2005) declares that English is the language of teaching and learning in the institution. Even though this is the

case, the policy declares that it is important that departments like the university's School of Languages to encourage other departments to "make isiXhosa definitions of technical terms in wide range of disciplines available to staff and students in order to facilitate learning" (RU Language Policy, 2005: 06).

Given the linguistic diversity of the students and their experience of language in their secondary schooling background, I sought to find out whether students do use LOTE in the learning process. The students that informed the data collection process speak different languages such as isiXhosa, isiZulu, English, Afrikaans, SiSwati and Setswana. There are certain research techniques that have been used to provide answers to questions related to this issue and these answers and questions are going to be presented below.

The first data presented is that collected from questionnaires. There were in total, thirty nine (39) questionnaires administered to a Pol I ESP class. Thirty nine (39) represents the total number of students in the class. Of the total, thirty-three (85%) questionnaires were returned and captured for analysis. Thirty-nine represents the number of students in the class and the number of the questionnaires returned shows the number of students who participated in the first sample of the questionnaires.

Ninety-one percent (91%) of the students from whom data from questionnaires was collected have LOTE as home languages. These, beginning with that with most speakers, are isiXhosa, Afrikaans, SiSwati and Setswana. Only three of the students from the sample have English, the MoI, as home language. Statistically, the students' home languages are as follows:

Languages spoken at home	Number of students
IsiXhosa	20
Afrikaans	5
SiSwati	2
IsiZulu	2
English	3
Setswana	1
TOTAL	34

Table 6: Languages spoken by students at home

With English being the only medium of instruction at Rhodes, the data collected shows that there are various languages such as those listed in the table above that students use in formal learning contexts in order for them to support sense-making in their learning. In most instances during the observations, the students would use their home languages when discussing issues around a certain concept and then they would mention the term of that particular concept in English. This is going to be shown in the data that was gathered during observations below. The languages that students would use when in formal learning contexts were different LOTE and this would depend on the people which they are addressing or interacting with.

Through using observations, when the students were with their classmates with whom they share a home language, and were discussing a particular task which they had to do, they would discuss it in their home language. For instance, the students who had isiXhosa as a home language would explain instructions about a task to each other in isiXhosa before they commence with performing the task. When students were grouped together for a discussion they would, for an example, detach themselves from the main group which would consist of other students who speak different languages. Those who spoke the same language would separate themselves and discuss the work in their home languages on the side.

Then when finished with the discussion they would report back to the main group in English. This was not happening only with students who spoke indigenous African languages as home languages, but also with those who spoke Afrikaans as a home language.

For instance, in a particular group the students were all isiXhosa speaking and their discussion was as follows:

“...le offence *ukuba* iphysical *yi-harm leyo.*” {Lit. If this offence is physical then that is harm}

“*Kufuneka sikhumbule* iharm principle, so *kuqala* we must discuss *ukuba yintoni* iharm principle” {lit. We must remember the harm principle, so we must first discuss what harm principle is}.

“...so iharm *akunyanzelekanga ibe*-physical... iharm *ne-offence ziyalink(a)*” {Lit. So harm does not have to be physical... harm and offence link}.

Throughout their discussion, the use of their home languages was used to emphasise understanding and to clearly articulate their thoughts about what they were required to do.

During the interviews, when asked which language they would prefer to use in learning the students stated that they prefer a language which they understand the most. The language which they understand the most and learn better in is their home language, one student stated that:

“It is isiXhosa as it is easy to understand and you can explain things easily when using isiXhosa”.

Another student responded that:

“*SisiXhosa ngoba nasendlini sithetha isiXhosa, naxa ndiphupha ndiphupha ngesiXhosa. Xa ndithetha* I think in *isiXhosa* then translate *loo nto ke ngoku* to English”. {Lit. It's isiXhosa because at home we also speak isiXhosa, I also dream in isiXhosa. When I speak, I think in isiXhosa then translate my thoughts into English}.

“...I would prefer Xhosa because it is my home language so I understand it much better than English.”

The information above was solicited through questionnaires, where the students were asked whether they understood their home languages better than English, and whether that was the reason they used the LOTE more in formal learning contexts. Here, the students were asked to rate their understanding of English as compared to their mother tongue. The options that

were given ranged between “excellent”, “good”, “fair” and “poor”. Excellent’ represented, full mother tongue and full English proficiency; ‘good’ represented near full mother tongue and full English proficiency; ‘fair’ represented full mother tongue but reasonable proficiency of English and ‘poor’ represented very low proficiency in English as compared to the students’ mother tongue. The students’ responses are as follows:

Students’ rating on understanding of English as compared to mother tongue	Number of students
Excellent	3
Good	15
Fair	10
Poor	0
No response	2
TOTAL	30

Table 7: Students' ratings on understanding of English as compared to their mother tongues

All the students who rated themselves from good to fair in terms of their understanding of English compared to their home language were speakers of indigenous languages (isiXhosa, isiZulu or SiSwati) who attended “township” (also commonly known as ex-DET) schools. The students who responded that they had an ‘excellent’ understanding of English attended private or former Model-C schools for secondary schooling.

In terms of feedback to the main group, even though the students would have a discussion in isiXhosa, when they had to give an oral report, they were required to speak English, the official language of teaching and learning. English was also the only language spoken and understood by the lecturer.

However, even though the lecturer was an English monolingual, during interviews the students stated that if she thought that some students did not understand a concept being taught, she would ask other students to explain the concept in the students' home language. This was also witnessed during the observations where the lecturer would ask me as a researcher or other students to explain to those who speak isiXhosa the meaning of a certain concept. For an example, the lecturer asked me for the definitions of terms such as 'ethics' and 'patriarchy'.

Observing the classes allowed the researcher to systematically observe and listen to languages the students used in formal learning contexts. Observation as a research technique enabled me to confirm students' responses from questionnaires, and follow-up interviews regarding the LOTE that students used in communication with the teacher and with each other in the formal learning context.

This section highlights that the language which the students speak in formal contexts depends on the people whom they are addressing. For instance, if the students are talking to their peers they might speak in a language which they both understand the most if they share a mother tongue. When communicating with the lecturer, the students would use English as the lecturer is monolingual. Students' previous experience of language use in formal learning contexts illustrate that they continued to use the languages which were used, by default, (i.e. in high school). It has been illustrated that the students are comfortable with learning in languages which they understand the most whether it would be the main LoLT or an additional language to the main LoLT. With the students finding themselves in the context of university where there is one language which is used a MoI and the language being different from their mother tongue which they are proficient in, there are certain resources which they make use of to assist them in their learning. The next issue is going to discuss the available resources that the students use when performing tasks.

5.3.2 The availability of multilingual resources for students in learning and executing tasks during the learning process

This section presents and discusses students' use of resources available to them, which they can use when performing tasks in formal and informal learning contexts, particularly to look for meaning of certain Political Philosophy 1 terms. This section is going to present the resources that have been shown through using certain data collection methods that the students use and how they use the resources the resources. Various techniques have been used to obtain the data which is being presented.

As it was stated in the methodology chapter, there were two sets of questionnaires that were distributed. The first sample was to elucidate information on students' perceptions about the use of additional resources in African languages, and that are available to them to assist in learning. The second sample was on the use of the bilingual glossary that was distributed to the students. When gathering data, one of the questions that were used in the questionnaires asked whether the students would make use of multilingual glossaries if these were made available to them. The students' responses in the questionnaires stated that they would use the multilingual glossaries if they would be provided with them as resource materials. This data was collected before the actual bilingual glossary was distributed to the students. There were thirty-three (33) students that filled in the first set of questionnaires. As shown by the following statistical representation, twenty-seven (27) students responded that they would use the materials if they would be provided with them, five (5) students responded that they would not use the materials and one (1) students did not answer the question.

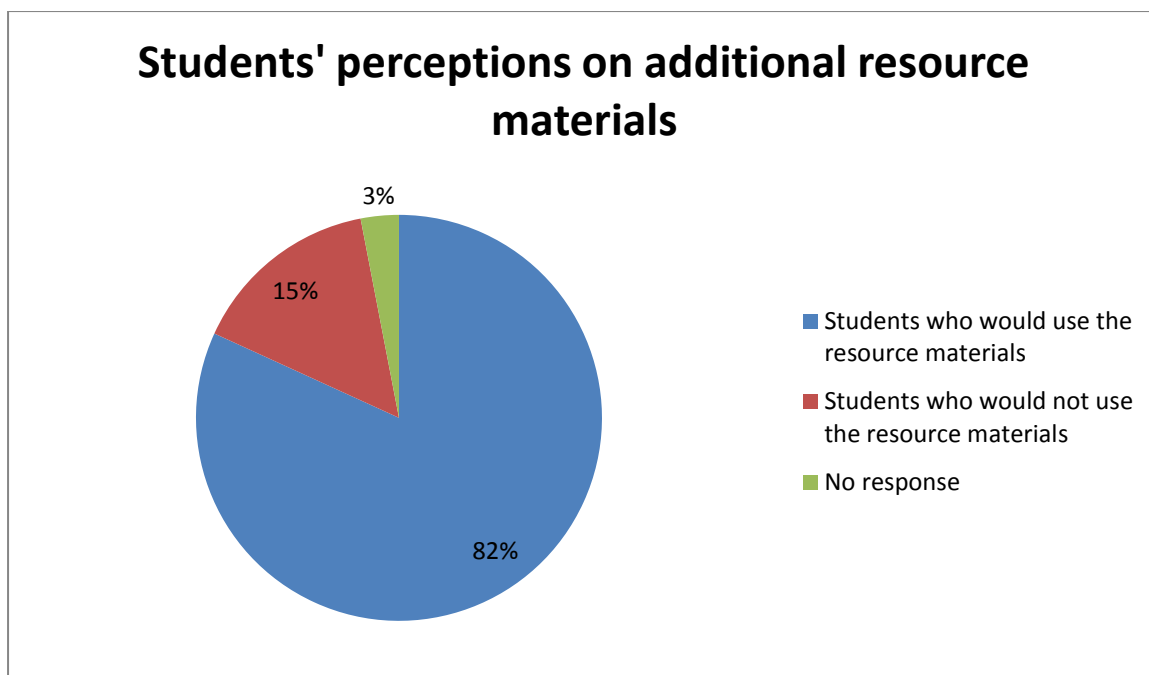


Figure 2: Students' perceptions on additional resource materials

In the questionnaires, the students were presented with options from which they had to choose their responses regarding how they would use the resource materials if they were provided with them. The statistical representation of number of students who selected options that were given to them is as follows:

Options given to the students regarding the use of additional resources	Number of students over a particular option
I would like to use them in lectures	14
I would like to use them in tutorials and/or practicals	17
I would like to use them on my own, when I am studying	21
Other	0

Table 8: Options given to the students regarding the use of additional resources

The responses that were given by the students vary and some students selected more than one option. There are fourteen (14) students who stated that they would like to use the additional resources in lectures. Seventeen (17) students responded that they would like to use the

additional resources in tutorials or practicals. There were twenty- one (21) students who stated that they would like to use these resources at their own time when studying. The option 'other' required students to state if there were any other ways in they used the additional resources, but there were no students who selected or provided an answer for this option.

In response to whether they used other resources when they had a problem understanding terms in the subject under study, students indicated that there were indeed other resources that they used to help them understand a certain concept that they would find difficult to understand. They acknowledged that they used dictionaries as sources to understand meaning of concepts which they found difficult to understand. Also in class, during observations the students were encouraged by their lecturer to buy monolingual dictionaries which seemed to be prescribed for them. In the questionnaires and interviews, all students who participated stated that they used dictionaries. Students also stated that they used other resources such as the internet, specialised subject dictionaries and glossaries. During observations, there were students that seemed to own monolingual dictionaries and they would use them solely when they were reading in class or working within groups. In discussions, when students were looking for the meaning of a certain concept they would consult their dictionaries.

The second set of questionnaires that were distributed was based on the bilingual glossary that was distributed to the students. The questionnaires were to investigate whether the students used the bilingual glossary when learning and the manner in which they used it. There were thirty-seven (37) students who participated in the second questionnaire. The second questionnaire was based on the bilingual English-isiXhosa glossary that was provided and was investigating whether the students were using it in learning, and to find meanings and definitions of concepts which they found difficult. The information that was given by students in the questionnaires as well as interviews both showed that the students used the bilingual glossary. The data collected during the interviews illustrated that all the students who participated in the follow-up interviews used the bilingual glossary. There are twenty-eight (28) students that responded in the questionnaires that they were using the bilingual glossary and nine students responded that they did not use it. The following statistical information shows the students' responses in the questionnaires regarding the use of the glossary that was provided to them.

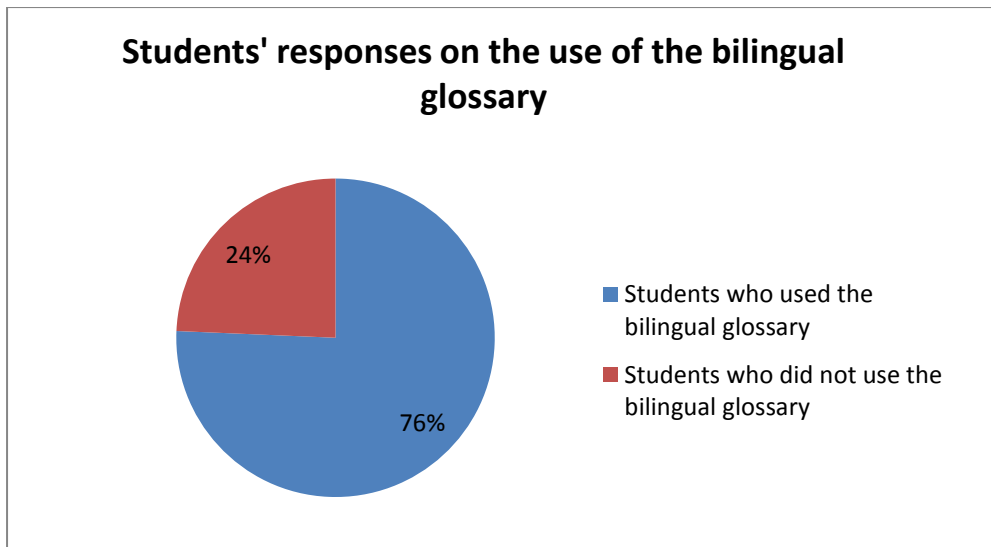


Figure 3: Students' responses on the use of the bilingual glossary

For the students who responded that they did not use the glossary, they were asked to explain why they did not use the glossary. The following table shows the students' responses to why they did not use the glossary and the number of students who gave such responses.

Students' responses for not using the bilingual glossary	Number of students
I cannot/do not speak isiXhosa	5
I do not need the bilingual glossary	2
I have no idea	1
No response	1

Table 9: Students' responses for not using the glossary

Using questionnaires, the students who responded that they used the bilingual glossary were also asked to state their reason for using it. The chart below shows the number of students and their responses regarding their reason for using the bilingual glossaries.

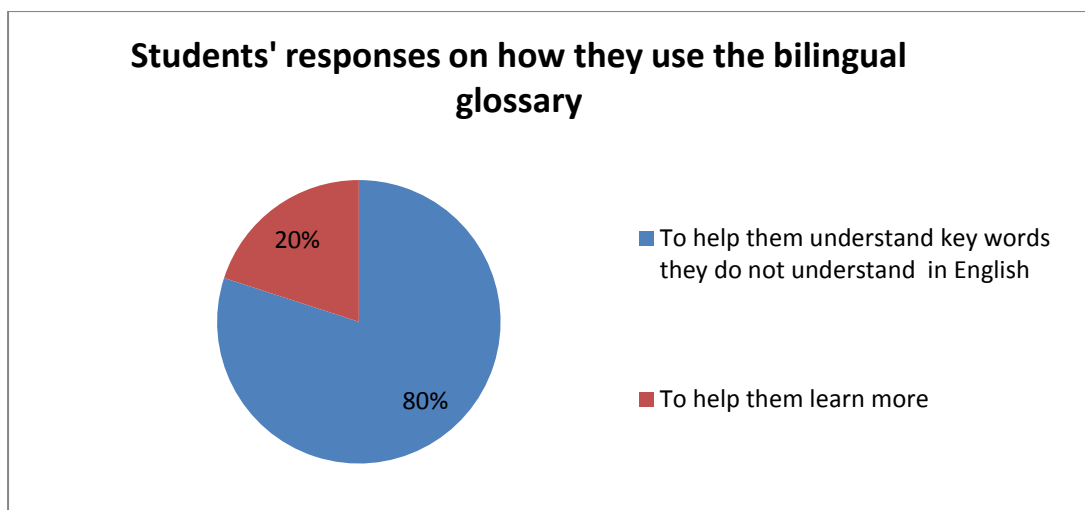


Figure 4: Students' responses on how they used the glossary

When the students were asked during the interviews how they were using the glossary, they stated that they were using it when they were executing tasks such as tutorials and assignments.

“Bendiyisebenzisa at my own time xa igama ndingali-understand(i), naxa ndifuna i-meaning yelo gama.” {Lit. I was using it at my own time when I don't understand a certain term and looking for the meaning of that term}.

“I only used it when I was doing my essay, assignments... so that I can understand the terms.”

“This glossary helps me a lot on writing meaningful essays and understanding what I am reading about.”

The students stated that they were using the bilingual glossaries at their own when doing essays and assignments. Using these at their own time means that the bilingual glossaries were used mostly when the students were in their rooms or at the library doing school work. The students stated that they were using the bilingual glossaries when looking for the meanings of particular terms and when they wanted to understand those particular terms.

The issues that have been presented above discuss the resources available to students to support learning in English, and that they use when performing various learning tasks. The data was gathered using questionnaires, observations and follow-up interviews as research

techniques. Through using these techniques it has been shown that the students use various sources such as dictionaries (monolingual print and online dictionaries); the internet as well as bilingual English- isiXhosa glossaries when they are performing their tasks. Using these techniques, it has also been presented how and when do the students use the resources. The next issue that is going to be presented is the students' perceptions on the role of the resources that they used (glossaries to be specific).

5.3.3 The students' perceptions on the role of bilingual glossaries in facilitating learning

This section presents information provided by the students regarding their perception of the role of bilingual glossaries in supporting learning in university. The data in this section was collected using observations, questionnaires as well as follow-up interviews. There were twenty-seven (27) students that responded in the first questionnaire: that they would use the glossary if they would be provided with one. The students who responded that they would use the glossary have different languages as home languages, including those that are not the speakers of indigenous African languages. The table below shows the home languages of students that responded that they would use the glossary.

Languages spoken by students at home	Number of students
IsiXhosa	16
Afrikaans	4
English	3
IsiZulu	2
SiSwati	2
TOTAL	27

Table 10: Languages spoken by students at home (students who would use the glossary)

There are five (5) students who responded that they would not use the materials if they were provided with them. The reasons that were given by these students in their questionnaires were that they cannot read and speak isiXhosa. These responses show that the students referred only to the bilingual glossary (which is in isiXhosa and English) that they were provided with later on in the study, and might not imply that they would not use the glossary if it was presented in a language combination in which they were fully proficient. These students also speak different languages at home and these have been illustrated below:

Languages spoken by students at home	Number of students
IsiXhosa	3
Afrikaans	1
Setswana	1
TOTAL	5

Table 11: Languages spoken by students at home (students who would not use the glossary)

Among the five students who stated that they would not use the materials, these students were all only taught in English in high school and there is only one who stated that they went to an ex-DET school.

There are different perceptions that the students have regarding the role of glossaries and other resource materials especially in terms of benefits these resources would provide in their learning. In the questionnaires, students have stated that they identify glossaries as materials that can help their learning as they get to see the meaning of certain concepts in languages which they understand better. Quoting students' responses in some of the questionnaires, they responded that:

“I wish for them to be used, because it would be much easier to understand other words.”

“I would like for them to be used, because it is much easier to understand something in your own language. My marks would improve.”

“...so that everyone could understand clearly as some of us do not understand English very well.”

The students were asked their thoughts regarding the provision of bilingual glossaries at university. There are four responses that the students were given as options to choose from, namely, ‘Strongly agree’; ‘Agree’; ‘Disagree’ and ‘Strongly disagree’.

All the students who participated in the questionnaires including those who said they would not use the materials responded by selecting ‘strongly agree’ or ‘agree’ to the statement that glossaries were a good idea to support students with learning and that they should be used. Out of the thirty-seven (37) that participated in the questionnaires, there are twenty-six (26) students who selected ‘strongly agree’ and eleven (11) students selected ‘agree’. There are no students who selected ‘Disagree’ and ‘Strongly disagree’. The following is the statistical responses of the students’ responses to the statement that bilingual glossaries were a good idea to support students with learning:

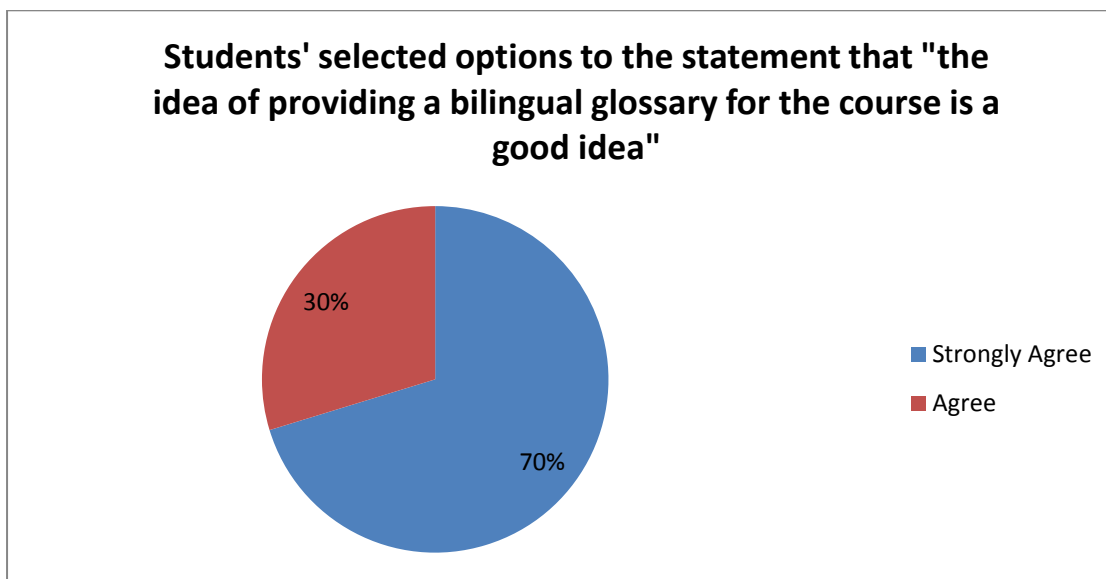


Figure 5: Students’ selected options to the statement that “the idea of providing a bilingual glossary for the course is a good idea”

In the data collected from the questionnaires as well as interviews the students stated that they used the glossary to help them with learning more and learning important terms that they did not understand in English.

The students consider the glossary that was distributed to them as a tool that helped understand their work better. There are certain reasons that have been stated by the students in the questionnaires about why they consider the glossary to be helpful. These responses from questionnaires were solicited through predetermined responses which the students were given to select from, and the following are the responses that they gave:

Students' responses to why they found the bilingual glossary helpful	Number of responses given by students
It helped them understand words they do not understand in class/tutorials.	13
It helped them learn more and better	8
It consisted of terms which they found difficult to understand in English.	13
Because of the quality of the material	2
TOTAL	36

Table 12: Student's responses on why they found the glossary helpful

In questionnaires, some students responded that:

“This glossary helps me a lot on writing meaningful essays and understanding what I am reading about.”

