ENGLISH AS MEDIUM OF INSTRUCTION
IN GRADE 11 GEOGRAPHY: A CASE OF ONE SECONDARY SCHOOL IN THE WESTERN CAPE

by

LLEWELLYN HENDRICKZ GROEPE

STUDENT NUMBER 2222475

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DEDICATION

This thesis is dedicated to my wife, Madelyne, and my children Vino, Cyart and Qetesh. Thank you for your support and patience.
ABSTRACT

This study explores the effect of English as medium of instruction in Geography teaching in Grade 11. It focuses on classroom interaction where both the teachers and learners have limited proficiency in the language of instruction. It reflects on the challenges experienced by Afrikaans speaking teachers in mediating Geography lessons to isiXhosa speaking learners in Grade 11 at one secondary school in the Western Cape.

In support of the study, literature is drawn from language-in-education policies and cognitive development theories. Language-in-education policies are discussed in relation to the impact of language history on the implementation of the current language in-education policy in South Africa. The role of language in classroom interaction and in knowledge construction is also discussed.

A qualitative research design was followed in this study. For triangulation purposes data collection techniques included classroom observations, document analysis and semi-structured interviews. The research was conducted in a school where the dominant language is Afrikaans, with few English and isiXhosa home language speakers.

The findings of the study indicate that there is a positive correlation between the language of instruction and Xhosa-speaking Grade 11 learners’ understanding of Geography concepts, as well as their achievement in this subject. Learners who are taught in their home language (English) experience better academic success than learners who are taught in an additional (second) language. In other words, English medium of instruction in Grade 11 Geography results in learners’ passive classroom participation and poor academic performance in the subject. Teachers with limited proficiency in the medium of instruction (English) also experience difficulties in terms of mediating Geography lessons properly and in providing adequate academic support to learners.

The study concludes that English medium of instruction is a barrier to teaching and learning, especially where both the teachers and learners have limited proficiency in it.
DECLARATION

I declare that ENGLISH AS A MEDIUM OF INSTRUCTION IN GRADE 11 GEOGRAPHY: A CASE OF A SECONDARY SCHOOL IN THE WESTERN CAPE is my own work. It has not been submitted for any degree or examination in any other university. All resources I have used or quoted have been indicated and acknowledged by complete references.

________________________
Llewellyn H. Groepe

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CHAPTER 1

1.1 INTRODUCTION

Although the South African Constitution and the Language-in-Education Policy encourages linguistic equality and the development of the previously marginalised or disadvantaged languages, English still enjoys the highest status in education. An increasing number of learners, especially speakers of African languages are taught through the medium of English and Afrikaans after Grade 3 (Schlebusch: 2002; De Klerk 2003). This situation usually disadvantages African language speaking e.g., Xhosa speaking children in many ways: in terms of gaining confidence in the language of instruction and in understanding lesson contents presented in English. There are of course historical and pragmatic reasons for the status quo which will be dealt with later in this chapter. In the light of the above, this study explores the effects of English medium of instruction in Geography to Xhosa speaking learners in Grade 11.

In this chapter special reference is made to the structure of the thesis. It gives background to the study by looking at the different language policies which have had an influence on education. The chapter further presents the statement of the problem, the research question(s), the rationale and significance of the study. Finally, it outlines the various chapters of this study.

1.2 Background and context of the study.

Language has always been a contentious issue in South African education since colonial times. The colonists imposed their languages upon the colonised, resulting in either assimilation or exclusion of African languages. In order to understand the language and education situation in South Africa schools today, it is essential to look at the historical background of languages as languages or
media of instruction in the country which can be traced from 3 significant periods, namely colonial, apartheid and democracy.

1.2.1 Colonial Language Policy

Firstly, the use of colonial languages by African pupils in schools can be backdated to the time of Van Riebeeck. In the 17th century. The first school to be established under the Dutch rule in South Africa was set up in Cape Town in 1656 for the instruction of the slave children from the West Coast (Loram, 1927). The colonists opened the school because they wanted their labourers to understand the language of their masters so that they could serve them effectively. During the Dutch occupation of the Cape of Good Hope in the 17th century, pre-eminence was given to Dutch as language of learning and teaching (LOLT) as well as language of wider communication.

English became the most favoured language during the British occupation of the Cape in the 18th century. Unfortunately, during the Dutch and British colonization, indigenous vernaculars were not regarded as important enough to educate the indigenous peoples of South Africa. They had to communicate with their masters in a colonial language. In 1862, the colonial setting in South Africa forced the colonised to accept English as a “Master Language” (Koloti, 1999). In 1912, British imperials introduced a parliamentary system of government which formalised English education. The sons of kings and chiefs were trained in English to serve as middle-men between Africans and the colonial administration. Although the economic power was still in English, there was an increase in English-Dutch bilingualism as Afrikaners started entering the urban job market and in government as civil servants (Beukes, 2004). At the same time the use of English among black South Africans was on the increase through mission schooling and more interaction with English speakers also grew in cities and the work places (Banda, 2000). However, when the Afrikaner National Party came into power in 1948, things began to change in education as the apartheid government introduced its own language policy in education.
1.2.2. Apartheid Language Policy

According to Lanham (1996) the Afrikaner National Party attempted to enforce Afrikaans over English in every sphere of public life. With the advent of the Bantu Education Act of 1953, the Afrikaner nationalists implemented mother tongue education. The policy was meant to promote indigenous instruction in the form of Bantu Education. Thus, Zulu mother tongue-speakers had to be educated in Zulu-medium schools; Xhosa mother-tongue speakers in Xhosa-speaking schools (Kamwangamalu, 2000). Language boards were set up to develop terminology and textbooks in each vernacular language (Mackay and De Klerk, 1996). All citizens were educated in their respective mother-tongues in primary schools. What is interesting about this move, is that it never aimed at promoting African languages as languages or media of instruction in schools, but it meant to increase the role of Afrikaans as a medium of instruction across South African racial groups while reducing the status of English in education (Banda, 2000).

However, from an educational point of view the use of mother-tongue instruction in primary schools had the advantage of allowing teachers and pupils to teach and learn in a language in which they were competent (Sigcau, 2004). In the minds of the black community, such an advantage was clouded by the realisation that educational motives were secondary to politics. The African language speaking learners resisted mother tongue education which was promoted by the Bantu Education Act because they perceived it as one of the strategies of the apartheid government to deny them access to higher education and socio-economic mobility (Nomvete, 1994). Realising that the segregation in schools was for the benefit of the Nationalist Party, Afrikaans was still the medium of instruction until the pupils and liberal organisations fought against Afrikaans as medium of instruction from grade 6 in 1976. This period marked an important turning point in the recognition of English as a language of instruction in black schools (Banda, 2000).

1.2.3 Post-apartheid (democratic) Language-in-Education Policy

When the ANC government took over governance from the National Party in 1994, a new constitution was released. The democratic constitution gave birth to the Language-in-Education
Policy which was launched in 1996. Although the Language-in-Education Policy Act, (Act 27 of 1996) stipulates that the right to choose language of learning is vested in the individual, unfortunately English still remains the most dominant and prestigious language of instruction in most South African schools. Similarly, Afrikaans enjoys high status in education as it is also used as language of learning and teaching from primary to tertiary education (Nomlomo, 2007). On the other hand, the nine African languages, including isiXhosa, despite their official status are only used as languages of instruction for the first three years of schooling only. This is contrary to the aims of the Language-in-Education Policy to develop previously marginalised languages.