“Bilingual glossary is very helpful and in terms of understanding in English other words we get a chance to even pronounce them in our own language that gives us a better understanding and vision as we study.” [The glossary is very helpful and it helps us to understand English. We also get a chance to say some of the terms in our languages and that helps us to have an idea of the concept when we are studying.]

“The bilingual glossary is very helpful because some words are hard to understand in English even if you explained; in isiXhosa I am able to understand them.”

Also during interviews, some students commented about usefulness of, the glossary was and this is what they stated:

“It was helpful *kakhulu*. Because *utsho ulazi igama uli-understand(e)*”. {Lit. It was very helpful. Because it helps one to understand a certain term.}

“I did not understand some words in English even though they were explained. Then when I looked at the Xhosa definitions I could understand them. They (Xhosa definitions) clarify them more.”

“*Ewe yayindinceda because xa igama ulijonge kwi-English iba-vague into. Kodwa xa ithethwe ngesiXhosa iye ivakale bhetele.*” {Lit. Yes it was helpful because when you are looking at a term in the English definitions the concept would become vague. But when explained in isiXhosa it would be understood better.}

Through using questionnaires as a tool for collecting data, there is also evidence that that the glossary was also used by students who do not speak isiXhosa or any of the indigenous African languages. Regarding the aspects of the glossary that they found useful, some students who do not speak isiXhosa or other indigenous African language responded through the questionnaires that they used the glossary and it was helpful, but they used the English definitions. The responses to questionnaires and interviews indicated that the terms on the glossary were not nearly enough and there are terms that should have been included and that were not there. This was accompanied by some terms that the students suggested that they should have been added in the glossary such as ‘harm principle’; ‘positive freedom’; ‘anarchy’ and ‘sovereignty’.

The students perceive the glossary to be a good source of information especially for first year level. Using questionnaires and interviews, students repeatedly stated that the glossary plays a big role in assisting those students who were not mother tongue speakers of English; are not yet familiar with some difficult concepts that are used in special subjects at university and students who are not used to being taught in English. The glossaries are recognized as good sources of information that can help students with definitions which are provided in their home languages. It has been highlighted that there are other students who stated that they benefitted from the glossary even though they could not use the isiXhosa definitions, they found the English definitions to be useful and would like it if the glossary would be available

in other languages such as Setswana and Afrikaans as well. The next issue which is going to be discussed is the students' perceptions on the role of LOTE.

5.3.4 The students' perceptions on the role of LOTE as languages of academia

Some of the data collection techniques used sought to investigate the students' perception of the role of LOTE in supporting learning in higher education. In this section I present how the students have shown to perceive LOTE. As presented in the first theme that I presented as an issue in this chapter, the students that participated in the collection of data for this research speak different home languages and most of those are LOTE.

It has been discussed that most students who do not speak English as home languages were also used to being taught in LOTE in high school even though English is the official MoI from Grade 5 of schooling. Responding to questionnaires and interview questions, there are students who stated that they were used to being taught in LOTE, and that it was new to them that everything was done in English.

“...coming from a township school it is difficult to follow what the lecturer is saying as we are used to being taught in Xhosa.”

“...*thina xa into uyixelelwe nge-English kufuneka uyi-convert(e) apha kuwe entloko la nto. Kanti xa kuthethwa ngesiXhosa it's first hand, uyaqonda ukuba uthini.*” [lit. for us when you are told something in English you first need to convert it in your head. But if it is in isiXhosa you get “first hand” information and understand what is being said immediately.]

“...because some words are hard to understand in English if you explained in isiXhosa I am able to understand them.”

“It will help a lot, especially for students who took English as first or second additional language.”

The students' responses above also show their perceptions about the provided bilingual glossary which is in isiXhosa and how it helps those who are not proficient in English and are used to being taught in both English another language to support their learning.

This has also been confirmed through observations, where sometimes students would discuss in their mother languages when they had to execute certain tasks. In interviews, the students stated that they prefer to learn in their home languages which they know better.

“IsiXhosa xa usifunda sininzi as compared to English. Kodwa ke xa ucaciselwa ngesiXhosa bekuza kuba kumnandi.” [lit. When you are reading in isiXhosa there are more words as compared to English, but it would be nicer to have things explained to you in isiXhosa.]

One student stated that they are used to English and do not have a problem with English only being used when they are learning but there needs to be something done to help understand certain terms. This gives an indication that even for those students who have English as home language, and who had English as MoI in both high school and university, learning in high function domains uses LSP, which is not knowledgeable in LGP, which these students possess. Even though the students stated that they prefer learning in English, they would also argue that it becomes difficult when they learn in English only as English is complicated and they need explanation of some terms in their own languages.. Such views are presented further in the next section.

In response to probing in questionnaires and interviews, the students stated that LOTE are languages which they grew up speaking, at school they were familiar with these languages and they were used as MoI as well in secondary schooling , so they are easy to understand, especially that it is a language which they grew up speaking. They stated that LOTE would be very helpful especially if they would be used at university as not everyone is fluent in English, the common medium of instruction. One student stated that:

“I would like them to be used, because it is much easier to understand something in your own language. My marks would improve.”

In the interviews, the students stated that LOTE are mostly useful when they are used while learning in English, in other words to support English. It was demonstrated by the students that these languages can be used at one’s own time independently when there are English terms that they do not understand. LOTE are considered to also be very helpful in assisting students who struggle with English and are not proficient in English. Another student during interviews stated that:

“I would like it for African languages to be used in a certain way, I do not know how. But they would help a lot.”

Some responses in the questionnaires show that students think that the use of LOTE would help in facilitating understanding those areas of their studies which they sometimes do not understand. One student said that this would be possible ...

“Because it will open doors for us as students and it will make it easy to understand lectures because they will help us with translations.”

“African languages would be useful to expand our understanding of the terminology because sometimes big words are used that I have never heard of them before.”

The students that do not speak LOTE at home who participated in the questionnaires also stated that they encourage the introduction of LOTE as they think that it would help their peers who are more proficient in these languages. This can be shown by a response given by one of the students who speaks English as a home language. The student stated that:

“I believe that the glossary is a good idea because certain terms are better understood when explained in our home languages.”

In both questionnaires it was stated that there is a need of intervention when it comes to introducing LOTE to assist learning. From the students’ responses in both questionnaires and interviews it has been revealed that the students agree that there is not only a need for developing and introducing indigenous languages at university, but also for Afrikaans as well. There were Afrikaans students who stated that they would also like it if there would be terms made available in their language. Another student who spoke Afrikaans as mother tongue speaker stated that they used the English definitions and when they were asked which terms they would like to see added into the glossary they stated that “Afrikaans terms translated into English”. This issue has also been raised by a student during interviews that it is important that the students who speak Afrikaans are also not disadvantaged and are accommodated. The student asked:

“Won’t it be unfair for Afrikaans speakers when they do not have a glossary and we have?”

To show the difference in students’ perceptions regarding indigenous languages, there is another perception that the students have regarding LOTE, which is considering indigenous

languages to be only linked to traditions and culture. Some students view LOTE as not having value in HE as they are just valuable in bearing tradition and culture, and that they only need to be used so that the people who speak them can relate to their cultural values and traditions. Using questionnaires, there are students who stated that it is important that LOTE are used at university so that those who speak them do not lose their sense of culture and traditions. In questionnaires, students stated that being at university they meet people who speak different languages and therefore they tend to use English most of the time and this makes them forget their home languages and traditions. One student during the interviews also presented a view that indigenous languages like isiXhosa are helpful for people who come from the villages and for this reason, they would benefit if they were made available at university to them.

The student also stated that they support indigenous languages so that they do not forget where they come from, as “indigenous languages and traditions are related”. Even though the student stated how they perceive indigenous languages, and their value for those students coming from “the villages”, they still stated that there are people who use the glossary and who have said that they find it helpful so they support it as it helps other students who are coming from schools that did not use only English as MoI.

From the data that was collected, it was shown that the students also perceived the indigenous languages not to have much value as English. There are some students who speak the languages as home languages and stated that they prefer English and do not need help by using indigenous languages at university when learning. The students stated that they do not need the languages because they are used to being taught in English and would be confused if they would have to learn in a different language. In response to some questions in the questionnaires, these students stated that they do not need indigenous African languages to assist them when learning as they prefer English which they consider to be the “communication and business language” even though they support the use of LOTE if there are students who require them.

There are different students' perceptions that have been provided regarding LOTE. Research techniques such as questionnaire and follow up interviews have been used to highlight these perceptions. From the data that was collected, it is shown that the students who perceive LOTE to be helpful are mostly the students who are used to be taught in both English and LOTE in high school. It has been presented also that there are students who do not speak LOTE but think that they might be helpful for those who speak these languages as their home languages. Even though this is the case there are also some students who find these languages to be "unnecessary" at university and that there is no need for them to be used as English is considered to be "convenient for everyone". The next section is going to discuss the students' perceptions on the role of English, as there are responses that the students provided which revealed that they do not perceive English the same way they do with indigenous languages.

5.3.5 The students' perceptions on the role of English in HE

From the data that was collected, it has been shown that the students have different perceptions about English, which is the LoLT at Rhodes University and which most students who took part in the research speak as second language. Because English is not most of the students' home language, the students have different competencies in English as compared to their home languages.

Starting off this section I will present students' responses to questions that sought their views on their perception/understanding of English in comparison to their home language, where they have LOTE as home languages. Again, students were asked to give their answer on a scale of 'excellent', where excellent represents a very good and full understanding of English compared to home language. 'Good' represented near full proficiency and understanding of English compared to home languages; 'fair' refers to reasonable understanding of English compared to home language while 'poor' represented a very low proficiency of English compared to the student's home language. From the six students that participated in the interviews, five students stated that they understand their home languages better than English. The table below shows the students whose home language is LOTE and their competencies in English as compared to their home languages.

Students' competencies in English as compared to their home languages	Number of Students
Excellent	3
Good	15
Fair	10
Poor	0
No response	2
TOTAL	30

Table 13: Students' competencies on English as compared to their home languages

Using questionnaires, there were thirty (30) students that stated that they do not speak English at home, these students were asked to rate their skills in English. Reading, understanding well, speaking and writing are the skills that the students were asked to rate themselves in in terms of their English competency and these are the skills that are mostly used in learning. The information displayed in the table below is that of students who do not speak English as home language and there is one student that did not supply an answer on 'understand well'. The table below presents the number of students' responses on how they have rated their skills in English.

	Excellent	Good	Fair	Poor
Read	4	26	0	0
Write	6	22	2	0
Speak	3	20	7	0
Understand Well	2	21	6	0

Table 14: Students' rated skills on English

The thirty (30) students who do not speak English at home were also asked to rate their skills in their home languages. The following table is going to show the students' skills in their home languages.

	Excellent	Good	Fair	Poor
Read	14	12	4	0
Write	11	15	4	0
Speak	13	15	2	0
Understand Well	16	12	2	0

Table 15: Students' rated skills on their home languages

The above results show that the students responded that they have better skills in their home languages as opposed to English. Even though this is the case, using questionnaires as well as interviews; it was found out that most students still preferred to be taught in, and are comfortable with English being the medium of instruction at university. Retrieved from the data from the questionnaires, the following chart shows the students' responses to the question regarding being comfortable with English being the medium of instruction at university.

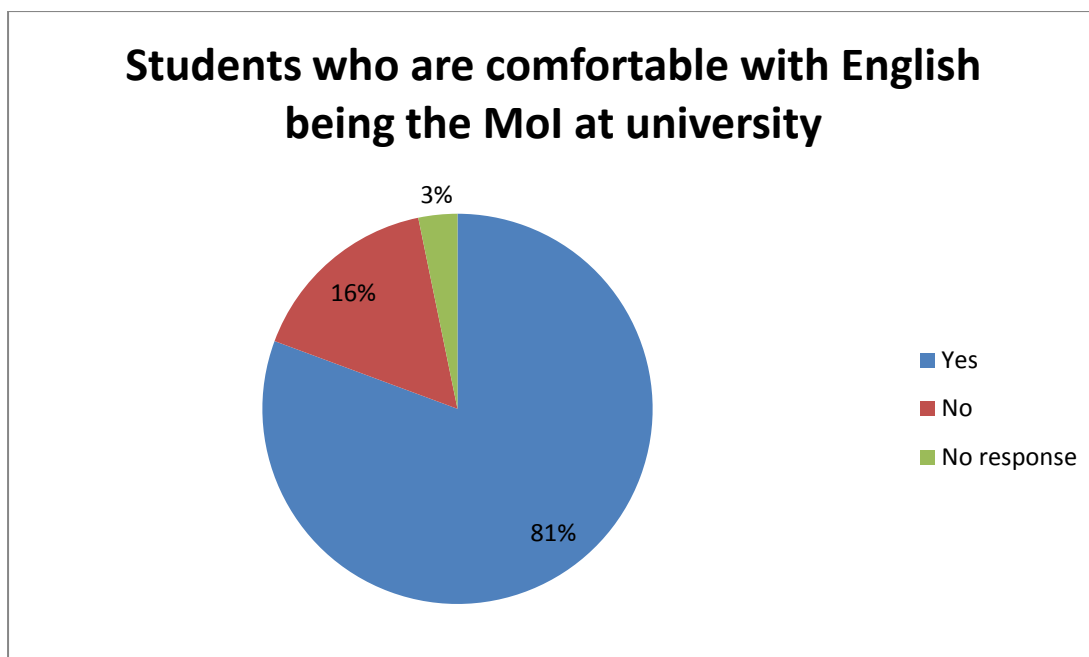


Figure 6: Students who are comfortable with English being the MoI at university

During the interviews, three students stated that they prefer being taught in English. They gave reasons for their statements regarding them being comfortable with English being the MoI at university, rather than the LOTE.

“Because English nowadays is the communicating and international language.”

“English is an international and business language so it must be taught everywhere.”

In both responses of questionnaires and interviews, the students who acknowledged English to be the “international and business language” stated that it would be better and easier for them if there are other languages (home languages) that are used to supplement their learning. The students were advocating for English to be used as MoI and with LOTE to support the LoLT. Through using questionnaires; observations and interviews it has been shown that the students’ most concern is not inability to understand or speak English as a language but rather certain terms that are used when they are taught in different disciplines. One student during interviews stated that:

“...it is not like we do not understand. We do understand because we are students who qualified for university. What then I would suggest is for university to try and help those students who have problems with some terms...”

However the perception presented by the student above is that it is the “other” who needs this intervention although it is stated in the discussion on terminology that learning in academia involves LSP terminology which might be difficult to decipher even for those who are proficient in the language concerned.

As shown above, using questionnaires and interviews most students responded that they prefer to be taught in English but with their home languages to assist their learning. There are also students who stated that they are not comfortable with English as MoI at university and would prefer to learn in their home languages. The statistical representations of these students’ views have been given above. Below I present their reasons for the statements they make.

In the questionnaires, there are five students who stated that they are not comfortable with English as MoI at university. The students stated that it was because they were not used to being taught in the English only as their home languages were also used in high school to help them understand better. The difficulty of some English terms has also been stated as a factor which makes students prefer to learn in their home languages.

5.4 SUMMARY

The purpose of this research is to introduce the use of bilingual glossaries to support learning at university. It also seeks to investigate the students’ perceptions on, and uses of additional resources that can be made available to them to assist them in learning effectively. Participant observations, interviews and questionnaires are the types of research methods that have been used to collect data. This chapter has presented the preliminary data collected using questionnaires from the former students who were registered in the ES programme in 2009 as well as the data that was collected using the techniques mentioned above. The preliminary data was used to compare the students’ experiences and it is going to be referred to (in comparison) in the next chapter when discussing the results of the ‘main’ data.

While collecting the data, there are issues that have been highlighted through the use of research techniques employed in this study (that is, questionnaires, follow-up interviews and observations) and these issues have also been discussed. The issues that have been discussed in this chapter related to the language/s used by students in formal learning contexts; the use of available resources that the students use when executing tasks; the students' perceptions on the role of bilingual glossaries; LOTE and English.

In the first issue highlighted in this chapter, the languages used by students in formal learning contexts, the historiographical information about the students' languages that they used in high school has been provided as well as the languages that the students speak at home. Using the mentioned data collection methods, this issue shows the languages that the students use when learning and how they use those languages. It has been shown that the students use their home languages in discussions with their peers in class especially if they speak the same home language.

The second issue which has been discussed is the use of available resources that the students use when executing tasks. Using different research techniques, the data has been presented to show the students' perceptions on additional materials that can be used at university to facilitate learning. This issue has presented the resources that the students use and how they use them. The use of the provided bilingual English- isiXhosa glossary has also been discussed in this chapter and how the students use the glossary.

The issue regarding the students' perceptions on glossaries has been discussed. As stated, the students who participated in this research have different home languages and they had different perceptions regarding the use of bilingual glossaries in HE. It has been shown that the students perceive glossaries to be helpful especially for students who speak English as a second language. Using certain research techniques the students who also speak English as a home language recognise glossaries as having a potential of being helpful for the students who are not proficient in English, and that even for them as English speaking students the glossaries are helpful as they contain simplifying definitions.

The students' perceptions on the role of LOTE have been highlighted as an issue when collecting data. There is statistical representation of the languages that the students have been exposed to in high school, in addition to English, the official MoI. It has been shown that the students recognise LOTE to be easy to understand as they grew up speaking those languages and they believe that it would be easy to be taught in them. It has also been presented that there are other students who see LOTE to be languages that can only be used so that the students do not lose their culture and traditions.

Lastly, the issue on the students' perceptions on the role of English has also been discussed and presented. There are certain questions that were enquired on the students whose responses highlighted this issue. With English being the MoI at Rhodes University and most of the students not speaking this language as home language; the students' competency in this language as compared to their mother tongues has been presented. The students' skills in English as well as their home languages have also been represented. Also, whether the students are comfortable with English used as the MoI at university. There are certain responses that the students provided and it has been presented that the students hold certain perceptions about English such as that it is an important language to have a skill on even though it is important that those who are not competent should be assisted. It has also been presented that the students' views are that English itself as a language is not the problem but rather the terms that are used in certain disciplines are what leads to the requirements of additional materials such as glossaries; dictionaries etc.

CHAPTER 6: DISCUSSION OF RESULTS

6.1 INTRODUCTION

This chapter discusses the results that have been presented in the data presentation chapter. Through the use of various data collection methods, there are issues that emerged from the data collection process and these will be discussed in the context of the theoretical framework of this study. Some scholars whose work has been used in the theoretical framework of this study have been used to explain some of the results that came up in the data collection process.

In different issues that have been discussed below, it has emerged that the students support the use of LOTE in HE, even though they do not want these languages to replace English. But there is an acknowledgement of the need for their use to facilitate the effective and meaningful learning and, consequently student success. The first issue which is going to be discussed is the languages used by students in formal learning contexts.

6.2 LANGUAGES USED BY STUDENTS IN FORMAL LEARNING CONTEXTS

As stated in the previous chapter, most students in high school were using two languages as MoI: English, which was mostly used according to the data, and another which was either Afrikaans or an indigenous African language such as isiXhosa or SiSwati. Ninety-one percent (91%) of the thirty-three (33) sampled students speak LOTE as home languages and these languages were also used in conjunction with English (which is spoken by three students as home language) which was the LoLT in high school. The LoLT in the schools is the child's mother tongue in the first four (from Grade R- Grade 3) years of schooling. According to the Department of Basic Education (2014) the LoLT from Grade 4 to Grade 12 is English. When LoLT changes from the learner's mother tongue to English, there is more code-switching that happens in class (Setati *et al*, 2002; Meyer, 1998; Madiba & Mabiletja, 2009; Desai, 2012). According to the research that was conducted by Madiba and Mabiletja (2009) in Limpopo schools on the implementation of the Language in Education Policy

(LiEP), it was found out that teachers of Ex-DET schools also mostly choose to teach using learners home languages rather than English. According to Madiba & Mabiletja (2009: 216) the teachers choose learner's home languages in order "to make learners understand" what they are being taught.

According to Desai (2012) children from Ex-DET schools usually speak African languages (which are most of the time their home languages) at home and they live in areas in which African languages are entirely spoken. Therefore, learners only use English at school and African languages when they get home but are expected to learn in English at school. This is when teachers mediate the learning process through code-switching. According to Meyer (1998) code-switching helps learners to cope with learning in English and also to develop proficiency in the language. The teachers in Ex-DET schools manage to assist the learners through code-switching because they are bilingual and English is only used solely when the learners are writing.

The use of learner's home languages with English in high school happens in order to facilitate cognition. According to scholars (Bangbose, 1991; Cummins & Swain, 1986; Cummins, 2001; Obanya, 2004) there is a relationship between language and learning and learning in one's home language or a language that one understands better facilitates more learning. It has been argued that it is better when new abstract concepts are introduced to the students in a language which they fully understand (Alexander, 2003; Kaschula, 2013; Maseko, 2011; Batibo, 2010). According to Vygotsky (1986) abstract thinking is required for learners when they are in school in order for them to understand the scientific and complicated concepts that are usually used. Language has been recognized to be playing a huge role in concept learning and conceptualization, and conceptual development happens in one's first language. Thus, it makes it difficult for learners to learn and understand difficult concepts in a language that is not their home language. In order for learners to be able to participate in learning and in the construction of knowledge, it is important that they are taught in a language which they understand the most (Maseko, 2011; Batibo, 2010; Kaschula, 2013).

In the South African schooling context, the learners' home languages are used in conjunction with English which is the LoLT. With English being the second language of the learners, according to Setati *et al* (2002) this means that when they are taught using English it is when they get to acquire proficiency in English. This means that the learners manage to develop competency in English at a basic level (Paxton, 2007). As discussed in the literature review chapter, this notion is that of Cummins' (1984; 1986; 2000) BICS and CALP.

As explained previously, BICS on one hand refers to Basic Interpersonal Communication Skills which can be explained as an everyday basic conversational communication which according to Cummins (2000) is context-embedded and supported by other interpersonal signals that makes it easy for one to understand. CALP, the Cognitive Academic Language Proficiency on the other hand is when the context in which communication occurs is reduced and there are certain technical terms that are used throughout the conversation. CALP is when there is a certain complicated language which is required in order for one to carry out academic tasks; also it is important that one is able to cope with the cognitive demands of the particular tasks (Cummins, 2000; 1980; Paxton, 2007). In most South African schools when the learners are taught in English, it is when they get to acquire the BICS of the language and usually CALP has not yet been developed (Paxton, 2009; Madiba, 2010; Madiba & Mabiletja, 2009; Desai, 2012). This is when the teachers resort to code-switching in order to facilitate cognition and make the students understand the concepts or ideas that the teachers use (Setati *et al*, 2002).

Code-switching of teachers in high schools assist students to cope with the school work. When these students get university, English is used as a *lingua franca* because of the student body which is diverse (Dalvit & de Klerk, 2005) and also in most universities English or Afrikaans are used as LoLT. According to Paxton (2009) this is the case because most university textbooks are available in English and have not yet been made available in other South African languages such as isiXhosa or isiZulu. Contrary to high school teachers, most university lecturers and tutors are monolingual and use English only when teaching. With the LoLT at RU being English this means that some students who come from Ex-DET schools where instruction was done in their home languages with English might struggle during the learning process.

Students who enter university and have LOTE as home languages seem to experience the LoLT which is English to be a barrier when learning. That can be motivated by the fact that, given the time that is required to develop CALP, by the time they get to university they have not developed in English. In other words, they do not have enough skills to deal with the cognitive demanding language which is used in academic contexts (Madiba, 2010). One of the students during interviews stated that they can speak English but the problem is using certain terms that are in English which are used in university. So, the student only has acquired BICS in English. In order to meet the students' needs there are various scholars (Madiba, 2010; Paxton, 2007; 2009; Dalvit, 2010; Maseko, 2011) who have engaged in terminology development projects in high-function domains such as Computer Science, Economics and Political Science in order to assist facilitate learning for university students.