The current situation which forces African language-speaking learners to shift to English (second language) medium of instruction from Grade 4 does not support the notion of additive bi/multilingualism and learners’ language rights as stipulated in the National Policy Act 27 (1996). Instead learners are confronted with difficulties in learning through a second language which is usually English for speakers of African languages. These challenges usually impact negatively on learners’ cognitive development and academic achievement. The question of medium of instruction in African languages is quite a contentious issue as the majority of parents want their children to rather study in English than their own home languages for possible reasons such as: to ensure a successful financial and social future; the job market which demands knowledge of English; and tertiary education which recognises English and Afrikaans only as Medium of Instruction (Cummins, 2003).

As discussed above there are some pragmatic constraints to teaching and learning in all African languages in South Africa. Thwala (2007) believes that there is a paucity of resources, both human and material, to make teaching and learning across the curriculum and throughout the education system possible in all the African languages. He claims that it will be expensive to develop the necessary resources to achieve mother-tongue teaching and learning in all the official languages in South Africa, except English and Afrikaans, where these resources are already in place (Thwala, 2007). This is, however, questionable due to the fact that it has never been tested. In response to this claim which sees no educational value on African languages, Brock-Utne is of the view that the costs are even higher when one considers the frustration and loss of knowledge suffered by millions
of African childern who are educated in languages they do not know well. This leads to a high failure and drop out rate (Brock-Utne, 2001)

Research has proven that learners’ ability to participate meaningfully in school activities is linked to their proficiency of the language of instruction at school (Brock-Utne, 2007; Gravelle, 1996). This means that inadequate language skills that the learner has in the second language are a fundamental retarding factor in understanding subject associated concepts (Tharpe, 1997). In other words language becomes a barrier in acquiring knowledge the learner can express his thoughts better, and comprehend related learning area content better in the mother tongue. Learning through the mother tongue has cognitive and psychological benefits in that the learner can express his thoughts better and comprehend subject content better. This may lead to high self-esteem better academic performance (Heugh, 1995; Wolff, 1999, Granville, et.al, 1998; Nomlomo, 2007).

1.3. Statement of the problem

The research problem is two-fold : Language-in-Education Policy implementation. Does the present Language-in-Education Policy address inequalities in the classroom? Does it address the problem of teaching and learning in an unfamiliar language? The language situation in South Africa is, unfortunately, not supportive of African languages as languages of instruction due to English hegemony. Despite obvious advantages of using the mother tongue for teaching and learning and for expressing ourselves, African languages, like Xhosa are marginalised as languages of learning and teaching. Most of the Xhosa speaking learners at the school where I teach, are being taught in either English or Afrikaans. It is assumed that learning in the additional language might put them at a disadvantage when it comes to understanding the concepts in the different learning areas and especially in Geography.

According to Lockheed & Vespoor (1991) children whose home language is not the medium of instruction confront a substantial barrier to learning. The primary assumption underlying this study is that English medium of instruction in Geography is the barrier learning. This has to do with a number of factores, including how learners construct knowledge in the second language, the nature
of interaction in the Geography classroom, and the strategies employed by the teachers to mediate learning where there is a mismatch between medium of instruction and teacher and learners' home languages. The problem is even exacerbated by the fact that the learners' home language is Xhosa, and the teachers are Afrikaans home language speakers while the medium of instruction is English for both teachers and learners. This causes a serious pedagogical problems as there might be a breakdown in communication between teacher and learner during lesson presentations. Likewise, Fafunwa (1990) believes that there is a correlation between learners’ cognitive under-development and the use of a foreign language as the official language of instruction a given country. In support of this view, there is a scientific perception that learners' ability to participate meaningfully in school learning activities is intimately linked to their proficiency in the language of instruction at school (Cummins, 1984; Ortez, 1997; Cleghorn, et al., 1998).

Professor Prah (1996) also observed that children, were now sent to English medium schools and that, in some families, both parents communicate in their indigenous language, but insist that the children should be spoken to in English. Cleghorn et al., (1998) confirm that such learners may be fluent enough in English to have passed an admission test measuring general language ability, but lack the command of English needed to comprehend the various concepts, principles and techniques required to pass different school learning areas. These parents who insist that their children be taught in English from the start, are obviously not aware that both their children and teachers are not able to cope with language-learning transfer from the mother tongue to school English.