Introducing bi/multilingual glossaries to students is an intervention strategy which is meant to assist students in learning cognitively demanding concepts that are used at university. The use of these glossaries will assist students to participate in meaningful learning as research (Dalvit, 2010; Paxton, 2009) shows that the students already use code-switching when discussing the concepts with their peers in order to make meaning of the new knowledge presented to them. Meaningful learning according to Boughey (2005) is where the students engage fully with the presented knowledge and is contributing in the construction of learning. Boughey (2005) and Simons (1993) refer to this notion as the constructive conception of learning. In order to achieve this kind of learning it is important that the students are given epistemic access and this can be achieved through, amongst other things, the use of languages which students understand the most in order to facilitate learning. Epistemic access according to Morrow (1995) and Boughey (2005) is where there is participation between both students and teachers in the construction of learning and where the students contribute to the production of knowledge. As stated above, this yet does not exist in the present university teaching context because learning happens in a language which most students cannot engage productively with knowledge as it their second language not a language which they can clearly articulate themselves in.

The above argument supports the students' responses that they get "confused" when learning in English only as they are used to code-switching in high school. This happens because the

students are not used to only using English in the classrooms. As stated above, in some high schools (especially Ex-DET schools) code-switching between the students' mother tongues and English is mostly used by teachers to help the students cope with the learning process.

The students in this research prefer the use of their home languages to be introduced at university especially at first year level. In studies that have been conducted on language attitudes (Dalvit & de Klerk, 2005; Dyers, 1998; Aziakpono, 2007), it has been reported that most students who are home language speakers of LOTE prefer LOTE to be used at first-year level in order to facilitate the transition from high school to university. When the lecturers and tutors are monolingual, code-switching at tertiary level becomes impossible and it becomes difficult for other students who do not speak English as a home language to understand what they are being taught. This according to Batibo (2010) hinders the students from acquiring proper understanding of certain meanings and concepts. As stated above, this happens because the students are taught cognitively demanding concepts in a language which they are not proficient in. The introduction of multilingual glossaries has been used as an intervention in most universities to facilitate the process of learning.

As shown in the previous chapter with English being the only LoLT at RU, students used their home languages to discuss certain concepts or when performing tasks in formal and informal learning contexts. This pattern was also observed in the studies of Setati *et al* (2000) which was conducted in South African primary schools. In terms of research that has been conducted in higher education and has illustrated similar results it is that of Dalvit (2010) and Paxton (2007; 2009). According to Dalvit (2010) in the research that he conducted of the students in a Computer Science class, the students who are speakers of indigenous languages would sometimes discuss and explain to those who did not understand what the lecturer was saying in their own languages. The students used this method to cope with the "context-reduced" and cognitively demanding language used at university. In Dalvit's study (2010) which focused on the implementation of isiXhosa terminology in Computer Science, he has reported that some bilingual tutors who could speak indigenous languages stated that sometimes in practicals they were also code-switching in order to broaden the students' understanding. Also in Paxton's study (2009: 355) where she was researching the use of

students' home languages in a multilingual glossary project in Economics, the students provided responses such as:

“It's easy to learn when you using your home language but with English you need to start learning language before you get to the concept.”

The above statement by the student shows that the students find it difficult to cope when they are learning in English only as they only have BICS-equivalence in the language and have not yet acquired the CALP level which requires them to perform at an abstract level.

During observations in this study, the students would discuss their task in isiXhosa but would utter the 'key' technical concepts in English. For an example, in a conversation like:

“...le offence ukuba i-physical yi-harm leyo.” {Lit. If this offence is physical then that is harm}

Above it is shown that the students do not have equivalent terms for the technical terms like 'offence' 'physical' or 'harm' and they ended up saying these terms in English. The student here uses code-switching to explain to the others what is required of them to do, but in the dialogue the abstract concepts which carry meaning in what is being said are in English. This indicates lack of conceptualizing the concepts but rather they are emitting the concepts the way they are in English. In other words, they use LGP in communicating *about* the LSP concepts, for which they have no equivalents in their linguistic repertoire. Similarly to Paxton's study (2009), the students use what Cummins (1996) refers to as BICS (everyday language) when explaining what they have to do and they cannot manage to conceptualize the abstract concepts that are used in the discipline. According to Gough (1999) (cited in Paxton, 2009), the transition of students from everyday language to specialised domain is very critical in the teaching and learning process. Therefore, instead of only providing equivalent terms of the concepts in students' mother tongues, if possible it is important that there is a provision of descriptive terms so that the students can be able to engage and conceptualize the meaning to gain better understanding of the concept (Gough, 1999, cited in Paxton, 2009). In order to assist the students cope with the language that is used in specialized domains it is important that the specialized terms are translated into languages that the students understand better.

According to Batibo (2010) it is ideal to introduce new concepts to students in a language which they understand best as that would act as an appropriate supportive tool for understanding. The students' home languages can be made available for use through glossaries which would consist of terms that the students consider to be important and

difficult to understand in English. According to Batibo (2010) and Madiba & Mabiletja (2009) students' home language is ideal to facilitate learning because it is a language which they are cognitively related to. Another student during the interviews stated that:

“ndiphupha ngesiXhosa, yonke into ndiyenza ngesiXhosa...” {lit. I dream in isiXhosa and I do everything in isiXhosa}

This is what they could have meant, that they have more cognitive abilities in isiXhosa (as it is their home language) than English. The response that the students understand their home languages better was also proven when the students were asked to rate their understanding of English as compared to their home languages. As shown previously, there were more students who stated that they have a 'good' and 'fair' understanding of English as compared to their home languages and there were only three students who stated that they have an 'excellent' understanding of English as compared to their home languages.

Another factor that needs to be noted is that the students who selected 'good' and 'fair' were speakers of LOTE and they went to ex-DET schools and those who responded 'excellent' attended ex-Model-C or Private schools. Ex-DET schools are the type of schools that were designed for black pupils under the governance of the Department of Education and Training during apartheid. These schools comprised of poor level of education, minimal resources, inadequate and few staff and usually the instruction would be in the students' home languages mixed with English (South African Human Rights Commission, 1999). According to Madiba & Mabiletja (2009); Bangeni & Kapp (2007); Desai (2012) and Paxton (2007; 2009) students from ex-DET schools do not have high proficiency in English as compared to those who went to ex-Model C and private schools. They only have the basic skills of the language but not enough proficiency to learn using English as they are usually taught in English with teachers frequently switching between English and their home languages. The students who attended ex-Model C and private schools (which use solely English as MoI) even though they are not first language speakers of the language might indicate that they have high competence in English because according to Madiba & Mabiletja (2009) they have might have had high exposure to English even outside school.

The issue of languages used by students in formal learning contexts indicates the ways in which students try to cope at university. With the background that the students have from high school when they come to university they find other ways such as code-switching that will assist them in facilitating acquisition of knowledge. This discussion has shown the importance of using the students' own languages in the learning and teaching process in order to facilitate cognition. The use of the students' languages like in other studies that have been conducted (Madiba, 2010; Paxton, 2007; 2009; Dalvit, 2010) is introduced in this study through the development of bi/multilingual glossaries that can assist in facilitating learning. The next section is going to discuss the availability of these multilingual resources for students in learning and executing tasks during the learning process.

6.3 THE AVAILABILITY OF MULTILINGUAL RESOURCES FOR STUDENTS IN LEARNING AND EXECUTING TASKS DURING THE LEARNING PROCESS

This section is going to discuss students' use of available resources to support learning when performing tasks. This refers to the use of resources that students use in formal and informal contexts to look for meanings of certain Political Philosophy 1 terms. As stated in the methodology chapter, the first sample of questionnaires distributed was on the students' perceptions on the use of resource materials that are in LOTE. When the students were asked if they would use the bi/multilingual resource materials if they would be provided with them, eighty-two percent (82%) (Twenty-seven out of the thirty-three (33) students) that took part in filling in the questionnaires responded that they would use the materials. The results in this part of the study are similar to those conducted on language attitudes in different higher education institutions in SA (Dyers, 1998; Aziakpono, 2007; Dalvit & de Klerk, 2005; Shembe, 2005; Dalvit, 2010). De Klerk (2002) also conducted a study on language preferences by parents in Grahamstown local schools.

The above mentioned studies to some extent had similar results. For instance, in the studies of Dyers (1998) (University of the Western Cape); Shembe (2005) (University of Durban-Westville); Dalvit & de Klerk (2005) (University of Fort Hare) and Aziakpono (2007) (Rhodes University) that were conducted on language attitudes of students on the use of

African languages (isiXhosa or isiZulu) as LoLT, the results showed that the students were not totally opposed to this view. But the difference was in how LOTE would be introduced in the spheres of learning. For an example, in Shembe's study (2005) where he was investigating the use of isiZulu as a teaching, learning and assessment tool in Chemistry in HE the students stated that they would like isiZulu to be used, but in combination with English. In other studies (Dalvit & de Klerk, 2005; Aziakpono, 2007) the majority of isiXhosa speaking students were not against the use of isiXhosa at university but they emphasised that they should be used in a bilingual form, where they will be used in combination with English especially at first year level.

In the study (de Klerk, 2002) that was conducted in a local English-medium school, English was chosen by the parents because of the quality of most local isiXhosa schools. But even though that is the case, according to Heugh (2001) (cited in de Klerk, 2002) parents wanted the shift from isiXhosa to English while also maintaining the mother-tongue. These studies show the acknowledgement of the significance of LOTE in education. In the context of this research, the RU's Revised Language Policy (2014: 8) states that academic departments will be requested to "explore ways in which African Languages can be used as resources in meaning-making in relation to disciplinary knowledge, for example through compiling multilingual glossaries." The questionnaires on the students' perceptions on the use of additional bi/multilingual resources were designed in order to investigate whether the students think there is a need to introduce the materials in order to facilitate learning. As stated above, most (83%) students responded that they would use the materials if they would be provided with them. Out of the students that stated that they would use the materials, twenty-four (24) of them had LOTE as home languages. It made sense for these students to state that they would use the resource materials as the LoLT is not their mother tongue. According to Obanya (2004) and Batibo (2010), when students have access to scientific concepts in their own languages, it will be easy for them to transfer their understanding into English. This is based on Cummins' study (1979) where he shows the relationship between first language acquisition and second language learning.

According to Cummins (1979), there is a relationship between academic and conceptual functioning on the first language as well as second language proficiency. In order for one to

perform well on the second language it is important that they have mastered the registers of a certain discipline in their first language. In this context, it is important that the students understand the meanings of the Political Philosophy concepts in their home languages before they can learn them in English so that they can first develop academic proficiency in their first languages.

Research (Paxton, 2007; 2009; Madiba, 2010; Adendorff, 1996) indicates that the use of an additional language which students know best when learning helps to facilitate learning. This can be done in a manner where the students code-switch or use their home languages to assist their learning in English. Some of the findings of Aziakpono's study (2007) where she was investigating language attitudes of isiXhosa-speaking students at RU were that the students stated that there is a need for an initiation of bilingual policy at the university where isiXhosa is used alongside English which is the LoLT. The use of English with isiXhosa should only be carried out either through assessments (bilingual papers); bilingual tutorials or bilingual resources such as glossaries.

On their studies Dalvit & de Klerk (2005) and Dyers (1998) have stated that the students reported that the arrangement of bilingual tutorial system would not be viable because of the diverse student body in HEIs. For instance, the University of the Western Cape consists of students who speak different languages and when they are assigned tutorials they get mixed with other students who speak languages such as Sepedi, Afrikaans and isiZulu as it would make other students feel marginalised and not accommodated. According to Koch & Burkett (2005), in terms of assessments in African languages the evaluation process would be a challenge as most lecturers are monolingual or mother tongue speakers of English or Afrikaans. The only implementation plan that is remaining is the implementation through the development of bilingual glossaries in the students' languages. There are multilingual glossary projects that have been initiated in most HEIs in the country to assist in facilitating learning (Maseko, 2014; Nkomo & Madiba, 2011; Madiba, 2010; Paxton, 2007; 2009; RU-SANTED Report, 2010), the students who participated in this study have also indicated their support for the introduction of these resource materials.

When the students were asked to for their general thoughts on the provision of bilingual resource materials one of the student stated that:

“I would like for them to used, because it is much easier to understand something in your own language. My marks would improve.”

Similar to the comment from the student above, when Shembe (2005) conducted a survey on the students’ perceptions on the use of isiZulu the general comments provided by the students on their preference on the use of isiZulu in addition to English was that isiZulu would allow them to have better results and the student participation in class would increase.

From the second questionnaire that was distributed, there are twenty-eight (28) (about 76%) out of thirty-seven (37) students who responded that they used the bilingual glossary that was provided. The students have different home languages; namely; isiXhosa (19 students); Afrikaans (4); isiZulu (2); siSwati (2) and English (1). The English and Afrikaans students stated that they used the English definitions. The students who speak indigenous languages stated that they used the isiXhosa terms and definitions and they found them to be helpful. These are some of the responses for students who used the bilingual glossary:

“It’s efficient in helping with the understanding of the terms.”

“It is helpful and you learn more about a certain word and it makes it more interesting.”

The above quotes are related to Shembe’s study (2005) where he states that the use of students’ home languages in the classroom also assists the students as they are sometimes expected to know the different meanings given to a single word. For an example, a word may be used for an everyday language and it can also have a specialised meaning for a certain discipline. As the students have stated above, the bilingual glossary is helpful in assisting them to understand certain concepts used in Political Philosophy. Because of the abstract nature of certain disciplines it is important that the students understand key concepts in order for them to have access to that certain discipline. According to Antia (2000) in order for one to access knowledge for a certain discipline it is important that they master the terminology used in that particular discipline. As most students stated that they are coming from Ex-DET schools, there are various reasons that have been stated in the discussion of the previous issue on why it is difficult for them to understand certain concepts. Such reasons include the teachers using code-switching in the classrooms to facilitate learning and make the students

understand. So, this makes it necessary to provide the students with multilingual resource materials.

The bilingual glossary was made available to students after the distribution of the questionnaires on their perceptions on the use of LOTE at university. As stated, seventy-six percent (76%) of the students stated that they have used the bilingual glossary. The way which the students have used the bilingual glossary has been stated in the data presentation. There are certain views that the students hold regarding bilingual glossaries and these are going to be discussed in the next issue observed.

6.4 THE STUDENTS' PERCEPTIONS ON THE ROLE OF BILINGUAL GLOSSARIES IN FACILITATING LEARNING

This section is going to discuss the student's perceptions on the role of bilingual glossaries and other resource materials in facilitating learning. As presented in the previous chapter, there are twenty-seven (27) students who responded that that they would use a glossary presented in their home languages if they were provided with one. It is not only the home language speakers of indigenous languages who see the need to use these materials, some students who speak English and Afrikaans as a home language also responded that they would use the materials if they would be provided with them. This shows that there is an acknowledgement of difficulty in learning in a different language from the students and they might be thinking that glossaries can assist in understanding and learning difficult concepts.

The students' general perceptions of the use of bilingual glossaries were that they would be helpful, especially for those who do not speak English as a first language. The following are some of the comments that were provided by the students before they were presented with the bilingual glossary.

“Because I will be given an opportunity to express my ideas clearly.”

“I would like them to be used because not all of us come from or have attended in model C schools. Some of us come from township schools.”

One of the purposes of distributing the first questionnaires was to investigate whether there would be change on the students' perceptions before and after they were provided with the bilingual glossary. The students maintained the same perceptions that bi/multilingual glossaries are helpful in facilitating learning. The quotations show the students' awareness that they would facilitate more cognition when using their first languages when learning. The above comments from the students are similar to those that were provided as students' responses in Paxton's research (2009: 355; 356).

“We got more explanations in Xhosa and that was more helping us to understand. We understood more...”

“Some things we may not know about in depth were quite explained. It gives one more light about the concept itself so I think it's wonderful.”

The above comments from both those students who participated in this study and in Paxton's (2009) prove that academic curricula becomes difficult to access for students who are second language speakers of English. This becomes problematic especially for students who are coming from ex-DET schools as according to Kapp (1998) the university learning environment does not always give students an advantage and make things easier for learning. For instance, lecturers and tutors in university are monolingual and teaching is carried out in English, which is the primary LoLT and a second language to most of these students. This according to Madiba (2013) does not facilitate concept literacy. Concept literacy according to Young *et al* (2005) (cited in Madiba, 2013) refers to an ability to read, understand and use subject-specific terms and certain language forms that are significant in order to gain knowledge of a particular discipline.

According to Kapp (1998), the students encounter multiple difficulties at university, besides being unable to understand what they are being taught most of the times they would refrain from asking questions and participating in class. On the other hand, it becomes difficult for the lecturers and tutors to be aware of the students' difficulties that they are facing. Bi/multilingual glossaries can assist students who are second language speakers of English to facilitate learning and access knowledge in their specific disciplines.

From the students who used the bilingual glossary, the feedback that they gave regarding the glossary was positive. The students were acknowledging the usefulness of the glossary and how much it was helping them in giving explanation of some terms that they found to be difficult in English. The following is a short transcript of the follow-up interviews between me and one of the students who used the bilingual glossary.

Interviewer: ...Okay. *Ubuyisebenzisile iglossary?* {Did you use the glossary?}

Participant: *La glossary wawusinike yona? Ewe, ndayisebenzisa ndimane ndijonga pha.* {That glossary you gave to us? Yes, I used it. I used to look up words on it.}

I: *Yayinceda?* {Was it helpful?}

P: *Ewe yayindinceda because xa igama ulijonge kwi-English iba-vague into. Kodwa xa ithethwe ngesiXhosa iye ivakale bethle.* {Yes it was helpful because when you are looking up an English term sometimes the meaning becomes vague. But when explained in isiXhosa you understand better.}

I: *Ubuyisebenzisa njani?* {How were you using it?}

P: *Mhlawumbi ukuba ndiyafunda, ndifunde igama then ndiyokulikhangela pha. Kukho ne-explanation ekhoyo pha iyalicazulula ela gama ukuba lithetha ukuthini.* {Like when I am reading, I would see a term then go look it up in the glossary. There is also an explanation there; it untangles the meaning of the term.}

The above dialogue with the student confirms that they found the glossary helpful in providing meaning to some terms that were in English and were difficult to understand. The student also acknowledges that sometimes when they do not understand what the term means they would just assume the meaning of the term without confirming it. This means that the students would use the terms without having a conceptual understanding of what they meant. This has been discussed on the first issue where the students were using their home languages in discussing their tasks but would utter terms like ‘harm’, ‘principle’ and ‘offence’ in English because one assumes that they do not have conceptual understanding of the terms. According to some students on Paxton’s study (2009: 355), sometimes the students would end up memorizing the English words without knowing what they mean.

“When you are studying you find some words that are too much for us to understand and you go to dictionary even the dictionary can’t really help so you tend to memorise when you are writing. So we memorized. . .”

In this study, the students also stated that when learning in English they do not have access to all the information that they need because of the language which becomes a barrier in facilitating understanding.

“I didn’t understand some words in English even though they were explained. They when I saw the isiXhosa definitions I could understand them. They clarify them more.”

Table 2 in the presentation of the preliminary data also shows on the students’ experiences during the course of the module. Most former students who participated have stated that the difficulties which they were facing were relating keywords with what they knew in isiXhosa. In other word words, the participants were finding it difficult to conceptualize what they were learning in their own languages. The former students also stated that they experienced difficulties in understanding the lecturer’s use of English and understanding keywords during lectures.

On Paxton’s study (2009: 355) when one of the students compared learning in English and in their mother tongue they stated that:

“We got more explanations in Xhosa and that was more helping us to understand. We understood more...”

The illustrations indicated above occur because the language used in academic contexts is abstract and is not easy to understand as basic conversation language. As stated previously, Cummins’ (1979) notion of BICS and CALP explains this phenomenon. Because the students only have BICS levels of when certain complicated academic terms are used they find it difficult to understand. Also, cognitive development works better in one’s first language, this is emphasised by the theories of language and cognition (Cummins, 1980; Vygotsky, 1986; Pederson & Nuyts, 1997). Because cognitive processes work less on one’s second language (Cooke, 1991 as cited in Kapp, 1998) learning only on second language becomes difficult for the students who have English as a second language.

“Bilingual glossary is very helpful and in terms of understanding in English other words we get a chance to even pronounce them in our own language that gives us a better understanding and **vision** as we study.” [The glossary is very helpful and it helps us to understand English. We also get a chance to say some of the terms in our languages and that helps us to have an idea of the concept when we are studying.]

The student quoted above is showing that the bilingual glossary helps them in understanding the technical terms that are in English, and that they get to know what the terms represent in their own languages. She says "...that gives us a better understanding and *vision* as we study." The student is using the term 'vision' in substitute of 'concept'. As stated in the literature review chapter, a concept is a mental unit which does not exist but only in the mind of humans (Sager, 1990; Maseko, 2011; Taljard, 2013). So, when the student refers to the concept as 'vision' it means that she has an *idea* of what the term represents. Therefore, when the student is learning in her own language cognition is more facilitated as opposed to when learning is in English which they sometimes have to "translate" into their own languages before they can understand what is being said.

Like in Paxton's study (2009), the students in this study stated that when learning in English it becomes more difficult for them to conceptualize the information as compared to their own languages. As one of the former students stated in the preliminary data on their experience on the bilingual glossary, it is easy to understand other some words in a language which one knows best. A student in Paxton's study stated that:

"When taught in English you forget easily because you need to sit down and try to understand the terms taught in English in your language . . . try to think what does this mean in Xhosa?"

One of the students who participated in this study stated that:

"...*moss thina xa uyixelelwe nge-English kufuneka uyi-converta apha kuwe entloko la nto. Kanti xa kuthethwa ngesiXhosa its first hand uyaqonda ukuba uthini. Singatsho sibe-quicker nokwenza imisebenzi yethu.*" {For us when you are told something in English you need to convert that in your head to your language. But then when you are told something in isiXhosa, it is first hand, you understand what is being said. We would also be quicker in doing our school work.}

The students above show what has been argued above about first language and cognition. The students show that use of their own languages is more beneficial and can yield success. It has been discussed above that the students perceive bi/multilingual glossaries to be helpful and effective for learning as they present specialised terms that are when learning. The bi/multilingual glossaries allow the students to participate in learning as it becomes difficult for the students who are mother tongue speakers of LOTE to cope at university, especially for those coming from Ex-DET schools as there are terms in university that they are expected to master in order for them to succeed.

6.5 THE STUDENTS' PERCEPTIONS ON THE ROLE OF LOTE AS LANGUAGES OF ACADEMIA

Another issue which came out during the data collection process is the students' perceptions on the role of LOTE as languages of academia in HE. This section is going to discuss the beliefs that they students have regarding the use of LoTE in HE. Most of students who participated in the process of data collection in this study are speakers of LoTE and are coming from Ex-DET schools, where they used to be taught in English in conjunction with LoTE (or rather in LoTE in conjunction with English as stated earlier). As it has been done with other issues, the results of the issue discussed here are going to be discussed while in comparison with the preliminary data, other studies and using certain theories which they are based on.

As it has previously discussed, in most Ex-DET schools still use teachers use code-switching to facilitate learning for the students even though the LoLT is English from Grade 4 (Setati *et al*, 2002; Desai, 2012; Madiba & Mabiletja, 2009). The students in this study responded that they would like it for LOTE to be used in HE in order to help them with understanding certain concepts when they are learning. According to Aziakpono's study (2007), sixty-five percent (65%) of the students who took part stated that they would like it for LOTE (isiXhosa in this case) to be developed and be used as LoLT. The students stated that learning would be better if there were terms that are in isiXhosa as that would enable them to understand. There are other studies (Dalvit & de Klerk, 2005; Dyers, 1998; Dalvit, 2010) where the students state that the use of their mother tongues in conjunction with the main LoLT which is English in most universities would be beneficial. In this study, most students were also in favour of use of LOTE ("I wish they could be used so that we can understand our studies better").

The students' preference for the use of LOTE with English shows that they are aware that using their mother tongue with the LoLT when learning can help them in understanding their work better. Even though it is the case, Similar to Aziakpono (2007); Dalvit & de Klerk (2005) and Dyers (1998), the students who agree to and support the use of LOTE in HE support that these languages can be used in addition to English which will still be the LoLT.

As stated in the previous issue, the students do not want to lose access to English because of what they believe access to English will allow. For an example, English allows people to participate in different sectors and it is a common belief among the students and some parents that when their children have more access to English then they have more chances of succeeding and getting better jobs (De Klerk, 2002).

The students' fear of losing access to English and led to some scepticism among the students regarding the use of their home languages in HE. Some students were asking questions such as "do you think it is possible to learn in African languages at university?" In Dalvit's study (2010) during the data collection process there were students who also found the idea of using African languages in HE (in the field of Computer Science for Dalvit) to be amusing and not possible. According to Edwards (1994) a language that is associated with high-domain or is seen to be dominating is always given high-status not only by its speaker, but by speakers of other languages as well. In this context, because English is linked to the language of access to good education, better resources and employment opportunities and is seen to be the language of the 'elite' and speakers of other languages aspire to access it.

Even though this is the case, studies (Setati *et al* 2002; Desai, 2012; Madiba & Mabilejja, 2009; Makgato, 2014) show that code-switching is used in most Ex-DET schools to facilitate learning where the learners are not first language speakers of English. According to Aziakpono (2007), some students who have participated in her study stated that in universities such as the University of Cape Town and the University of the Western Cape there has been interventions where students are taught in tutorials with their home languages to assist learning. This shows that the students acknowledge the potential that their home languages have in assisting to facilitate cognition.

In this study, most students are aware that learning in their home languages would help them in understanding. Also, the students acknowledge that exclusive use of English when learning hinders them in understanding their work.

"...it would be much easier to understand other words."

“I think it would be better for people to understand certain things better if they were in their own language.”

According to Paxton (2009), the students in her study appreciated the use of their own languages for discussing concepts and perceived it to be more benefitting.

“It’s easy for me to translate in English when I know it in Xhosa.”

From the student’s comment above, it can be supported by Cummins’ hypothesis of developing conceptual learning. As discussed in the previous issues, according to Cummins (1979) in order for one to facilitate cognition in a second language it is important that understanding in the first language has been fully developed. The first and second language are interdependent for academic functioning, also, cognition is initially attained in the first language then the skills get transferred into the second language after fully proficiency in the mother tongue has been reached. In this context as the students above have explained, it is easy for them to learn new information in their own languages which they are proficient in and then transfer it into the second language which is English in this case.

As LOTE (indigenous languages to be specific) are mostly associated with being used at home and in other small institutions, another view that came from the students was linking the use of LOTE to traditions and culture. When the students were asked for their views on the use of LOTE in HE some students responded that:

“African languages should be used because it is neglected as mother tongue. Traditional learning languages at schools and university is important”

“I support them to an extent that people don’t forget where they come from. So that I do not get caught up in this English world that I forget my own language”.

According to Dalvit and de Klerk (2005), in their study as well isiXhosa was being more associated with the Xhosa culture while English was not seen to be belonging to any culture. According to Phillipson (1992), English has globalised to a point where it moved from where it originated, has spread and is used at a non-regional, non-national and non-ethnic level because of the ‘power’ it holds. Wardhaugh (1987) (cited in Phillipson, 1992: 275) explains this notion:

“...since no cultural requirements are tied to the learning of English, you can learn it without having to subscribe to another set of values...tied to no particular social, political, economic, or religious system, English belongs to everyone or to no one, or it at least is quite often regarded as having this property.”

When the students think of LOTE they also consider values and traditions because they are used to using these languages at home.

Even though there are some students who consider LOTE to be impractical to use in HE. Most students in this study seemed to be aware of the value of LOTE and how much the use of these languages can assist them in learning. There are other studies such as Shembe (2005); Dyers (1998) that have been mentioned where the students state that they are aware that the use of their home languages in HE would help them in learning and also they would be able to participate in class as they would fully understand what they are being taught. The use of LOTE in HE is supported by the students especially at first year level. But in all of that, the students do not want to use the languages solely, but rather they prefer to use them in a manner in which they will facilitate learning in English. As discussed above, the students' perceptions of English make them want to always associate their learning with English. Even though they want access to English, they are aware that learning in their home languages has more benefits and that is what makes the students to be more positive on the use of LOTE in HE. The students acknowledge that the use of LOTE in HE would not only develop the languages but they would play a great role in facilitating their learning. The next section is going to discuss the results on the students' perceptions on the role that English has in HE.

6.6 THE STUDENTS' PERCEPTIONS ON THE ROLE OF ENGLISH IN HE

With English being the LoLT at RU there are different perceptions that the students have regarding the language. This issue emerged as the students were comparing learning in English to their home languages and the role which the students think English holds in learning and in HE. Starting off this section, the perceptions that are held in the South African schooling context are going to be briefly presented. These refer to the perceptions from the teachers; parents as well as learners, the beliefs that they have regarding the role of English. These views are going to be discussed because the students who are part of HE might relate to them as they experience being in high school before they come to university.

As stipulated in the LiEP (1997) English or Afrikaans is the language of teaching in most high schools. Even though this is the case, it has been discussed previously that in some schools especially Ex-DET code-switching is dominating where teachers use indigenous languages to explain concepts to the learners. Some parents who can afford good quality education manage to take their children to English-medium schools where there are well-equipped teachers as well as adequate resources to assist the learning process of the pupils.

In de Klerk's study (2002) that was conducted in all English-medium schools in Grahamstown she was investigating the parents' reasons for sending their children to English-medium schools where they would be taught in English. The parents' responses were based on their view of English. Most parents stated that they chose the English-medium schools because of the quality of education that these schools offer (De Klerk, 2002). There are other responses that are relevant for this study such as that the parents believed that English is one of the most important languages that a child should learn while they are still young and that will allow them more job opportunities, better life and high chances of educational success in the future (De Klerk, 2002).

Similar to the parents' beliefs, the learners in Limpopo schools on a study conducted by Madiba and Mabiletja (2009) stated that they prefer to be taught in English. According to Madiba and Mabiletja (2009) the majority of the learners believe that they are proficient in English and can learn using English as LoLT. With the observations from the study the researchers found out that the learners do not have academic proficiency of English. This is a typical case where learners who have acquired the BICS of a language assume that they can learn in the language. According to Cummins (1979) acquiring basic conversational proficiency in a language does not guarantee that one can learn in that particular language. So, acquiring BICS does not guarantee the CALP level as well. Some teachers on the other hand also stated that they prefer to teach in English because it is the language that is used in HE therefore they are preparing the learners for university.

English is indeed a language that is used for teaching and learning in most universities in South Africa. Also because of multilingual nature of the university environment, it is used in

most universities as a *lingua franca*. There are certain studies that have been conducted on the university students' attitudes towards English (Dyers, 1997) as well as some other students' languages that are other than English (Aziakpono, 2007; Dalvit, 2005; Shembe, 2005; Dyers, 1998).

In this study, when the students were asked about their perceptions about English being the only LoLT at university the students' responses showed that they were comparing learning in English to learning in their home languages instead of comparing learning in English with their home languages as additional mediums of instruction. When this happens, then the students would come with arguments such as "English is an international language and most people in the world communicate in English, which is why it is important that we learn in English." This was indicating the students' fear of losing access to English as they are aware of the "benefits" of being able to speak the language. Similarly Aziakpono's (2007); Dalvit and De Klerk's (2005) and Dyers' study (1997), their findings on the students' attitudes towards English were that the students wanted access to English as they believed that being proficient in the language will allow them to have better jobs and easy access in other sectors. This is because of the power that English is associated with. According to Giles *et al* (1997) and Edwards (1994) (cited in Aziakpono, 1997) any language that carries a high-status is always positively evaluated by its speakers and other people. This has also been illustrated earlier in studies that have been conducted in the schooling context.

Even though the students indicate that they want to continue to have access to English and be taught in English, they also acknowledge that an English only policy puts them in a disadvantage when it comes to academic success (Aziakpono, 2007). When Kapp (1998) argues this notion she states that the students are willing to access English at university as LoLT but in a manner in which there will be inclusive methods to accommodate those who speak English as a second language. When students enter university there are new concepts and information that they get introduced to (Batibo, 2010) and sometimes most of these students are not first language speakers of English and that makes it necessary to establish an intervention that is going to assist them in learning. As stated above, as much as the students want English to continue being LoLT because of their awareness of the role that English has in HE, they also do not want to be separated out from participating in learning because of language. One of the students stated that:

“...it is not like we don't understand [English]. We do understand, because we are students who qualified for university. What then I would suggest is that university to try and help those students who don't understand and who have problems with some terms.”

The student above states that they can communicate in English, therefore the problem is not speaking the language but the terms that are used in most academic contexts. When interpreting this in Cummins' terms, one could say that the student is acknowledging that they have proficiency of the BICS level of the language in order for them to hold conversations. But that does not mean that they have academic proficiency as acquiring BICS of a certain language (especially second language) does not guarantee the CALP level. Because English is not some of the students' first language, it becomes difficult for them to learn in the language only as the process of cognitive development is highly facilitated in one's home language.

In Dyers' study (1998), some students reported that they are competent enough to cope with learning in English because they can speak the language. But according to their poor English results in matric did not support their statements and with other studies that have been conducted which state that one of the reasons students fail at university it is because of their insufficient level of English (Sinclair, 1992; Agar, 1990) (cited in Dyers, 1998). Similar to Dyers (1998), in this study the students stated that they are doing well with English being the LoLT but when they discuss their tasks among their peers which they share a common language with they would discuss in their mother tongues. Without them realising, the students in this context use the language which they know best to facilitate learning. As they do not have CALP in English, they use their own languages to facilitate cognition and conceptualize the register which they need to master in order for them to succeed.

Similar to other studies (Dalvit & de Klerk, 2005; Shembe, 2005; Aziakpono, 2007) in this study the students perceive English to be important in HE as it is also a language of communication between students who have different mother tongues. Also, the students are happy with English being the LoLT in HE, but they acknowledge that fact that there is a need for other languages to be introduced to facilitate learning assist students who speak English as an additional language. The students in this study state that English terminology is complicated in academic contexts so there is a need for other languages to mediate.

6.7 SUMMARY

There are issues that emerged during the process of data collection and these have been discussed in this chapter. There are scholars that have been used in discussing the results. Also, this chapter has used other studies to compare the results found during the study. The issues discussed above are linked to each other and the main finding through the data collection process is that the students are aware that the use of one's first language has certain benefits for learning. The first issue discussed portrays this when the students use their home languages in some formal learning contexts. The second issue of the students' use of multilingual resources when executing tasks in the process of learning also shows the importance of the students' mother tongues when learning.

Even though the students want access to English, it has been discussed that cognition becomes difficult in one's second language especially in academic and abstract terms and that is when the students get to use their home languages when learning. If the students do not use their home languages they use multilingual resources such as glossaries if they are available, the third issue discussed is on the students' perceptions on the role of these multilingual glossaries. The glossaries such as the bilingual glossary that was provided to the students consist of technical terms and definition of a specific subject in the students' languages and they assist them to understand certain concepts which they find difficult in understanding in English. The students get to use these bilingual glossaries to facilitate their learning; there are other ways which the students facilitate their learning like discussing in their mother tongues in class. The fourth issue discussed here is on the students' perception on the role of LOTE in HE as languages of academia. The last issue discussed are the students' perceptions the role of English in HE as the students perceive English differently as opposed to other languages that are other than English.

CHAPTER 7: PRESENTING A MODEL FOR THE DEVELOPMENT OF TERMINOLOGY

7.1 INTRODUCTION

This chapter presents a process that was followed in the development of Political Philosophy glossary. The glossary consists of terms from a particular theme in the subject field of Political Philosophy, with the definitions of these terms. The chapter discusses methods that have been followed in extracting and defining the terms that needed to be translated. The primary corpus extraction tool that has been used is WordSmith Tools, and various sources have been used to seek definitions of these terms. These will be discussed below.

During the data collection process, participating students were asked to submit to the researcher terms they found difficult to understand in English in the subject. There were only two students who submitted the terms. These students submitted one term each and the terms were “offence principle” and “paternalism”. There was also one student who responded through the questionnaire and listed terms which they stated they did not find in the glossary, which they wished could be available in isiXhosa. This method of extracting corpus by sourcing it from students was not successful and therefore, there was a need for a tool to use to extract enough corpus in order to design the model of the bilingual glossary that could be used in Political Philosophy.

7.2 THE DEVELOPMENT OF THE BILINGUAL GLOSSARY AS AN INTERVENTION TO ASSIST STUDENTS WITH LEARNING

7.2.1 Extraction of the corpus

The students who are enrolled in the Political Philosophy module were provided with the prescribed textbook for the module, *Puzzles in Contemporary Political Philosophy: An introduction* (2009). As stated in the methodology chapter, the lecturer for the module was consulted for permission to use the textbook for the extraction of the corpus. The first chapter of the book “Liberty” was used as the main source from which corpus was to be extracted.

This chapter was chosen randomly and it was used to present a model of how corpus extraction tools can be used in the extraction of corpus in order to create glossaries that can assist students when learning.

WordSmith Tools (WST) is the software that was used for extracting corpus. According to LinguisTech (2011) WST is a software tool used for the extraction and analysis of corpus that can be used by linguists, translators and teachers when creating glossaries and terminology lists. Taljard (2013) supports the use of computer software such a WST and states that it helps to process large quantities of texts and it can repeat the same process consistently as compared to manual extraction. The use of corpus extraction tools also assists the terminologist by suggesting the possible term candidates for a particular field. There are various programmes that can be used for retrieving these possible terms. Before the corpus was extracted into the software it had to be ‘cleaned’ and be converted into a plain text (text-format) which is the format that the WST software can be able to read the text in.

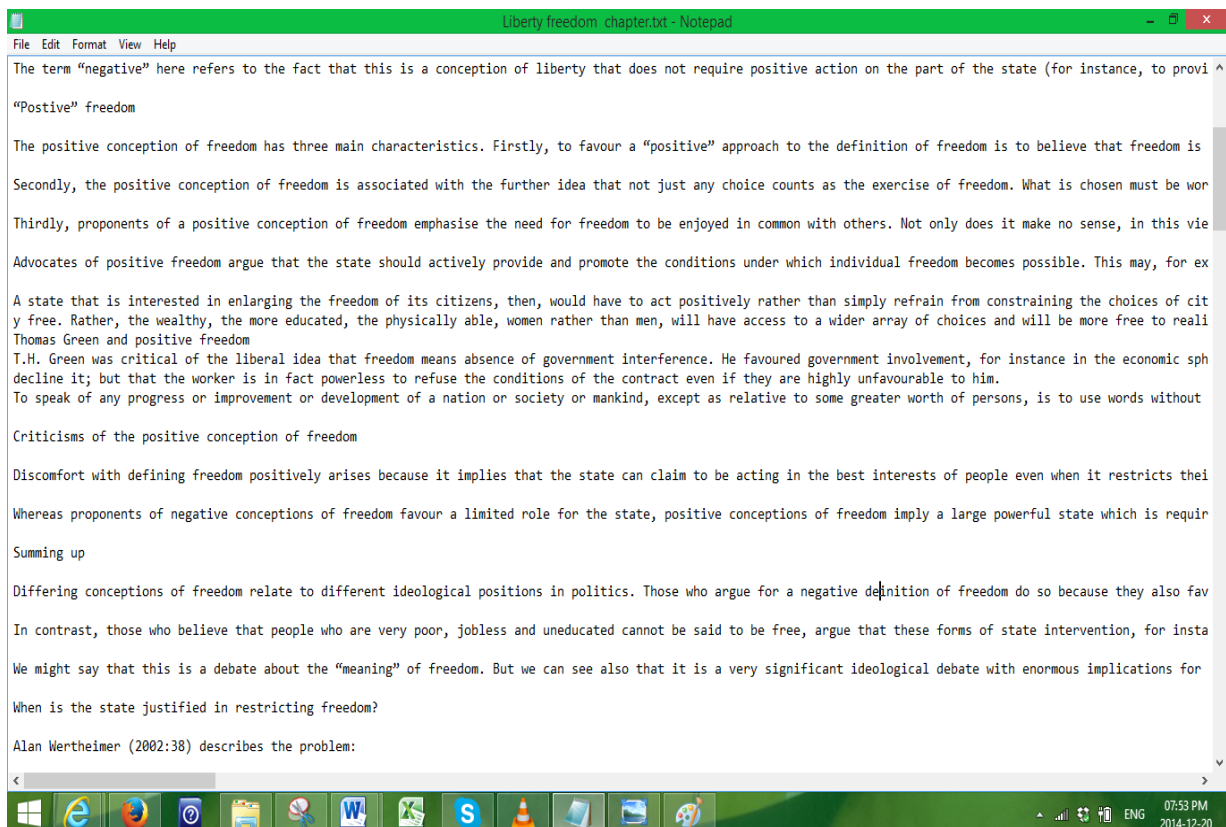


Figure 7: The screenshot of the extracted text in plain text.

There are three programmes that the WST features, namely, the Wordlist; the Keywords and the Concord. For the purposes of this research, it is the Wordlist as well as the Concord feature that were used.

7.2.1.1 The Wordlist feature

The Wordlist feature allows one to generate a statistical analysis of the list of words in the corpus (Scott, 2010; LinguisTech, 2011). When using Wordlist, the numbers of words appearing in the corpus are shown and the list appears in alphabetical as well as in frequency form (Taljard, 2013; Scott, 2010). The frequency tool was used in the Wordlist feature. Frequency refers to the number of times the word appears in the text. When using the frequency tool one has to look at words that have unusual frequency in the text, whether they have high or very low frequency. Those words are usually possible term candidates on a particular special field.

Terms that represent concepts sometimes consist of more than one word, and therefore it is important for one to keep that in mind when generating the wordlist. For an example, in Maseko's study (2011) where she generated corpus from the same textbook that was used in this research, there are concepts such as "absolute rights" that had terms developed but it was not shown how she generated the wordlist for terms which consisted of more than one word. Even though at first she was provided with the 'key terms' by the lecturer, when generating the wordlist there was no way one could know that there are other terms which consist of more than one word that are important in the discipline. Even though the terms for these concepts are formulated by combining two terms which might have two different meanings, when combined they tend to present another concept. For an example, if 'freedom' means the absence of disabling conditions for an individual to perform certain tasks, the concept 'positive freedom' might have a different meaning even though the term has been formed through combining two other terms. As stated above, sometimes the combination of two or more words can make up one term which represents a certain concept, the 'cluster' tool in the Wordlist feature is used to generate these terms and these have been illustrated in the screenshots from Figures 10 to 13.

The wordlist feature allows one to generate more than one word and this is called a ‘cluster feature’. The can be used when one is looking for term candidates that consist of more than one word and they can be set if the user is looking for a term that has more than one word. For this research, the wordlist was generated for up to three-word clusters and these are going to be illustrated.

As shown below, when the wordlist was generated using the one-word cluster the words with the highest frequency were words that are always used in English such as “the”, “and” “of”.

N	Word	Freq	%	Lemmas
1	THE	433	5.33	
2	TO	364	4.48	
3	OF	327	4.03	
4	IN	200	2.46	
5	A	188	2.32	
6	IS	188	2.32	
7	THAT	156	1.92	
8	AND	142	1.75	
9	BE	109	1.34	
10	FOR	98	1.21	
11	ARE	88	1.08	
12	FREEDOM	81	1.00	
13	AS	79	0.97	
14	IT	77	0.95	
15	STATE	76	0.94	
16	NOT	73	0.90	
17	ON	68	0.84	
18	OR	66	0.81	
19	HARM	55	0.68	
20	WE	54	0.67	
21	HAVE	51	0.63	
22	WHICH	47	0.58	
23	THIS	46	0.57	
24	WHO	46	0.57	

Figure 8: Screenshot showing words with high frequency

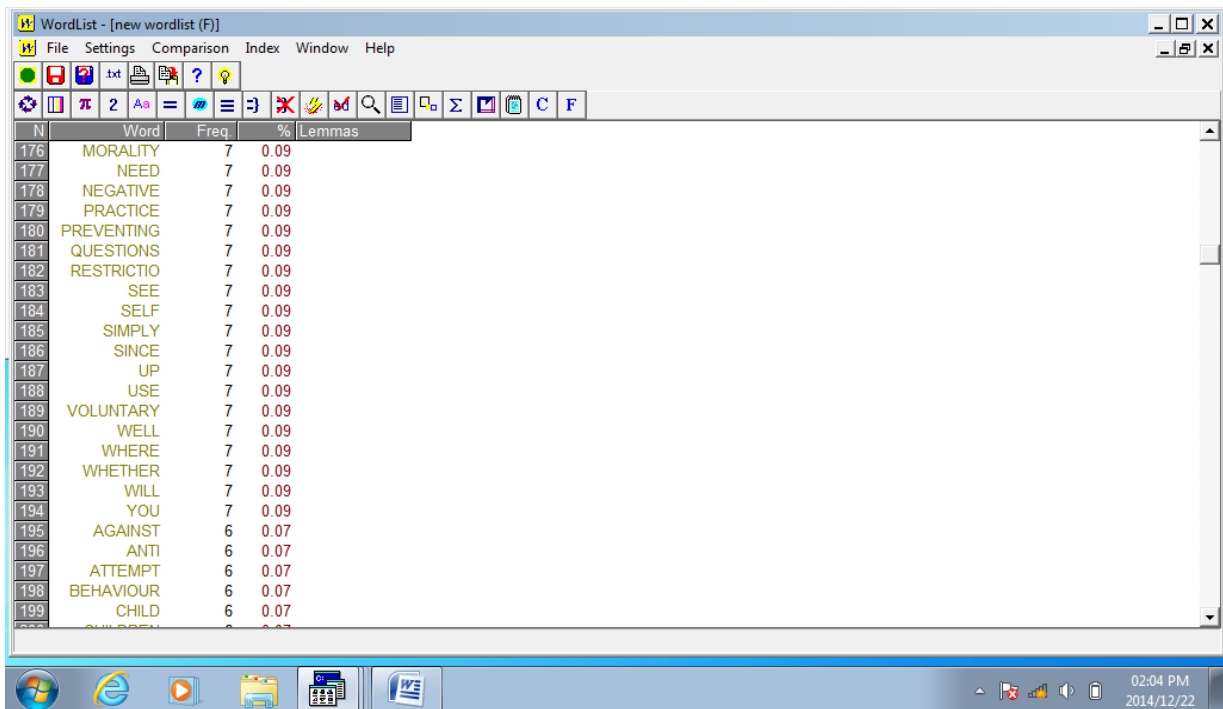


Figure 9: Screenshot showing terms with low frequency

The next screenshots are going to show when the two and three-words cluster features were used to generate the wordlist.

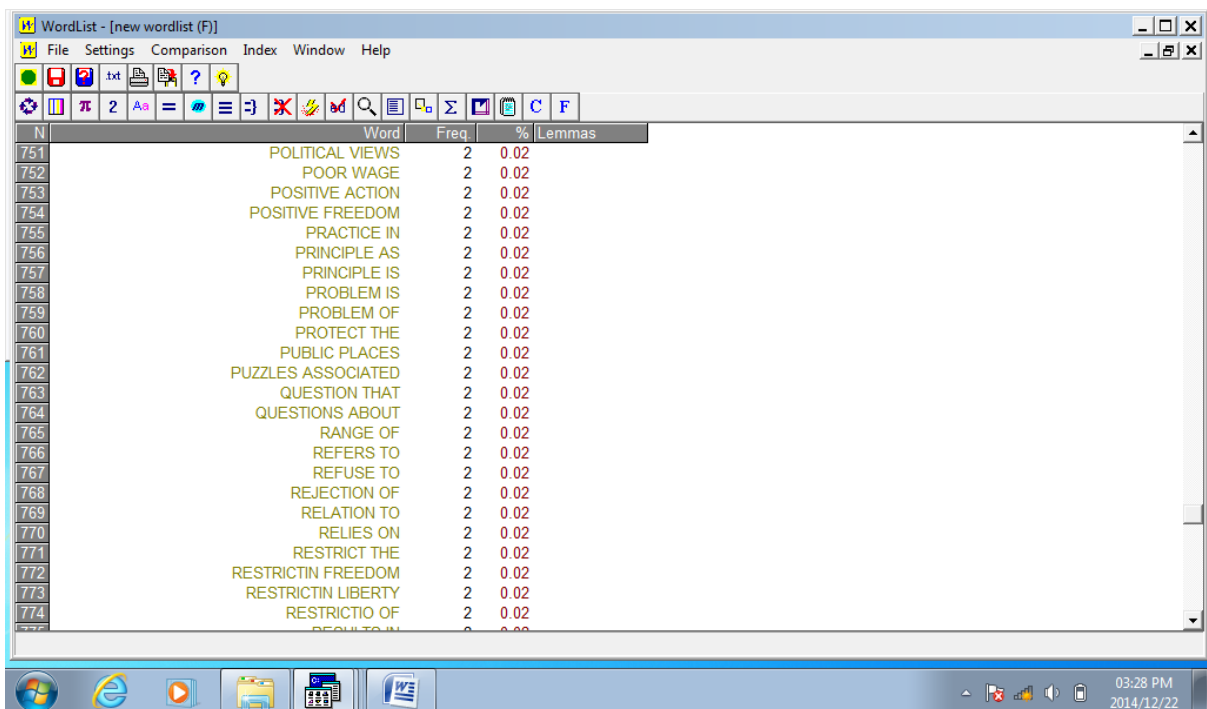


Figure 10: Screenshot indicating when the two-word cluster feature was used

After generating the wordlist the text was converted into word format and cleaned up to show that there are indeed terms which consist of two words that represented concepts in the text, even though some of them were not Political Philosophy terms. The screenshot below shows the terms that consist of two words and which represent concepts. For the terminology list created (See Appendix H), it is only Political Philosophy terms that have been generated. There are other terms which consist of more than one word (See Figure 11 and Figure 13) which are not included in the terminology list created, even though these terms represent concepts they are not terms for Political Philosophy. One would notice that some of these terms have low frequency as compared to other political philosophy terms. For example, in the illustration below, the term ‘harm principle’ (has appeared 11 times in the text) and ‘compulsory voting’ (has appeared six times in the text) have high frequency as compared to other terms such as ‘blood transfusion’ (has appeared twice) and ‘anti-pornography’.

The screenshot shows a Microsoft Word document with a list of terms. The terms are listed in a table format with their respective frequencies and relative frequencies. The terms are: HARM PRINCIPLE (11, 0.14), COMPULSORY VOTING (6, 0.07), DEMOCRATIC STATE (5, 0.06), INDIVIDUAL LIBERTY (5, 0.06), INDIVIDUAL FREEDOM (3, 0.04), POLITICAL PHILOSOPHY (3, 0.04), ALTERNATIVE VIEW (2, 0.02), ANTI-PORNOGRAPHY (2, 0.02), ANTI-SUICIDE (2, 0.02), BLOOD TRANSFUSION (2, 0.02), CHILD ABUSE (2, 0.02), HUMAN BEINGS (2, 0.02), MEDICAL INTERVENTION (2, 0.02), POLITICAL VIEWS (2, 0.02), POSITIVE FREEDOM (2, 0.02), and STATE INTERFERENCE (2, 0.02).

Line Number	Term	Frequency	Relative Frequency
33	HARM PRINCIPLE	11	0.14
85	COMPULSORY VOTING	6	0.07
127	DEMOCRATIC STATE	5	0.06
135	INDIVIDUAL LIBERTY	5	0.06
318	INDIVIDUAL FREEDOM	3	0.04
364	POLITICAL PHILOSOPHY	3	0.04
456	ALTERNATIVE VIEW	2	0.02
469	ANTI-PORNOGRAPHY	2	0.02
470	ANTI-SUICIDE	2	0.02
510	BLOOD TRANSFUSION	2	0.02
526	CHILD ABUSE	2	0.02
597	HUMAN BEINGS	2	0.02
664	MEDICAL INTERVENTION	2	0.02
743	POLITICAL VIEWS	2	0.02
746	POSITIVE FREEDOM	2	0.02
787	STATE INTERFERENCE	2	0.02

Figure 11: Screenshot showing two-word terms representing concepts in word-format.

The screenshot shows the WordList application window titled "WordList - [new wordlist (F)]". The interface includes a menu bar (File, Settings, Comparison, Index, Window, Help), a toolbar with various icons, and a main display area with a table. The table has four columns: "N", "Word", "Freq.", and "% Lemmas". The data rows show three-word clusters, each with a frequency of 3 and a percentage of 0.04. The clusters listed are:

N	Word	Freq.	% Lemmas
62	BE HARMED BY	3	0.04
63	BE POSSIBLE TO	3	0.04
64	BY THOSE WHO	3	0.04
65	CONSTRAINTS ON THE	3	0.04
66	COUNTS AS :HARM;	3	0.04
67	DESCRIBES THE PROBLEM	3	0.04
68	DIFFICULTY IS THAT	3	0.04
69	DO NOT WISH	3	0.04
70	FOR INSTANCE IN	3	0.04
71	FREEDOM ARGUE THAT	3	0.04
72	FREEDOM IS ASSOCIATED	3	0.04
73	HARM TO :OTHERS;	3	0.04
74	HARM TO THE	3	0.04
75	HE MADE THE	3	0.04
76	IN LIMITING THE	3	0.04
77	IN POLITICAL PHILOSOPHY	3	0.04
78	IN SOUTH AFRICA	3	0.04
79	IN THE CASE	3	0.04
80	INSTANCE IN THE	3	0.04
81	IS A GOOD	3	0.04
82	IS NOT UNUSUAL	3	0.04
83	IS TO BE	3	0.04
84	IS TO COUNT	3	0.04
85	IT IS ALSO	3	0.04
86	IT IS JUSTIFIED	3	0.04

The Windows taskbar at the bottom shows the system clock as 03:30 PM on 2014/12/22.

Figure 12: Screenshot showing when the three-word cluster feature was used

The next screenshot illustrates the terms in the word-format after cleaning up the list from the wordlist feature when using the three-word cluster feature.

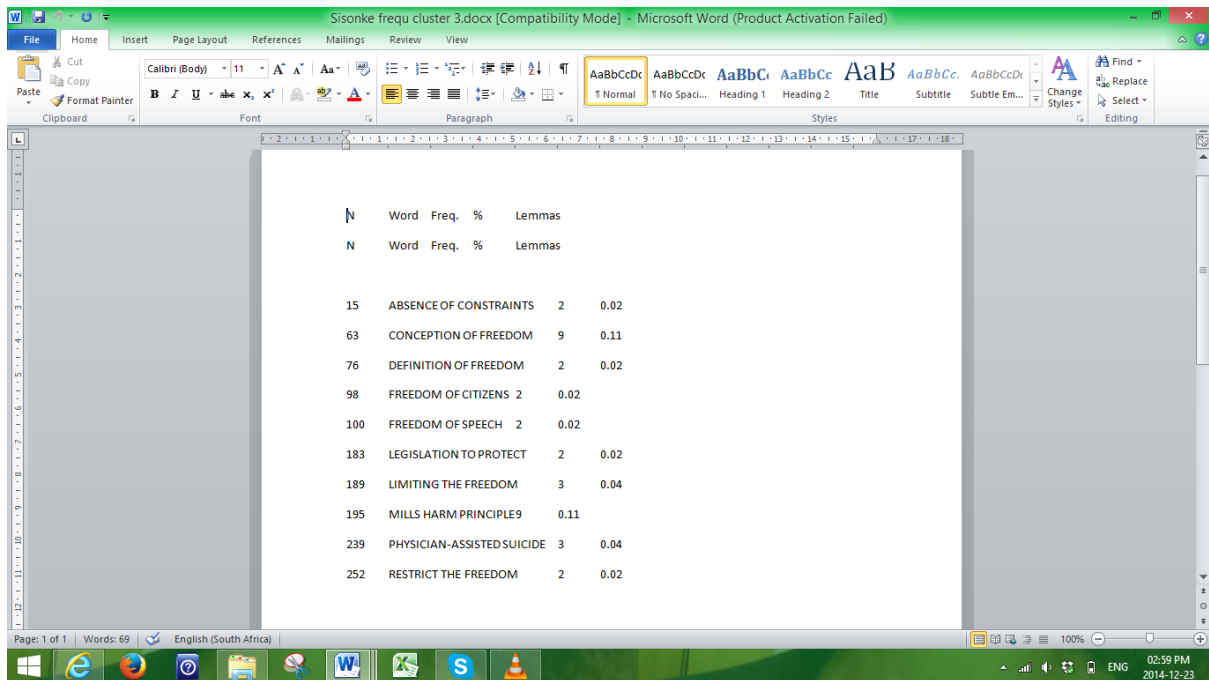


Figure 13: Screenshot showing three-word terms representing concepts in word-format.

The wordlist texts were then copied into an editable word format where linguistic units that did not represent any concepts were removed. According to Maseko (2011:192) this is when the text is “cleaned up”. The words that did not represent concepts were deleted.

According to Taljard (2013), when deciding on the term candidates for a field there are certain questions that one needs to ask such as whether the term might be representing a certain concept in the field and if it is possible for that unit to be rather a term. The following terms were selected as term candidates extracted through the Wordlist feature to be used for the model. The criteria used for selecting the terms was the frequency feature, the terms with high frequency when in ‘cluster’ forms such as ‘harm principle’ were selected. There are some terms that did not have high frequency, like ‘positive freedom’ but this concept has been discussed many times in the text, therefore, that made it important to also consider terms like that to be Political Philosophy concepts. As stated earlier, this chapter only represents a model which can be used to develop a glossary, there are other Political Philosophy terms which were extracted but are not provided with isiXhosa equivalents and definitions, and these are attached on this thesis as an appendix (See Appendix H). The following list represents the terms that have been selected and used for the model.

1. Harm Principle
2. Liberty
3. Consent
4. Positive Freedom
5. Morality
6. Negative Freedom
7. Constraints
8. Paternalism
9. Democracy
10. Autonomy
11. Immorality
12. Infringement
13. Legitimate
14. Intoxicated Consent
15. Infringements
16. Offence
17. Restriction
18. Sovereignty

7.2.1.2 The Concord feature

The Concord feature in the WST shows all the contexts that the term is used in within the text (Scott, 2010). This feature helps one to determine the meaning of the term by looking at the contexts that the term has been used in and also for the definition of the concept (Gouws & Prinsloo, 2005). This feature was used in this study in order to assist in providing the definitions of the term. The following illustrations are examples of the concordances for the terms “consent”; “liberty”; “positive conception of freedom” and “harm principle”.

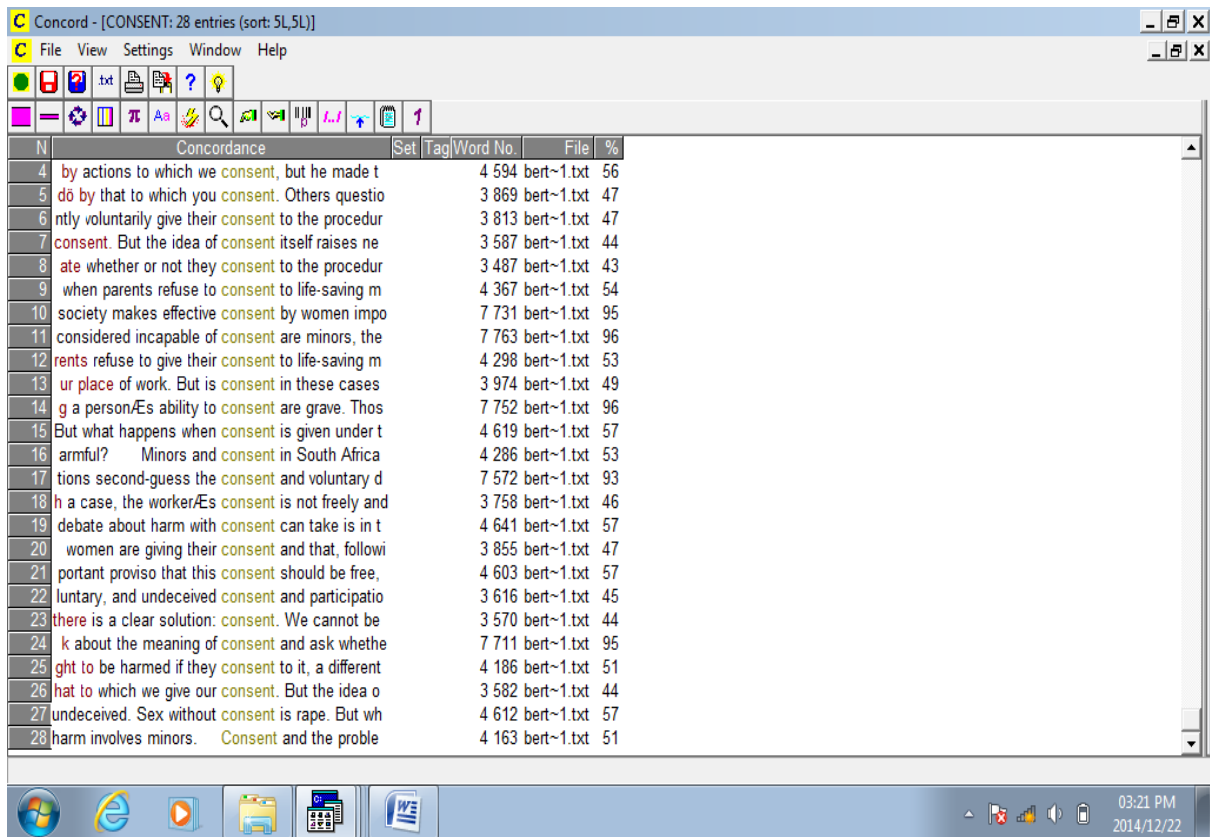


Figure 14: Screenshot showing concordance for 'consent'

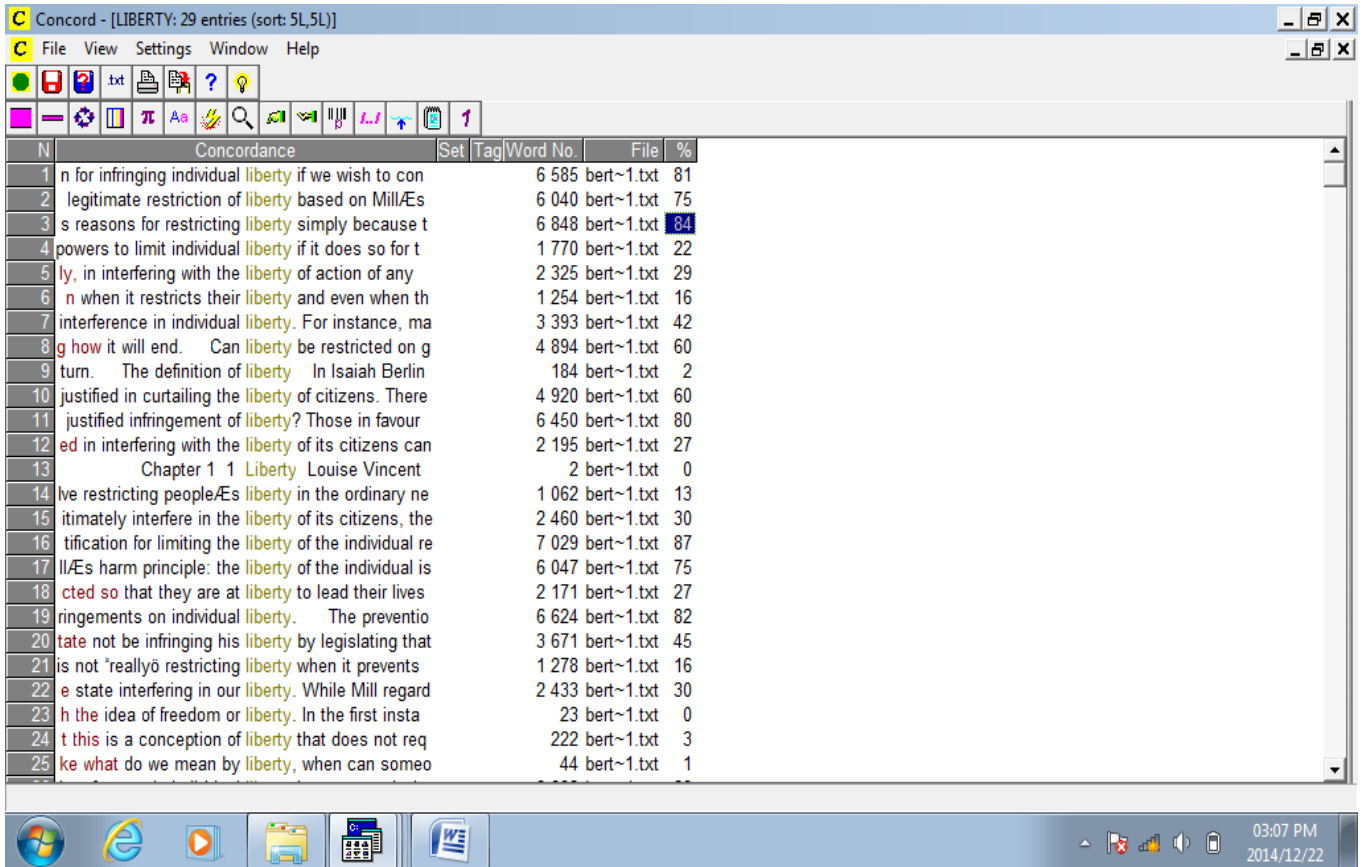


Figure 15: Screenshot showing concordance for 'liberty'

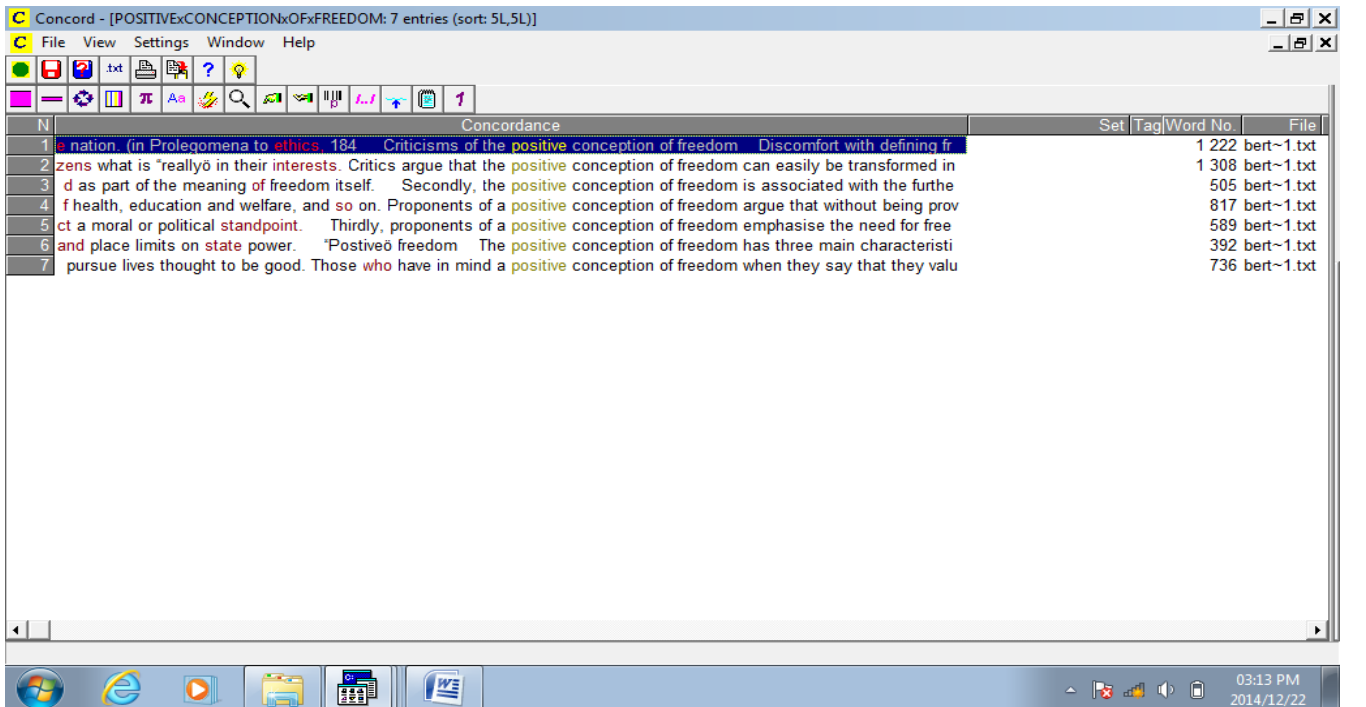


Figure 16: Screenshot showing concordance for 'positive conception of freedom'

The screenshot shows a window titled 'Concord - [HARMxPRINCIPLE: 11 entries (sort: 5L,5L)]'. The window contains a table with 11 rows of concordance results. The table has columns for line number (N), the concordance text, a 'Set' column, 'Tag', 'Word No.', 'File', and '%'. The text in the concordance column is highlighted in blue.

N	Concordance	Set	Tag	Word No.	File	%
1	contravention of Mill/E's harm principle or it must			5 276	bert~1.txt	65
2	According to Mill/E's harm principle, it is justif			2 486	bert~1.txt	31
3	ossible to evoke Mill/E's harm principle in this wa			6 548	bert~1.txt	81
4	. If we accept Mill/E's harm principle as a good			2 722	bert~1.txt	33
5	er than harm? Mill/E's harm principle provides			4 903	bert~1.txt	60
6	roper. He called this his harm principle: The ob			2 294	bert~1.txt	28
7	ill (1806-1873) Mill/E's harm principle Mill tho			2 265	bert~1.txt	28
8	erty of its citizens, the harm principle raises a n			2 465	bert~1.txt	30
9	While Mill regarded his harm principle as a strai			2 438	bert~1.txt	30
10	liberty based on Mill/E's harm principle: the libert			6 044	bert~1.txt	75
11	rated. Following Mill/E's harm principle, it may b			6 496	bert~1.txt	80

Figure 17: Screenshot showing concordance for 'harm principle'

As stated above, the concord feature was used in order to look at the context in which the words are used so that the researcher can be able to generate the meaning of the terms. After processing the concord of the terms provided the terms were defined. According to Taljard (2013) it is important to use reliable sources when collecting definitions. There are various sources that were used to verify the terms, Political Philosophy textbooks (mostly recommended by the lecturer) (Hobbes & Harrington, 1889; Vincent, 2009; Thomas, 2000; Wolff, 1996; Thompson, 2010; William, 2002) and the Online Stanford Encyclopaedia website (2012) were used.

7.2.2 Defining the terms in English

The next step was to provide the selected terms with definitions using the sources that have been mentioned above. Definitions help in providing the link between concepts and terms and this is done by defining the terms and explaining what they mean (Sager, 1990). There are different types of definitions that have been used in defining the terms. In this section it is

going to be shown how the different types of definitions that have been discussed in the literature review chapter have been used in defining the terms. The list below shows the terms with their definitions.

Terms	Definitions
Autonomy	This term refers to self-governance. It is when one makes unforced decisions which they will be held responsible and accountable for.
Consent	Approval or permission to participate in a particular act.
Constraint	It is a control that limits one's actions.
Democracy	It is a system where citizens are allowed to participate equally in the running of their country.
Harm Principle	It is a view by John Stuart Mill which states that individuals can exercise liberty but have their actions limited only to prevent (physical) harm to others.
Ideology	It is a way of thinking and how one looks at how things work.
Immorality	It is an act that violates the values of morality.
Infringement	It is when one is limited on the rights that they have.
Intoxicated consent	Giving consent while under the influence of alcohol or drugs.
Legitimate	It is when an authority, most of the time the government authority is considered to be accepted the way it is ruling.
Liberty	An ability to do things without hindrance on actions and decisions that one wants to take.
Morality	It is a belief of what one considers to be a wrong and right behaviour.
Negative Freedom	Freedom from the state's and other people's interfering. The state does not have to provide any goods and services for the individuals.

Offense (Principle)	An act which is against certain values accepted in society results on being invasive and causing displeasure to others.
Paternalism	Having power over someone restricting their freedom with the justification that you are protecting them.
Positive Freedom	Having ability and resources to fulfil certain acts. But this notion of freedom has certain constraints from the state and the state takes the role of shaping and influencing the choices made by the individual. So, the choice must be of moral value and be enjoyed by others as well.
Restriction	It is an act of limiting or controlling someone and their actions.
Sovereignty	When a state or a governing body has a right and power to govern itself without interference from outside entities.

Table 16: Terms with English definitions

When defining the terms, from the types of definitions that have been discussed in the literature review chapter there were only two types of definitions that were used in this research. The types of definitions that have been used in the definitions of the terms are paraphrase and intentional definition. Paraphrase definition is used when the terminologist defines the term by paraphrasing the meaning of the term. Intentional definition which is also known as *genus-differentia* is used by classifying a concept into a certain category to which it belongs and stating its unique characteristics which makes it different from the other concepts. These definitions have been used in defining the terms because they provide precise explanation of the concepts and they also allow people who are not experts in the field of Political Philosophy to be able to understand the meaning of the concepts. For instance, the use of extensional definition where one enumerates the components which make up that particular concept means that someone who is not an expert in Political Philosophy and is not familiar with its concepts might not understand or know the concepts that have been listed to define the primary concept.

7.2.2.1 Terms defined using intentional definition

The terms that were defined using intentional definition have concepts that belong to a certain category and that particular category was classified, and then the defined concept was then differentiated from other concepts in that particular class. The terms are ‘autonomy’; ‘democracy’; ‘harm principle’; ‘ideology’; ‘morality’; ‘immorality’; ‘negative freedom’ and ‘positive freedom’. The way that these terms have been defined is that at first I state the category in which the concept belongs, and then the characteristics of the concepts are explained. For example, in the definition of the term ‘democracy’: it has been stated that it is a *system*, but the kind of system where the citizens are allowed to participate in the running of their own country. So, the term has first been classified that it is a system and then it has been shown the kind of ‘system’ which it is referring to, that is “where citizens are allowed to participate equally in the running of their country.”

7.2.2.2 Terms defined using paraphrase definition

Paraphrase definition is used when the meaning of the concept is paraphrased in the definition. The terms that have been defined using paraphrase definition are ‘consent’; ‘constraint’; ‘infringement’ ‘intoxicated consent’; ‘liberty’; ‘paraphrase’; ‘paternalism’; ‘restriction’ and ‘sovereignty’. The meaning of these concepts has been paraphrased in simple terms to make them easy to understand for the intended audience. In other concepts such as ‘consent’ one would relate the definition to synonym definition. Synonym definition is when a synonym of a certain term for the concept is used (Gouws & Prinsloo, 2005). One would say that to some extent synonym definition has been used to define the term ‘consent’ as the definition states that it is “an *approval* or *permission* to participate in a particular act.” When defining that concept, the terms which are synonyms to the term ‘consent’ were used but they were also supplemented with an explanation which paraphrases the meaning of the term.

7.2.3 The translation of the terms and definitions into isiXhosa

After the terms were defined, the next step was to translate the definitions of the terms into isiXhosa. The translation of the definitions allowed one to capture the meaning in isiXhosa as that would enable getting an equivalent term for the English terms. Unlike the method that was followed by Maseko (2011) where the equivalent terms were created first before the translation of the definition, the terms were first defined in isiXhosa by translating the English definitions. The translation of the definitions was going to assist in coming up with the terms suitable for the concepts as the definitions (which carry the meaning of the concept) were already there to link the concepts with the terms that were going to be created. During primary term creation, it is important to name the concept or attach a linguistic unit to it by giving it a term (Sager, 1990). But in this context, a concept already exists. What was required was to perform secondary term creation where a concept that already has a term is transferred from one linguistic community to another. The translated definitions and terms are shown below.

English Terms	IsiXhosa Terms	English Definitions	IsiXhosa Definitions
Autonomy	Ukuziphatha/ Ukuzilawula	This term refers to self-governance. It is when one makes unforced decisions which they will be held responsible and accountable for.	Eli gama lithetha ukuzilawula. Kulapho ubani athi enganyanzeliswa ngathathe izigqibo aya kuthi azimele kwaye athathe uxanduva lwazo.
Consent	Imvume	Approval or permission to participate in a particular act.	Ukuvumela okanye ukunika imvume yokuthatha inxaxheba kwisenzo esithile.

Constraint	Isithintelo	It is a control that limits one's actions.	Lulawulo oluthi lunyine izenzo zomntu.
Democracy	Idemokhrasi	It is a system where citizens are allowed to participate equally in the running of their country.	Yinqubo apho abantu bavumelekile ukuba bathathe inxaxheba ngokulinganayo kwindlela ekuthi kuqhutywe ngayo izinto kwilizwe labo.
Harm Principle	I-Harm Principle	It is a view by John Stuart Mill which states that individuals can exercise liberty but have their actions limited only to prevent (physical) harm to others.	Luluvo lukaJohn Stuart Mill oluchaza ukuba abantu bangasebenzisa inkululeko yabo benze nantoni na kodwa izenzo zabo kufuneka zingachaphazeli, zonakalise/zonzakalise abanye abantu.
Ideology	Ingcingane	It is a way of thinking and how one looks at how things work.	Yindlela yokucinga ethile nendlela ubani athi ajonge ukuba izinto zisebenza ngayo.
Immorality	Izenzo ezingahambisani nokuziphatha kakuhle	It is an act that violates the values of morality.	Sisenzo esingavumelani neenqobo zokuziphatha ezisemgangathweni olindelekileyo.
Infringement	Uthintelo	It is when one is limited on the rights that they have.	Kulapho umntu athi anyinwe kumalungelo athile anawo

Intoxicated consent	Ukuvuma unxilile okanye uqhunyiwe	Giving consent while under the influence of alcohol or drugs.	Kukunika imvume yokwenzi into ethile uphantsi kweempembelelo zotywala okanye iziyobisi.
Legitimate	Okwamkelekileyo	It is when an authority, most of the time the government authority is considered to be accepted the way it is ruling.	Kulapho igunya elilawulayo, ngamaxesha amaninzi uRhulumente onegunya athi amkelwe indlela alawula ngayo.
Liberty	Inkululeko	An ability to do things without hindrance on actions and decisions that one wants to take.	Kukuba nako ukwenza izinto ngaphandle kwesithintelo kwizinto kunye nezigqibo ubani afuna ukuzenza.
Morality	Ukuziphatha kakuhle	It is a belief of what one considers to be a wrong and right behaviour.	Yinkolelo yomntu yokwahlula into elungileyo kwengalunganga.
Negative Freedom	Inkululeko engenakuphazanyiswa	Freedom from the state's and other people's interfering. The state does not have to provide any goods and services for the individuals.	Kulapho umntu angathi enze nantoni na engaphazanyiswa nguRhulumente nangabanye abantu. Akunyanzelekanga kubekho iinkonzo nezinto uRhulumente angathi abonelele abantu ngazo.

Offence (Principle)	Isikhubekiso	An act which is against certain values accepted in society results on being invasive and causing displeasure to others.	Isenzo esichaseneyo neenqobo eyamkelekileyo ekuhlaleni. Esi senzo sibangela ukungakhohiseki kwabanye abantu.
Paternalism	Ukulawula ngegqudu	Having power over someone restricting their freedom with the justification that you are protection them.	Ukuba negunya nokulawula umntu uthintele inkululeko yakhe ngesizathu sokuba uyamkhusela.
Positive Freedom	Inkululeko enokuphazanyiswa	Having ability and resources to fulfil certain acts. But this notion of freedom has certain constraints from the state and the state takes the role of shaping and influencing the choices made by the individual. So, the choice must be of moral value and be enjoyed by others as well.	Ukuba namandla kunye namacebo okwenza izinto ezithile. Kodwa olu hlobo lwenkululeko lunonyino oluthi luvele kuRhulumente kwaye uRhulumente uye adlale indima yokuba nefuthe kwizinto abantu abathi bazikhethe kunye neendlela abathi baziphathe ngayo.
Restriction	Isithintelo	It is an act of limiting or controlling	Sisenzo sokunyina okanye ukuthintela umntu kwizenzo

		someone and their actions.	zakhe.
Sovereignty	Ukuzilawula kwelizwe	When a state or a governing body has a right and power to govern itself without interference from outside entities.	Kulapho ilizwe okanye iqumrhu elilawulayo lithi libe nelungelo kunye negunya lokuzilawula ngaphandle kokuphazanyiswa ngamanye amaqela okanye amaziko avela angaphandle.

Table 17: The created bilingual glossary with definitions

The next section is going to discuss the process of the translation of the definitions as well as the creation of the English equivalent terms.

7.2.3.1 The process translating the equivalent terms and definitions

This section is going to discuss the process that was followed when translating the definitions as well as the terms into isiXhosa. The methods and approaches that were adopted during the translation as well as the term creation processes are going to be considered. The first process to be discussed is going to be the process that was followed first, which is the translation of the definitions from English into isiXhosa.

7.2.3.1.1 The translation of the English definitions into isiXhosa

When translating, it is important for one to take note of the type of text that they are translating first (Schubert, 2010). In the context of this study, the terminology list that has been developed and was being translated can be regarded as technical text. According to Munday (2001) there are two types of texts, namely, literary as well as technical text. Literary

text refers to mainly creative works and during the process of translation the translator is allowed to use metaphors and idioms in an attempt to reach equivalence and pass the meaning to the target audience. For technical text, the text is of factual nature which usually belongs to a particular domain, the aim in this type of text is to transfer the words the way they are from one language to another, without using any metaphors and idioms. Also the text is not 'emotional' the way literary texts are sometimes (Schubert, 2010).

For this research, the type of text which was translated is technical text because the main objective of the translation was to transfer the meaning of the definitions of the Political Philosophy concepts. The objective of the translation of technical texts is always to ensure that the target audience has access to what the source audience has accessed. In this context, it is to assist the students who do not speak English as their mother tongue to have access to knowledge and Political Philosophy concepts in a language which they understand better. For this type of text there was no need for one to focus on the culture of the target audience as long as the linguistic rules of the target language are followed during the translation process. There are certain strategies that have been used when translating the definitions and these are also going to be discussed through the discussion of the translation process of the definitions.

The approach that has been used when translating the definitions is the literal approach. When using the literal approach, the translator transfers the meaning 'word-for-word' as nothing from the source text is changed unless the translation product makes the target text look clumsy. In other words, if the meaning is still passed on successfully and equivalence is reached in the target text then there is no need to make any changes in the word order of the text during the translation process. Because of the nature of the source text of the terminology list which was being translated (technical text), the source text was taken to the culture of the target text without any alterations except for the language and replacing the English words with isiXhosa equivalents, in a manner that conforms to the syntactical rules of the language.

Even though most of the translation of the definitions was through literal approach, there are other definitions which had terms that are used more in the political context and when translated in isiXhosa they had to be given certain equivalents within the language. For

example, the English definition of ‘autonomy’ at the beginning states that “this term refers to *self-governance*.” Because African languages are known not to have terms that are related to administrative systems that are originally foreign (Madiba, 2001), there was a need for a term to be created for the equivalent of “self-governance”. Before proceeding to the equivalent of the term, it is important to note that even though there might be no standardized term for the concept in isiXhosa it does not mean that the concept does not exist in the isiXhosa culture. For example, the political context can be related to the context of chiefs and kings in the isiXhosa culture of governance. Therefore, when looking for the term one can look using that context. The term that has been formulated for “self-governance” is ‘*ukuzilawula*’. *Ukuzilawula* literally means ‘to rule oneself’. This term has been formulated through using an isiXhosa verb stem which is *lawula* (lit → rule). *Ukuzilawula* shows reflexivity and the reflexive is ‘-zi-’ which is usually inserted before the verb stem to show that one is doing an action upon themselves (Zotwana, 1994). An infinitive prefix ‘*uku*’ has also been used and it is an equivalent of ‘to’ and ‘...ing’ in English, the infinitives in isiXhosa sometimes allow a verb to function as a noun (Zotwana, 1994). So, the formulation of ‘*ukuzilawula*’ translates to one “ruling themselves” which in the context of politics can be ‘self-governance.’

7.2.3.1.2 The process of the creation of equivalent terms

As discussed in the literature review chapter, there are criteria that need to be followed and some strategies that are used by terminologists when creating terms. This section is going to illustrate the use of strategies available for term creation in the formulation of terms for Political Philosophy.

According to Sager (1990) and Batibo (2010) it is important that before formulating new terms that terms which are already in existence in a language are used. This principle was followed when providing equivalents for some of the terms. There are terms that are already in use and such terms could not be named again. This principle was also followed by Maseko (2011) in her study. The terms are “democracy” (*idemokhrasi*); “liberty” (*inkululeko*); “consent” (*invume*); “ideology” (*ingcingane*); “constraint”; “infringement”; “restriction”

(*isithintelo*); “sovereignty” (*ukuzilawula kwelizwe*); “legitimate” (*okwamkelekileyo*); “morality” (*imfundiso elungileyo*) and “autonomy” (*ukuzilawula*).

The next section below discusses the different strategies of term-creation that have been used when creating the isiXhosa equivalent terms.

7.2.3.1.2.1 Semantic Expansion

Semantic expansion is when the terms already exist in a language and a new meaning gets attached to them (Maseko, 2011; Mtintsilana & Morris, 1988). Maseko (2011) used the idiom “*ukulawula ngegqudu*” as a term for the concept ‘paternalism’. *Ukulawula ngegqudu* (lit → ruling using a knob-kerrie) in isiXhosa refers to making your own rules without anyone’s permission and sometimes using force. When someone uses *igqudu* (knob-kerrie) in isiXhosa it is when they are forcing someone to do something whether they like it or not and it has been derived from the act of “disciplining” children (Mawonga, 2012). In this context, paternalism has been given that equivalent because the concept is described as where one rules and exercises power over someone the way they want with the justification that they are protecting them.

Semantic expansion has also been used in the formulation of the equivalent term for “offence principle”. The equivalent which has been given “offence principle” is “*isikhubekiso*”. This term originates from an isiXhosa verb ‘*ukukhubeka*’ which refers to when one is walking and they trip or bump their feet into something and they get distracted. The relation of these concepts has been taken from the original concept where one was walking without any disturbances until they bump into that particular object. So, when transferring this meaning it can be linked by looking at the definition of the concept “offence principle”. The definition states that the concept refers to “an act against certain values accepted in society which results on being invasive and causing displeasure to others”. Therefore, the act itself has been used metaphorically and is being related to the ‘object’ that one bumps into and experiences displeasure. The term has ‘*isikhubekiso*’ exists as a metaphor for “offence” (when someone has been offended) and in this context is it used for ‘offence principle’.

7.2.3.1.2.2 Borrowing

Borrowing can be defined as when a certain term gets adopted into the target language and also following rules of the target language. According to Mtintsilana & Morris (1988), when languages are in contact borrowing tends to occur and borrowing of terms from other languages plays a major role in the creation of new terms.

Borrowing was used to formulate the term ‘*i-harm principle*’. Transference has been used in formulating this term. This is when the English term is only provided with the class prefix. This type of term formulation has been witnessed in Maseko’s study where the role players in the creation of terms in her study only provided the description of the concept and when the concept could not be named in isiXhosa (Maseko, 2011). Similarly in this context, I could not create the term for this concept but the description of the term has been provided in order to facilitate conceptualization. Also, because the term is new in the language and is not known therefore it has not yet adapted to the registers of isiXhosa even though the use of the initial vowel can be regarded as the minimal adaptation of the term into the language.

7.2.3.1.2.3 Paraphrasing

Paraphrasing is when a short description of the term is used as an equivalent (Taljard, 2013; Mtintsilana & Morris, 1988). The terms “immorality” (*izenzo ezingahambisani nokuziphatha kakuhle*); “intoxicated consent” (*ukuvuma unxilile okanye uqhunyiwe*); “negative freedom” (*inkululeko engenakuphazanyiswa*) and “positive freedom” (*inkululeko enokuphazanyiswa*). The term ‘immorality’ was defined by Maseko (2011) as “*ukungabi nasimilo*” (lit→ acting in a manner in which one shows no discipline), but for this context this term is ambiguous as also ‘*ukungabi nasimilo*’ refers to being respectful. So to avoid confusion by the target users, another term (*izenzo ezingahambisani nokuziphatha kakuhle*) has been provided.

7.3 SUMMARY

This chapter has dealt with presenting the model which can be followed in an attempt to assist students with the provision of special-domain concepts in a language which they understand better. The initiative that was taken by the Political Philosophy lecturer on approaching the SANTED team shows that there is an acknowledgement in HEIs that students who do not speak the LoLT as their home language do experience difficulty in understanding some abstract terms that are used at university. This shows that there is a need to provide students with access to epistemological knowledge and that can be done through the provision of resource learning materials which are translated in the students' home languages.

There are certain ways in which the resource learning materials can be created and one of these ways is making use of corpus extraction tools. This chapter has shown how corpus extraction tools such as WST can be used in order to create bilingual glossaries. Also, the theory translation appraisal has been used on showing how the terms and definitions were translated, defined and formulated. This means that by using translation strategies and term-creation approaches it is possible to produce bilingual glossaries that can help in achieving equality of access to education in HEIs at university. The use of corpus extraction tools with its available features; the translation processes and approaches have played a role in attaining accurate equivalence of the selected terms for the presented model. The term extraction processes as well as the translation process have been used while comparing with similar studies. The next chapter presents findings; recommendations and conclusions of the study.

CHAPTER 8: FINDINGS, RECOMMENDATIONS AND CONCLUSION

8.1 INTRODUCTION

This chapter presents the findings, recommendations as well as the conclusion of the study. There are certain findings that have been observed and most of them have been outlined in chapter five and six, but these are going to be summarised here as well. The recommendations for further research in language and learning are also going to be discussed in this chapter. Lastly, this chapter is also going to provide an overall summary of the whole study. The next section presents a summary of the findings of the study.

8.2 FINDINGS

As stated above, the main findings for this study relate to issues that emerged during the data collection process as have been discussed in chapter five and chapter six.

The first finding relates to the use LOTE by the students in class. This research confirms studies referred to in the foregoing chapters (Paxton, 2009; Madiba, 2009, Bangeni & Kapp, 2007) that even though the LoLT at RU is English, students use LOTE especially when discussing their work and attempting to get deeper understanding of the concepts presented, with the other students. To facilitate this, in the actual classroom environment, students tend to group themselves according to their mother tongue, and discussions in these groups occur in the common language of the group. Where students' language is not common, they tend to group themselves with those students whose home language is within their language family. In the case of the ES class, there was an "Afrikaans group" and an "isiXhosa group" but within these groups were speakers of other languages from the same language family, who followed in the discussion, and contributed, in their home language during discussion. The fact that the groups were not linguistically homogenous did not deter use of LOTE, and I believe, nor learning.

The second finding relates to the teacher's role in managing use of LOTE in the classroom in HE. While small group discussions occurred in LOTE, the whole class discussions at the

introduction and at the conclusion of the class occurred in the LoTL, with the teacher leading the process. The teacher is monolingual, and has no way of getting engaged with students' discussions in their home languages, but she is keen to allow a multilingual classroom discourse, to the extent that she often asked me, as a researcher in her class, to intervene, and explain concepts in isiXhosa when she identifies that the students are struggling with understanding. This again confirms findings of studies such as those conducted by the HE Monitor (2009), where it is stated monolingual teaching practices that favour English are, by and large, also as a result of the teaching staff which is monolingual. In summary, this finding confirms that students use their home languages in learning, and even though the class is linguistically heterogeneous, the most common LOTE was used, but this did not deter students from "minority languages" to follow or participate in small group discussions, and whole group learning occurred in the LoTL. Secondly, although teachers in HE are monolingual, there is a growing acknowledgement of students' home languages, especially LOTE, and the role of these languages in enabling learning, and therefore student success. This particular teacher used students' languages as resources to enable learning, and trialled ways to make this possible in her class.

Thirdly, although students that participated in this research moved between the LoTL and LOTE in learning, and could be perceived as having an advantage as bilinguals, in fact they only have communication skills of English; they do not entirely have the academic and cognitive skills of the language. They state in their responses in the questionnaires and interviews that they have no problem understanding the everyday language, the problem arises when they have to engage with subject-specific terms, in the context of learning. This includes those students who have LOTE as mother tongue, but went to English-medium schools. One student in the questionnaires responded that:

"I wish it can be used to help us with some English words. Most of us do not understand the difficult words."

The students' responses when they were asked to rate themselves on their skill in English (see Table 14) indicates that most students for all skills selected 'good' and there were fifteen (15) students who selected 'fair' and none of them selected 'poor'. This might indicate that the students do understand the language for communication and the problem might only be the subject-specific terms.

The notion of Cummins' BICS and CALP has been discussed in the previous chapters and to clarify this finding, one can state that the students are able to communicate in English but only basic communication which does not involve complicated academic concepts and do not require abstract thinking.

The fourth finding relates to students' views on the function of English in both education and other social institutions. The students' perceptions of English in HE are different from how they perceive LOTE. The students consider English to be important in HE, because it is the LoLT and also because of the status which the language carries both locally and globally. According to the students, access to English allows access to other resources such as technology, science etc. the students see it to be important to master the language and maybe more than their own languages; so that they could access the education which they desire. As compared to similar studies, it has also been found the students hold the preference that English be used as the LoLT rather than their home languages, but even though that is the case they still acknowledge that it is important that their home languages should form part of learning.

The fifth finding is based on availability of learning resources in students' home languages, particularly LOTE. As the students acknowledge the importance of their home languages, they also appreciate and see value in bi-/multilingual glossaries. There is some of acknowledgement from the students that the use of resource materials that contain "difficult" terms and definitions of concepts in their home languages assists them in learning. It is acknowledged by the students that the bi-/multilingual glossaries are helpful in understanding certain concepts better as it is easy for them to learn in their own languages. The students used the bilingual glossary which they were provided with; mostly the bilingual glossary was used by the students during their own time. The invisibility of the the glossaries in class did not mean that they were not used, but there were different methods which they used.

Lastly, classroom observations indicated that there were multilingual teaching and learning practices that were emerging, perhaps unintentionally, but that clearly were systematic where learning that included LOTE was concerned. For example, the teacher would introduce the

subject of the day in the LoTL, the students then went away in small group discussion which were formed according to “majority” languages, other “minority” language speakers joined groups where the language was intelligible with theirs, in the groups discussions were primarily in the common language, but not to the exclusion of the minority language, report back and conclusion to the whole group occurred in the LoTL, with the teacher facilitating both this. The teacher, further facilitated and affirmed the use of LOTE. Students were referred to the bilingual glossary developed for the subject

The recommendations for these findings are discussed below in the next section.

8.3 RECOMMENDATIONS

This section presents the recommendations that this study make in response to the findings discussed above.

There are recommendations that relate to language planning. The study, in its findings clearly illustrates that there are practices of multilingual teaching and learning in HE although there is clearly very little management, documentation and reflection about this process. In the first finding, where students group themselves according to their home languages, the study recommends that there needs to be careful planning and management of the process so that this does not entrench linguistic division, and perpetuate the misconception that multilingualism is a “problem” and not a resource. The ESP process which emerged organically seems to be working, and it requires to be studied further.

The second recommendation relates to the role of the teachers in facilitating multilingualism. The teachers in HE are monolinguals, but their student body is linguistically diverse. While in the ideal world, growing the teacher’s linguistic repertoire would be ideal, my recommendation here is that the teachers should be equipped with skills, as part of their training in teaching in HE, to use students as resources, as illustrated by the HE Monitor

(2009). However, managing the process is very important as it is critical that learning does actually take place.

It is recommended that students are encouraged to use the glossary through an introduction of tasks which will make them use the terms in the glossary. This can be in the form of exercises where students have to write about a certain term or topic which uses the terms. This would also allow the students to 'review' the glossary as they would use the terms if they think they are appropriate or suggest a different term if they think the term in the glossary are not appropriate.

The finding on students' deficiency in CALP as well as their own home languages (LOTE) is a great concern, and as a recommendation, academic literacy programmes would need to provide an intervention, and this is not entirely in the realm of this study.

The view, that English is language of opportunity is real and true. The opportunities presented knowledge of English *as well as other* languages, including your own mother tongue, are not part of academic (and generally, education) discourse. I recommend that courses on benefits of mother tongue based bi/multilingual education form part of learning in higher education. This would deal with myths related to bi-multilingualism.

The context of the emerging multilingual teaching and learning practices as observed in the ESP class presented an opportunity where multilingual classroom pedagogies could be hypothesised. Besides the Ramani and Joseph study (2002) of the implementation of a bilingual degree in English and Sesotho sa Leboa at the University of Limpopo, there is no other South African context that officially presents use of LOTE in HE. Even though other universities have engaged in activities which include the use of LOTE in the context of learning (Paxton, 2009; Madiba, 2010; 2014) it has not been officially done but as stated earlier, only when students use LOTE when discussing in class. This recommendation, i.e. the researching these teaching practices would not only provide reputable multilingual

teaching strategies, but would also initiate the process of grounding scholarship in African languages in the African context.

The main recommendation for this study relates to the availability of multilingual resources to facilitate multilingualism in HE. It is a model that can be used when developing bilingual glossaries and it has been presented on the previous chapter. As presented in the previous chapter, there is certain available software that can be used for the development of glossaries. There is a need for the provision of resource materials such as bilingual glossaries which can be used by the students in order to facilitate the students' learning at university. It is also important that the students are encourage to use the resources which are made available to them and for the students to be made aware of how their own home languages can be used to facilitate learning.

With the material that has been developed in other universities and institutions, there is a need for the integration of the material so that there can be consistency on the terms used for the different concepts. Different bodies such as HEIs; national language boards (NLBs) and the national Department of Arts and Culture (DAC) should become more active in playing a role in terminology development in LOTE. In this way, the process of development of equivalent terms in LOTE will be faster as the terms will be created by different role players.

The current study provides only a model with a small sample on how glossaries can be developed, thus there is a need for further research which will focus on the actual creation of the glossaries. The type of research which is referred to here is where various sources (like textbooks) from a specific discipline can be used for corpus extraction in order to create glossaries for that particular discipline. For instance, various Political Science textbooks can be used to extract corpus in order to create different a bi/multilingual glossary for the discipline where computer assisted corpus extraction tools are used. As stated, the current study presents a model for the development of bi/multilingual glossaries and attached on the appendices (See Appendix H) are more terms which represent concepts in Political Philosophy and these terms need to be provided with definitions and equivalents. Further research can also look into that.

8.4 CONCLUSION

This study looks at the use of additional resource materials such as bilingual glossaries which can be used in order to facilitate learning and assist students who are second language speakers of English at university. The objectives of this study have been outlined on chapter one, also it has been stated that this study is not only focusing on the development of bilingual glossaries but also there is an intention of developing LOTE through terminology development. Various theories which demonstrate the relation between language and learning have been used in order to support the viability of the study and to show how language proficiency is also an important factor in academic achievement.

There are certain legislative documents that have been discussed which form part of the contextual background for this study. The main legislative document which this study is guided by is the Constitution, as it is the supreme document in the Republic and multilingualism as well as the promotion of other previously disadvantaged languages encouraged.

Various research methods such as interviews, questionnaires and observations have been used to collect the data for this research. With the use of these mentioned research methods there are certain issues that emerged during the data collection process and these issues have been discussed in this thesis. One of the findings for this research is the necessity for the bilingual glossaries in order to assist students when learning. The use of corpus extraction tools has been introduced in the study and there is a model which has been presented on how these computer-assisted tools can be used in order to extract terms which can be developed into glossaries.

The development of bilingual glossaries to assist learning has been recommended and bilingual glossaries are possible to be developed through translation and terminology development. Translation assists on terminology development especially when creating term equivalents of scientific concepts from English to LOTE such as isiXhosa which are not

developed enough yet to be used solely in HEIs. The use of translation assist in transferring meaning from one language to another and this helps on showing that it is not necessary for language to act as a barrier to access epistemological knowledge. The use of students' home languages can be used to facilitate learning in English and for the students to access knowledge in various disciplines which they study.

REFERENCES

Adendorff, R. D. 1996. "The function of code switching among high school teachers and students in KwaZulu and implications for teacher education." In Bailey, K. M. & Nunan, D. (eds.) *Voices from the language classroom: Qualitative Research in Second Language Acquisition*. Cambridge: Cambridge University Press. 388-406.

Alexander, N. 1989. *Language Policy and National Unity in South Africa/Azania*. Cape Town: Buchu Books.

Alexander, N. 1995. "Models of multilingual schooling in South Africa" in K. Heugh, A. Siegruhn and P. Pluddemann (eds.) *Multilingual Education for South Africa*. Johannesburg: Heinemann.

Alexander, N. 2000. "Mother tongue-based bilingual education as political and educational strategy". Paper presented in *Second National Symposium on National Language Policy*, in October at Mangochi, Malawi.

Alexander, N. 2003. "Language Education Policy, National and Sub-National Identities in South Africa" in *Guide for the Development of Language Education Policies in Europe: From Linguistic Diversity to Plurilingual Education*. Council of Europe.

Antia, B. E. 2000. *Terminology and Language Planning: An Alternative framework of practice and discourse*. Amsterdam: John Benjamins.

Antia, B. E. 2013. "Relationship between terminology and knowledge" in *HSS Catalytic Project Workshop*, August, at Rhodes University.

Aziakpono, P. 2007. *The attitudes of isiXhosa-speaking students towards various languages of learning and teaching (LOLT) issues at Rhodes University*. Master's Thesis. Grahamstown: Rhodes University.

Babbie, E. & Mouton, J. 2001. *The Practice of Social Research*. Oxford: OUP.

Badat, S. 2014. The Vice Chancellor's speech at the Rhodes University Graduation Ceremony. 11 April 2014. Grahamstown.

Baker, C. 1993. *Foundations of bilingual education and bilingualism*. England: Multilingual Matters.

Baker, C. & Jones, P. S. 1997. *Encyclopaedia of bilingualism and bilingual education*. Philadelphia: Multilingual Matters.

Baker, T. L. 1988. *Doing Social Research*. NY: McGraw-Hill Book Company.

Ball, J. 2011. *Enhancing learning of children from diverse language backgrounds: Mother Tongue-based Bilingual or Multilingual Education in the early years*. Paris: UNESCO.

Bamgbose, A. 1991. *Language and the Nation: The Language Question in Sub-Saharan Africa*. Edinburg: Edinburg Press.

Banda, F. 2000. "The Dilemma of the Mother-Tongue: Prospects for Bilingual Education in South Africa" in *South Africa, Language, Culture and Curriculum*. Vol. 13(1) pp:51-66.

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

Batibo, H. 2010a. "Challenges of Term Standardisation, Dissemination and Acceptance." In Maseko, P. (ed.). *Terminology Development for the Intellectualisation of African Languages*. PRAESA Occasional Paper No. 38. Rondebosch: PRAESA.

Batibo, H. 2010b. "The Use of African Languages for Effective Education at Tertiary level." In Maseko, P. (ed.). *Terminology Development for the Intellectualisation of African Languages*. PRAESA Occasional Paper No. 38. Rondebosch: PRAESA.

Beauchamp, T. 2013. "The Principle of Beneficence in Applied Ethics." In Zalta, E. N. (ed.) *The Stanford Encyclopedia of Philosophy*.

<http://plato.stanford.edu/archives/win2013/entries/principle-beneficence/>. Accessed on 07 December, 2014.

Bell, J. 2005. *Doing your Research Project: A guide for first-time researchers in education, health and social science*. (4ed) NY: OUP.

Berg, L. B. 1998. *Qualitative Research Methods for the Social Sciences*. (3ed) Boston: Allyn & Bacon.

Boughey, C. 2005. 'Epistemological' access to university: an alternative perspective.' In *South African Journal for Higher Education* 19 (3). Pretoria: Unisa Press. pp. 239-242.

Bryman, A. 1988. *Quantity and Quality in Social Research*. USA: Routledge.

Bryman, A. 2012. *Social Research Methods*. (4ed) US: OUP. Bunting, I. 2002. "The Higher Education Landscape under Apartheid" in Cloete, N. Fehnel, R. Maassen, P. Moja, T. Perold, H. Gibbon, T. (eds) *Transformation in Higher Education: Global Pressures and Local Realities in South Africa*. Lansdowne: Juta and Co Pty Ltd.

Clark, N.L. & Worger, W. H. 2004. *South Africa: The Rise and Fall of Apartheid*. Hallow: Longman.

Carter, I. 2012. "Positive and Negative Liberty", in Zalta, E. N. (ed.) *The Stanford Encyclopedia of Philosophy*. <http://plato.stanford.edu/archives/spr2012/entries/liberty-positive-negative/> Accessed on 07 December, 2014.

Cohen, L. Manion, L. & Morrison, K. 2007. *Research Methods in Education*. Canada, USA: Routledge.

Constitution of the Republic of South Africa, 1996. Act 108 of 1996.

Cooper, R. 1989. *Language planning and social change*. Cambridge: Cambridge University Press.

Council on Higher Education. 2001. *Language framework for South African Higher Education*. Pretoria: CHE.

Council for Higher Education. 2009. *Higher Education Monitor: The State of Higher Education in South Africa*. Pretoria: CHE.

Council on Higher Education, 2010. "Access and throughput in South African Higher Education: Three Case Studies" in *Higher Education Monitor* no 9, March 2010.

Cummins, J. 1979. "Linguistic Interdependence and the Educational Development of Bilingual Children" in *Review of Educational Research*. Vol. 49 (2) pp: 222-251.

Cummins, J. 1980. "The cross-lingual dimensions of language proficiency: implications for bilingual education and the optimal age issue." In *TESOL Quarterly*. Vol 14 (2). Pp: 175-187.

Cummins, J. 1984. "Wanted: A theoretical framework for relating language proficiency to academic achievements among bilingual students" in Rivera, C. (ed). *Language Proficiency and Academic Achievement*. England: Multilingual Matters.

Cummins, J. & Swain, M. 1986. *Bilingualism in education: aspects of theory, research and practice*. London: Longman.

Cummins, J. 2000. *Language, power and pedagogy: Bilingual children in the crossfire*. Clevedon, England: Multilingualism Matters.

Cummins, J. 2001. *Bilingual Children's Mother Tongue: Why is it important for education?* Toronto: University of Toronto.

Dalvit, L. 2010. *Multilingualism and IT education at Rhodes University: An Exploratory Study*. Unpublished PhD thesis. Grahamstown. Rhodes University.

Dalvit, L. & de Klerk, V. (2005). "Attitudes of isiXhosa-Speaking Students at the University of Fort Hare towards the Use of isiXhosa as a Language of Learning and Teaching (LOLT)". In *Southern African Journal of Linguistics and Applied Language Studies (SALAALS)*, Vol. 23(1), pp:1-18.

Davidson, D. 1997. "Seeing through Language" in Preston, J. (ed). *Thought and Language*. Cambridge: Cambridge University Press.

Davies, M. B. 2007. *Doing a Successful Research Project: Using Qualitative ir Quantitative Methods*. NY: Palgrave Macmillan.

De Klerk, V. 1996. “Use of and attitudes to English in a multilingual university” in *English World-Wide* Vol. 17(1) pp: 111–127.

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

Department of Arts and Culture. 2008. *Multilingual Parliamentary/Political terminology list*. Pretoria: The Government Printers.

Department of Arts and Culture. 2011. *South African Languages Bill*.

Department of Education, 1997. *Higher Education Act*.

Department of Education, 1997. *Language in Education Policy*.

Department of Education, 2000. *Values, Education and Democracy*. Conxtions Development Communications.

Department of Education. 2003. *Development of Indigenous languages as Mediums of Instruction in Higher Education* (Report compiled by the Ministerial Committee appointed by the Ministry of Education). Pretoria: Government Printer.

Department of Education, 2014.

Department of Sport, Recreation, Arts and Culture. 2011. *Eastern Cape Provincial Language Policy Framework*.

Department of Sport, Recreation, Arts and Culture. 2013. *Draft Eastern Cape Use of Official Languages Bill*.

Desai, Z. 2012. *A Case for Mother Tongue Education?* PhD Thesis. University of the Western Cape: Bellville.

Djité, P.G. 2008. *Sociolinguistics of Development in Africat*. Cleveland: Multilingual Matters.

Dyers, C. 1997. "An investigation into current attitudes towards English at the University of the Western Cape" in *Per Linguam*. Vol 13(1).

Dyers, C. 1998. "Xhosa students' attitudes towards Black South African Languages at the University of the Western Cape" in *South African Journal of African Languages*. Vol 19(2). Pp: 73 – 82.

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

Faltis, C. & Hudelson, S. J. 1998. *Bilingual education in elementary and secondary school communities: toward understanding and caring*. Boston: Allyn & Bacon.

Finlayson, R. 1995. "Women's language of respect: isihlonipho sabafazi" in Mesthrie, R. (ed.). *Language and social history*. Cape Town: David Phillip.

Finlayson, R. & Madiba, M. 2002. "Intellectualization of the Indigenous Languages of South Africa: Challenges and Prospects." In *Current Issues in Language Planning*. Vol. 3(1) pp: 40-61.

Fischer, A., Weiss, E., Mdala, E. & Tshabe, S. 1985. *Oxford English Xhosa Dictionary*. Cape Town: Oxford University Press.

Garcia, O. & Baker, C. 1995. *Policy and practice in bilingual education: a reader extending the foundations*. Philadelphia: Multilingual Matters.

Gerard, A. S. 1981. *African Language Literatures: An Introduction to the Literally History of Sub-Saharan Africa*. Washington D.C.: Three Continents.

Giliomee, H. 2003. *The Rise and Possible Demise of Afrikaans as a Public Language*. Cape Town: PRAESA.

Giliomee, H. 2009. "A note on Bantu Education 1953-1970" in *South African Journal of Economics*.

Gough, D. 1999. "African Languages: Discourse, Concepts, Education and other Challenges" in Prah, K. K. (ed). *Knowledge in Black and White: The Impact of Apartheid on the*

Production and Reproduction of Knowledge. Cape Town: The Centre for Advanced Studies of African Society.

Gouws, R.H. and Prinsloo, D.J. *Principles and Practice of South African Lexicography*

Hartshorne, K. 1953. *Native Education in the Union of South Africa: A summary of the report of the commission on Native Education in South Africa- U.G. 53- 1951*. Cape Town: SAIRR.

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

Hartshorne, K. 1995. "Language Policy in African Education: a background to the future". In Mesthrie, R. (ed.). *Language and social history*. Cape Town: David Phillip.

Hesse - Biber, N. S. & Leavy, P. 2011. *The Practice of Qualitative Research*. London: Sage Publications.

Heugh, K. 1995. "The multilingual school: modified dual medium" in K. Heugh, A. Siegruhn and P. Pluddemann (eds) *Multilingual Education for South Africa*. Johannesburg: Heinemann.

Heugh, K. 2001. *The case against bilingual and multilingual education in South Africa*. PRAESA occasional paper No 6. Cape Town: PRAESA.

Hobbes, T. and Harrington, J. 1889. *Hobbes's Leviathan. Harrington's Oceana. Famous Pamphlets*. London: Routledge.

Kapp, R. 1998. "Language, Culture and Politics: The case for multilingualism in tutorials" in Angelil- Carter, S. (ed) *Access to Success: Literacy in academic contexts*. Cape Town: UCT Press.

Kaschula, R. H. 2008. "The Oppression of IsiXhosa Literature and the Irony of Transformation" in *English in Africa*. Vol 35(1). pp:117-132.

Kaschula, R.H. Maseko, P. Dalvit, L. Mapi, T. Nelani, L. Nosilela, B. & Sam, M. 2009. 'An intercultural approach to implementing multilingualism at Rhodes University, South Africa' in *Stellenbosch Papers in Linguistics PLUS*. Vol. 39 pp: 45-61.

Kaschula, R. H. 2013. "A Response to Jonathan Jansen's Percy Baneshik Memorial lecture to the English Academy of South Africa" in *Litnet*. <http://www.litnet.co.za/Article/a-response-to-jonathan-jansens-percy-baneshik-memorial-lecture-to-the-english-academy-of-s>. Accessed on 25 October 2013.

Kaschula, R. H. 2014. "Challenging the forked tongue of multilingualism: Scholarship in African languages at South African universities". In Altmayer, Claus & Wolff, Ekkehard (eds.) *Africa: Challenges of Multilingualism*. Frankfurt, Germany: Peter lang. pp. 203-222.

Koch, E. & Buckett, B. 2005. "Making the role of African languages in higher education a reality" in *SAJHE*. Vol 19(6) pp:1089-1107.

Kropf, A. 1915. *Kaffir-English Dictionary*. Alice: Lovedale Mission Press.

Levinson, S. C. 1997. "From outer to inner space: Linguistic categories and non-linguistic thinking." in Pederson, E. & Nuyts, J. (eds) *Language and Conceptualization*. New York: Cambridge University Press.

LinguisTech, 2011. *WordSmith Tools Concord Tutorial, Level II*. http://linguistech.ca/WordSmith_Concord_E_TUTCERTT_II Accessed on: 18 December 2014.

Mack, N., Woodsong, C., Macqueen, K.M., Guest, G. and Namey, E. 2005. *Qualitative research methods: A data collector's field guide*. Research Triangle Park, North Carolina: Family Health International.

Madiba, M. & Mabiletja, M. 2009. "An evaluation of the implementation of the new Language in Education Policy (LiEP) in selected secondary schools of Limpopo province." In *Language Matters: Studies in the Languages of Africa*. Vol 39(2). Pp: 204 - 229.

Madiba, M. 2001. "Towards a Model for Terminology Modernisation in the African Languages of South Africa." In *Multilingual Matters*, 32 (1), pp. 53-77.

Madiba, M. 2010. "Fast-tracking concept learning to English as an additional language

(EAL) students through corpus-based multilingual glossaries.” In *Alternation: Interdisciplinary Journal for Study of the Arts and Humanities in Southern Africa*. Vol 17(1) pp. 225-248.

Madiba, M. 2014. “Promoting Concept Literacy through Multilingual Glossaries: A Translanguaging Approach.” In Hibbert, L. & van der Walt, C. (eds.) *Multilingual Universities in South Africa: Reflecting society in Higher Education*. NY: Multilingual Matters.

Mahlalela-Thusi, B. & Heugh, K. 2002. “Unravelling some of the historical threads of mother-tongue development and use during the first period of Bantu Education (1955-1975)” in *Perspectives in Education*. Vol 20(1). pp: 241-258.

Makalima, R.G.S. 1981. *An Assessment of the Educational Implications of the Development of Xhosa as a Written Medium from 1820 to 1950 – A Historical-didactical analysis*. An Unpublished M.A. Thesis. Alice: University of Fort Hare.

Makgatho, M. 2014. “The use of English and code switching in the teaching and learning of Technology in some schools in Eastern Cape province, South Africa.” In *Mediterranean Journal of Social Sciences*. Vol 5(23). Pp: 933-940

Maseko, P. 2008. *Vocational Language Learning and how it relates to Language Policy Issues*. Unpublished MA thesis. Grahamstown: Rhodes University.

Maseko, P. 2011. *Intellectualization of African Languages with particular reference to isiXhosa*. Unpublished PhD thesis. Grahamstown: Rhodes University.

Maseko, P. 2011. “Looking in all the wrong places for real for real learning” in *Mail & Guardian*. <http://mg.co.za/article/2011-08-26-looking-in-all-the-wrong-places-for-real-learning>. Accessed on 25 October 2013.

Maseko, P. 2014. “Multilingualism at work in South African Higher Education: From Policy to Practice.” In Hibbert, L. & van der Walt, C. (eds.) *Multilingual Universities in South Africa: Reflecting society in Higher Education*. NY: Multilingual Matters.

Mason, J. 2002. *Qualitative Research*. London: Sage Publications.

Mawonga, S. 2012. *Evaluation of the Translated Glossary for the Department of Political Science*. Unpublished Honours Thesis. Grahamstown: Rhodes University.

Mawonga, S. Maseko, P. & Nkomo, D. 2013. "Promotion of the use of African languages in South African Higher Education Institutions: Examining the role and the development of glossaries to facilitate learning" paper presented at the *African Languages Association of Southern Africa Conference* in Pretoria, 19 July 2013.

Mawonga, S. Maseko, P. & Nkomo, D. 2014. "The Centrality of Translation in the Development of African Languages for use in South African Higher Education Institutions: A Case Study of a Political Science English-isiXhosa glossary in a South African University" in *Alternation*. Vol, 13. Pp: 55-79.

Mbude-Shale, N. B. N. 2013. *Exploring the correlation between language medium and academic achievement: A comparative study of the language of learning and teaching (LOLT) and Mathematics results in the 2010 Grade 12 National Senior Certificate examinations in the Eastern Cape*. Unpublished MA Thesis. Grahamstown: Rhodes University.

Meyer, D. 1998. "What teachers say they want, what they actually do and its implications for language education policy" in *Journal for Language Teaching*. Vol 32(1). Pp: 1- 16.

Ministry of Education. 2002. *Language Policy for Higher Education*. Pretoria: Government Press.

Ministry of Education. 1996. *National Education Policy Act*.

Miti, L.M. 2003. "Problems and Possibilities: The Harmonisation and Standardization of Nguni Varieties". in Chebane, A. Jokweni, M. Mokitimi, M.I. & Ngubane, S. (eds) *Unifying Southern African languages*. Cape Town: CASAS.

Morrison, K. R. B. 2003. "Complexity theory and curriculum reforms in Hong Kong" in *Pedagogy, Culture and Society*. Vol 22 (2), pp: 279-302.

Morrow, W. 1994. "Entitlement and achievement in education." in *Studies in Philosophy and Education* 13(1):33-37.

Mtintsilana, P. N. & Morris, R. 1988. "Terminography in African languages in South Africa" in *South African Journal of African Languages*. 8(4): 109-113.

Newmark, P. 1981. *Approaches to Translation*. Oxford: Pergamon Press.

Ngcobo, M.N. 2007. "Language Planning, Policy and Implementation in South Africa" <http://bibliotecavirtualut.suagm.edu/Glossa/Journal/jun2007/Language%20Planning,%20Policy%20and%20Implementation%20in%20South%20Africa.pdf>. Accessed on 14 June 2013.

Nkomo, D. & Madiba, M. 2011. "The Compilation of Multilingual Concept Literacy Glossaries at the University of Cape Town: A Lexicographical Function Theoretical Approach." in *Lexikos*. Vol.21. pp:144-168

O' Malley, P. 1959. "1959- The Extension of University Education Act No 45" in *O' Malley: The Heart of Hope*. <http://www.nelsonmandela.org/omalley/index.php/site/q/03lv01538/04lv01828/05lv01829/06lv01898.htm>. Accessed on: 8 April 2014.

Obanya, P. 2004. *Learning In, With and From the First Language*. PRAESA Occasional Paper No. 19. Cape Town. PRAESA.

Ostrov, J. M. & Hart, E. J. 2012. "Observational Methods" in Little, T.D (ed.) *The Oxford Handbook of Qualitative Methods in Psychology, Vol 1*. Oxford: OUP.

Ouane, A. & Glanz, C. 2010. *Why and how Africa should invest in African languages and multilingual education: An evidence- and practice-based policy advocacy brief*. Hamburg: UNESCO Institute for Lifelong Learning.

Paulston, C.B. 1978. "Bilingual/Bicultural Education" in *Review of research in Education*. Vol.6 pp:186-228.

Paxton, M. 2007. "You would be a master of a subject if taught in Xhosa...": An investigation into the complexities of Bilingual Concept Development in an English Medium University in South Africa." In *The International Journal of Learning*. Vol 14(6) pp: 61-67.

Paxton, M. 2009. "It's easy to learn when you using your home language, but with English you need to start learning language before you get the concept': bilingual concept development in an English medium university in South Africa." in *Journal of Multilingual and Multicultural Development*. Vol. 30(4) pp:345-359.

Pederson, E. & Nuyts, J. 1997. "Overview on the relationship between language and conceptualization." in Pederson, E. & Nuyts, J. (eds) *Language and Conceptualization*. New York: Cambridge University Press.

Phillipson R. 1992. *Linguistic imperialism*. Oxford: Oxford University Press.

Picht, H. 2000. *Introduction to the basic principles of terminology*. Vienna: First Terminology Summer Academy.

Pinker, S. 1995. *The Language Instinct: How the Mind Creates Language*. New York: Harper Collins Publishers.

Prah, K. K. 2007. "Challenges to the Promotion of Indigenous Languages in South Africa" in *Review Commissioned by the Foundation for Human Rights in South Africa*. Cape Town: The Centre for Advanced Studies of African Society.

Prah, K. K. 2009. "Winning souls through the written word" in Prah, K. K. (ed.) *The Role of Missionaries in the Development of African Languages*. Cape Town: The Centre for Advanced Studies of African Society.

Ramani, E. & Joseph, M. 2002. "Breaking new Ground: Introducing an African language as medium of instruction at the University of the North." In *Perspectives in Education*. Vol. 20(1) pp: 233-240.

Rhodes University Extended Studies Unit, 2014. "Entrance Requirements". <http://www.ru.ac.za/extendedstudies/humanities/entrancerequirements/> Accessed on: 10 April 2014.

Rhodes University Language Committee Meeting Report, 2012. *Theses written in Languages Other Than English*. Grahamstown.

Rhodes University Language Policy, 2005.

Rhodes University Revised Language Policy, 2014.

Rhor, M. 2012. "Classes turn bilingual students into biliterate ones" in *Chron*. <http://m.chron.com/news/houston-texas/article/Classes-turn-bilingual-students-into-biliterate-2851275.php>. Accessed on: 17 January 2015.

Sager, J. C. 1990. *A Practical Course in Terminology Processing*. Philadelphia: John Benjamins Publishing Company.

Scott, M. 2004. *WordSmith Tools Version 4*. Oxford: Oxford University Press.

Scott, M. 2010. *WordSmith Tools Step-by-Step Version 5*.

Setati, M. Adler, J. Reed, Y. & Bapoo, A. 2002. in Adler, J. & Reed, Y. (eds) *Challenges of Teacher Development: An investigation of take-up in South Africa*. Pretoria: Van Schaik.

Shembe, S. 2005. "IsiZulu as a teaching, learning and assessment tool in Chemistry in Higher Education". in *Doing Science in African Languages, with particular reference to Nguni languages Report*. Cape Town: Praesa, UCT.

Sibula, P. M. 2007. "Furthering the aim of multilingualism through Integrated Terminology Development" in *Lexikos* 17, pp: 397-406.

Silverman, D. 2000. *Doing Qualitative Research: A Practical Handbook*. London, Washington DC: SAGE.

Silverman, D. 2010. *Doing Qualitative Research: A Practical Handbook*. London, Washington DC: SAGE.

Simons, P.J.R. 1993. "Constructive Learning: The role of the learner" in Duffy, T.M. Lowyck, J. Jonassen, D.H. Welsh, T. M. (eds) *Designing Environments for Constructive Learning*. Heidelberg: Springer.

South African-Norway Tertiary Education Development, 2010, *Rhodes-SANTED Multilingualism Project: Project Close-Out Report*.

South African History Online, 2014. "The Bantu Education Act No 47 of 1953" in *South African History Online*. <http://www.sahistory.org.za/bantu-education-act-no-47-1953>. Accessed on: 8 April 2014.

Steurs, F. 2013. “Terminology, language planning and domain loss” *Endangered languages, Multilingual terminology and Language planning: An intensive seminar*. Paper presented at the University of Stellenbosch. 27-31 May 2013.

Taljard, E. 2002. “Semi-automatic term Extraction for the African Languages, with Special Reference to Northern Sotho” In *LEXIKOS* 12.

Taljard, E. 2013. “ Terminology in a multilingual, South African context”. in *Endangered languages, Multilingual terminology and Language planning: An intensive seminar*. Paper presented at the University of Stellenbosch. 27-31 May 2013.

Tanyanyiwa, P. 2014. *A sociological analysis of the provision of Extended Studies as a means of addressing transformation at a historically white university*. PhD thesis. Rhodes University: Grahamstown.

Taylor, S. J. & Bogdan, R. 1998. *Introduction to Qualitative Research Methods*. New York: John Wiley & Sons, Inc.

Terzoli, A. Dalvit, L. Murray, S. Mini, B. Zhao, X. 2005. “Producing and sharing ICT based knowledge through English and African languages at a South African university” in *SAJHE* Vol. 19 pp: 1486-1498.

The Bible Society of SA, 2014. “IsiNdebele Bible Translation” in *Bible Society of South Africa*. <http://www.bybelgenootskap.co.za/index.php/en/translation-projects/suid-ndebele>. Accessed on: 15 January 2015.

Thomas, G. 2000. *Introduction to Political Philosophy*. London: Duckworth.

Thompson, M. 2010. *Understand Political Philosophy*. London: Teach Yourself.

Van der Walt, C. 2004. “The Challenge of Multilingualism: in response to the language policy for Higher Education” in *SAJHE* Vol.18(1) 2004: 140-152.

Van Maanen, J. Dabbs, Jr., M. J. & Faulkner, R. R. 1982. *Varieties of Qualitative Research*. London: Sage Publications.

Vincent, L. 2009. *Puzzles in Contemporary Political Philosophy: An Introduction*. Cape Town: Source Corporation

Vygotsky, L. S. 1986. *Thought and Language*. Cambridge: MIT Press.

William, N. 2002. "Liberal Theories and their Critics." In Simon, R. L. (ed.) *The Blackwell Guide to Social and Political Philosophy*. Oxford: Blackwell.

Wolff, J. 1996. *An Introduction to Political Philosophy*. London: OUP.

Yin, R. K. 2002. *Case Study Research: Design and Methods*. (3ed) London: Sage Publications.

Zotwana, S. Z. 1994. *Xhosa in Context: From Novice to Intermediate*. Cape Town: Vlaeberg Publishers.

APPENDICES

Appendix A



RHODES UNIVERSITY
Where leaders learn

Hello

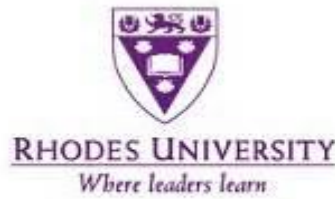
My name is Sisonke Mawonga and I am a Masters student from the Department of African Languages. My research examines the use of glossaries as supporting resources for learning at university. I intend to collect data from the 2014 Politics 1 ES class during the course of the Political Philosophy module in the first term. My methods of collecting the data include administering questionnaires; class observations as well as conducting follow-up interviews. I have obtained permission from your lecturer to sit and observe your classes, but I would also like to request your permission allowing me to interact with you during the first term when you attend your Pol 1 ES classes.

If you have any questions please contact me by email: g09m0800@campus.ru.ac.za

Thank You

Sisonke Mawonga

Appendix B



Agreement between Researcher and Participant

I (participant's name)_____ agree to participate on a Masters research of Sisonke Mawonga on *Bilingual teaching practices in South African higher education: making a case for terminology planning.*

I understand that:

1. The researcher is conducting the study as part of the requirements for a Master's degree at Rhodes University.
2. I can withdraw from participating in the research at any moment I want.
3. My identity is going to be kept anonymous.
4. The interview is going to be recorded using an audio device.
5. The interview is going to be used for the purposes of this research only.

Signature of Participant

Date

Signature of Researcher

Date

Appendix C



RHODES UNIVERSITY
Where leaders learn

Hi Guys

I am doing a study that looks on whether the use of language that students know best could help in understanding better when learning in English. I am collecting data which I can use for preliminary findings for the study. I am interviewing you because you were in the Politics 1 ES 2009 class when the textbook used in that year had English-isiXhosa glossary appended to it. I would like to ask questions on your experience with the glossary. Please be assured that your name and surname will be kept confidential and private. Thanks for taking part ☺

1. What is your home language?
2. Did you do any indigenous African language/s in high school?
3. When compared with English, how would you rate your understanding of isiXhosa?

What kind of learning difficulties did you experience when learning the *Puzzles in Contemporary Political Philosophy* module? Were they... (Please highlight/**bold** your answer)

- a. Difficulty in understanding lecturer's use of English in the lectures?
 - b. Difficulty in understanding key words during lectures?
 - c. Difficulty in understanding key words when learning on your own?
 - d. Difficulty in relating key words with what you know in isiXhosa?
 - e. Other (specify) _____
4. Did you use the English-isiXhosa glossary in the textbook?
 5. If yes, how did you use it? For example, did you use it ... (Please highlight/**bold** your answer)
 - a. To help you understand keywords you did not understand in English

- b. To help you learn more?
 - c. Because it was there?
 - d. Other (Please specify)
6. If no, why not?
7. If yes, did you find the glossary useful?
8. Was the glossary useful because...
- a. It helped you understand things you did not understand in class/tutorials?
 - b. It helped you learn more and better?
 - c. Of the manner in which it was laid out?
 - d. Of the quality of the material?
 - e. Other (Please specify)
9. Were there words that you looked for, but did not find in the glossary?
10. Did the teacher/lecturer recommend the glossary to you?
11. If not, how did you find out about it?
12. Are there any other resources (e.g. dictionaries, internet) that you have used to look for the meaning of the terms or together with the definitions?
13. If yes, which ones? Did you find them useful?
14. On the overall, what was most useful about the glossary?
15. On the overall, what was least useful about the glossary?

Appendix D



RHODES UNIVERSITY

Where leaders learn

Good day. I am Sisonke Mawonga. I am a Masters student in the African Language Studies Section of the School of Language. My research examines the use of language that students know best and if it could help for effective learning in English. I would like to collect data for this research from the Politics 1 ES class of 2014. Please take a few moments to complete this questionnaire for the purposes of this research.

THANK YOU FOR COMPLETING THIS SURVEY

1. What language do you speak mostly at home?
2. Did you study this language at school?
3. Rate your skills in the language in 1. Above

	EXCELLENT	GOOD	FAIR	POOR
SPEAK				
READ				
WRITE				
UNDERSTAND WELL				

4. What other language/s did you study at school?

5. Rate your skills in the language/s in 4. above

NAME THE LANGUAGE:	EXCELLENT	GOOD	FAIR	POOR
SPEAK				
READ				
WRITE				
UNDERSTAND WELL				

NAME THE OTHER LANGUAGE:	EXCELLENT	GOOD	FAIR	POOR
SPEAK				
READ				

WRITE				
UNDERSTAND WELL				

6. What language did you study as Home Language at school?
7. Which language was mostly used in teaching at school?
8. Which other language was used in teaching at school, in addition to the main language of teaching?
9. Compared to your mother tongue, how would you rate your understanding of English?

EXCELLENT	GOOD	FAIR	POOR

10. How would you describe the school you attended? Tick next to the appropriate answer:

- a) Former Model C school
- b) Ex-DET school (township school)
- c) Private school
- d) Other (please specify) _____

11. Are you comfortable with English being the primary language of teaching at university?

YES NO

Comment further

12. Do you use resources (e.g. dictionaries and glossaries) to help you understand a concept, if you struggle with understanding? YES NO

13. If you were provided with an opportunity or materials in your mother-tongue, e.g. glossary list with definition of terms, would you use it to assist your understanding of terms/concepts you are struggling with in English? YES NO

14. If difficult terms in the subject/s you study were given and defined in your mother-tongue, how would you prefer them used *to assist in your learning and further understanding?*

Please tick next to an appropriate statement

- a) I would like them used in lectures YES NO
- b) I would like them used in tutorials and/or practicals YES NO

Appendix E



Hi, thank you for taking part on the study. Please take time to complete this follow-up questionnaire which is on the bilingual glossary which was provided to you three weeks ago. If you have any questions or further general comments please email me on g09m0800@campus.ru.ac.za.

1. What language do you speak mostly at home?
2. Which languages did you do in high school?
3. Which language did you study as home language at school?
4. Which language that was used at school as a language of teaching?
5. Which language that was used for teaching in addition to the main language of teaching and learning?

6. How would you describe the school you attended? Please tick next to the appropriate answer:
 - e) Former Model C school
 - f) Ex-DET school (township school)
 - g) Private school
 - h) Other (please specify)_____

Please tick on the appropriate boxes below:

	Strongly Agree	Agree	Disagree	Strongly Disagree
7. I support the use of African languages as support for learning in higher education.				
8. The idea of providing a glossary for the course is a good idea.				

9. Are you using the bilingual glossary provided?

10. If yes, how are you using it? For an example, are you using it...?

- a. To help you understand key words you do not understand in English
- b. To help you learn more?
- c. Because it has been given to you?
- d. Other _____

11. If no, why not?

12. Do you find the glossary helpful?

13. If yes, is it helpful because...

- a. It helps you understand things you do not understand in class/tutorials?
- b. It helps you learn more and better?
- c. It consists of terms which you find difficult to understand in English?
- d. Of the quality of the material?

14. Are there any other sources which you use to search for the meaning of the term? For example, dictionaries; the internet etc.

15. If yes, please name them.

16. Are there any terms that you sometimes look for in the glossary and you do not find?

17. Please provide those terms and any term/s (as many as you like) which you find difficult to understand; think are keywords and should have been in the glossary.

18. Please write down any general comments and opinions regarding the provision of the bilingual glossary:

19. Would you be willing to be interviewed as a follow-up to this questionnaire?
NO YES (here is my email / cell number: _____)

20. Would you like to get feedback on the findings about this survey?

YES NO

THANK YOU FOR TAKING PART IN THIS SURVEY! ☺

Appendix F

Predetermined questions for the semi-structured interviews

1. Which language do you speak at home?
2. Which language did you study as a first language at school?
3. Which language do you understand the most?
4. Would you prefer to learn in this language?
5. What would you suggest to be done to facilitate learning in English at university?
6. To what extent do you support the use of African languages at university?
7. Was the glossary helpful? How?
8. How are/were you using it?
9. How did you find the content of the glossary? i.e were the terms enough or were the terms which you think should have been there? Were they easy to understand?
10. After consulting the bilingual glossary did you understand the terms better in English or isiXhosa?
11. What conditions, in your opinion, could help you in using your home language to support English in your learning? For example, could it be bilingual teachers, multilingual resources, resources in your languages?
12. Do you have any other general comments regarding the glossary?

Appendix G

GLOSSARY

ENGLISH TERM	XHOSA TERM	XHOSA DEFINITION	LITERAL TRANSLATION OF XHOSA DEFINITION INTO ENGLISH
Autonomy	Ukuzilawula	Ukuba nako ukuthatha izigqibo ngokwentando yakho. Oku kukwabhekisele kumaqela okanye kumaziko azilawulayo ikakhulu noxa ephantsi kolawulo lwelinye igunya.	To be able to take decisions according to your own will. This also applies to institutions or groups that mostly govern themselves even though they are under governance of other institutions.
Civil disobedience	Toyitoyi	Uqhanqalazo lwezopolitiko apho iqela labantu lisaphula ngabom umthetho othile ngenjongo yokuba kubekwe indlebe kwizikhalazo zabo zezopolitiko	A political protest where a group of people break a certain law deliberately with the aim of drawing attention to their political grievances.
Communitarianism	Umanyano ngeenkqobo	Luluvo oluxhasa isimo sentlalo apho abantu bonke badityaniswa ziinkqobo (<i>values</i>) ezifanayo enjongo yazo ikukukhuthaza umanyano kuluntu	A doctrine which believes in a society based on common values.
Constitution	Umgqaqo-siseko	Owona mthetho uphezulu kumbuso welizwe. Yonke eminye imithetho iphantsi komgqaqo-siseko kwaye kufanele ukuba ingaphikisani nawo, ukuba kwenzeka ukuba iphikisane ngumgqaqo-siseko oyakulawula	The supreme law in the state. All other laws are subordinated to the constitution and they should not conflict with it. If they do conflict, the constitution will rule.
Democracy	Idemokhrasi	Eli gama lisuka kwigama lesiGrike elithetha ulawulo lwabantu. Kule nkqubo amandla okulawla	This word is derived from a Greek word meaning the rule of the people. In this system the power to govern derives from the people.

		asuka ebantwini	
Egalitarian	Oxhasa ukulingana kwabantu bonke	Ngumntu oxhasa uluvo lokuba abantu kufuneka banikwe amalungelo alinganayo	A person who believes in the ideology that people should be treated equally.
Equality	Ukulingana	Isimo sokulingana kwabantu kwaye bafumane amalungelo ngokufanayo	The state of people being equal and receiving equal rights.
Idealist	Ocamanga ngesimo esifezekileyo	Lowo ukholelwa, futhi ezama ngenene ukufumana isimo esifezekileyo nesigqibeleleyo kodwa amaxesha amaninzi sibe sibonwa njengesingenakufezeka	A person believing in and striving to attain a perfect state, although that goal often is perceived as unattainable.
Judicial Independence	Ukuzimela kwamaziko ezobulungisa	Ukuwiswa kwesigwebo kumaziko ezobulungisa ngaphandle kweempembelelo zabanye. Oku kusekelwe phantsi komqathango wokwahlulwa kwamagunya olawulo, apho icandelo lowisomthetho (ipalamente) limisa imithetho, elolawulo (urhulumente) linyanzelisa le mithetho, ze elezobulungisa (iinkundla) lisebenzise le mithetho xa liwisa isigwebo	The principle that a judgement in judicial institutions shall be passed without the influence of others. This is based on the principle of separation of powers whereby the legislature (parliament) creates laws, the executive (government) enforces these laws and the judiciary (courts) uses these laws when passing judgement.
Legitimacy	Okwamkelekileyo	Kulapho abantu babona kwamkelekile okanye kufanelekile ukuba bathobeke urhulumente	When people see it as appropriate or acceptable to obey the government.
Liberalism	Inkolo yenkululeko yomntu	Lisuka kwigama lesiLatini, <i>liber</i> , elithetha "ukukhululeka". Olu	Taken from the Latin word <i>liber</i> meaning free. This is a doctrine that sees individual freedom as the most

		luluvo oluthatha inkululeko yomntu njengeyona njongo ibalulekileyo kwezopolitiko	important goal in politics.
Paternalism	Ukulawula ngegqudu	Kulapho abasemagunyeni bethatha izigqibo ngabantu, oku bekwenza ngokunciphisa inkululeko yabo iinjongo ikukubakhusela okanye ukuphakamisa intalontle yabo. Abo basemagunyeni benza izigqibo njengoko uyise enokwenza njalo kumntwana wakhe, emnqwenelela okuhle	Where those in authority take decisions on behalf of their subordinates; they do this by restricting their freedom with the aim of protecting them or promoting their welfare. Those in authority make decisions as a father would do to his child wishing him well.
Pluralism	Ipluralism	Inkqubo yezopolitiko apho ingamaqela ngamaqela anempembelelo kwizigqibo ezithathwayo kwezopolitiko	A political system where various groups have got an influence in political decision-making.
Political Obligation	Isibophelelo kwezopolitiko	Ukubona kufanelekile ukuba uthobeke urhulumente wakho okanye abo basemagunyeni	To see it as your duty to obey the government or those in authority.
Socialism	Isoshiyalizim	Uluvo oluxhasa ukuba impahla, ubutyebi nomhlaba kufuneka zibe zezoluntu okanye zilawulwe luluntu	An ideology which supports that property (livestock, capital, wealth and land) should be owned or regulated by the community
Utilitarian	I-utilitarian	Ngumntu oxhasa uluvo lokuba esona senzo singcono sesona sizisa olona lonwabo luninzi kwabona bantu baninzi	A person who supports an ideology which holds that the best action is the one that brings the most happiness to the most people.

Appendix H

LIST OF POLITICAL PHILOSOPHY TERMS

ABSENCE OF CONSTRAINTS	ECONOMIC
ABUSE	ELECTION
ALTERNATIVE VIEW	EQUALLY
AUTHORITY	EQUALLY FREE
AUTONOMY	FREE
CAPACITY	FREE SOCIETY
CHILD ABUSE	FREEDOM
CHOICE	FREEDOM OF CITIZENS
CITIZENS	FREEDOM OF SPEECH
COERCIVE	FREELY AND VOLUNTARILY
COMPULSORY	HARM PRINCIPLE
COMPULSORY VOTING	HUMANITY
CONCEPTION OF FREEDOM	GOVERNMENT
CONSENT	GOVERNMENT INTERFERENCE
CONSTRAINTS	GROSS INDECENCY
CONTRACT	IDEOLOGICAL
DEBATE5	INDIVIDUAL FREEDOM
DEFINITION OF FREEDOM	INDIVIDUAL LIBERTY
DEMOCRACY	INTERFERE
DEMOCRATIC	ILLEGAL
DEMOCRATIC STATE	IMMORAL
ECONOMY	INFRINGEMENT

INTERFERENCE

INTERVENE

INTERVENTION

JUSTIFIED

LEGISLATION

LEGITIMATE

LIBERAL

LIBERTY

MAJORITY

MINORITY

MINORITY VIEWS

MINORS

MORAL VALUE

MORALITY

NATION

NATIONAL

NEED

OFFENCE

OFFENSIVE

OPPOSED

PATERNALISM

PATERNALISTIC

PHILOSOPHY

POLICIES

POLITICAL PHILOSOPHY

POLITICAL VIEWS

POLITICS

POWER

PROHIBIT

PUBLIC PLACES

RELIGION

RESOURCES

RESTRAINT

RESTRICT

RESTRICTIONS

RIGHT

SOCIETY

STATE

STATE INTERFERENCE

TAXES

UNDECEIVED CONSENT

VALUES AND INTERESTS

VIEWS

VIOLATION

VOLUNTARY

VOLUNTARY AND UNDECEIVED

VOTING

WELFARE

WELLBEING