As stated above, this study sought to to investigate the effects of English medium of instruction in Grade 11 on Xhosa speaking learners' conceptual development and academic performance in Geography. The research was done at a high school in Kraaifontein, where between 30 % - 35% of the learners are mother tongue speakers of Xhosa. The main medium of instruction at the school is Afrikaans. There is however, also an English medium stream at the school for English first language learners and Xhosa does not form part of the curriculum. In the English medium stream there are Xhosa-speaking learners, the majority of whom stay in the surrounding informal settlements of Bloekombos and Wallacedene. Some of these learners were not born in the Western Cape, but moved here through the migration of the parents and families from the Eastern Cape, due
Grade 10 tests and examination results in 2007 showed poor performance in Geography by Xhosa-speaking learners. For instance, out of a class of 43 Grade 10 learners, 17 were Xhosa home language speakers, 6 were English home language speakers and the rest (20) were Afrikaans home language speakers. In the English medium stream, of the 13 Xhosa-speaking learners, only 5 passed Geography at the end of the year. All 6 English home language speakers passed while 13 of the Afrikaans home language learners passed. It is against this background the present study was conceived, to understand how teaching and learning occur where the Medium of instruction is different from the teachers' and learners' home language.

Secondly, the Xhosa speaking learners do not have much exposure to English, other than in school. That is, in most cases they communicate with each other in Xhosa at school and during lessons. In relation to Cummins’ (1992) theory, these learners might have acquired the Basic Interpersonal Communication Skills (BICS) in using their additional language, but they may not have enough Cognitive Academic Language Proficiency (CALP). What Cummins (1992) probably means by this is that through the acquisition of BICS, the learners are able to participate in everyday conversations which are not too demanding. However, when these learners are confronted with difficult and abstract (e.g. Geography) concepts and terminology that may require a much higher cognitive ability, they may experience difficulties because of their lack of the command of English needed to comprehend the various concepts.

Thirdly, Geography, as a science subject has its own "unique language" or terminology which is abstract. It is also important to note that the teachers at the schools do not speak or understand Xhosa and therefore cannot code switch to learners’ mother tongue (Xhosa). Because the Xhosa speaking learners might have inadequate skills in English, this becomes a fundamental retarding factor for them in understanding the concepts of Geography. Graville (1996) claims that almost all learning involves language, whether in written or spoken form. For these learners it is the language used in the classroom that will be the most demanding. Students who lack proficiency in this language stand out as low achievers and have to obtain a level of English language skills that will
enable them to achieve their academic goals (Schlebusch, 2002). Alternatively, these learners should receive education in their mother tongue or languages of their choice (Pluddeman, 1997).

The main research question addressed by the study is: What effects does English medium of instruction have on the teaching and learning of Grade 11 Geography to Xhosa-speaking learners? In relation to the key research question, the following sub-questions will be addressed in order to gain better insight into classroom interaction and practices where teachers and learners do not have full competence in the language of instruction.

1. How do teachers interact with isiXhosa-speaking learners in Grade 11 Geography classes where English is the medium of instruction?

2. What learning strategies do Xhosa-speaking learners employ in trying to understand Geography concepts in English?

3. To what extent does English as a medium of instruction influence learners’ academic performance in Geography?

4. What academic support is available to Grade 11 Xhosa speaking learners who are taught Geography through the medium of English?

1.4 Research Objectives

In relation to research problems and questions, the main research objectives of this study are:

1. To observe and analyse Xhosa speaking learners' interaction with their teachers and peers in Grade 11 Geography lessons.

2. To explore the relationship between classroom interaction and learner's academic performance in Grade 11 Geography taught through the medium of English.
To investigate the extent to which English as medium of instruction influences teachers' pedagogical strategies and learners’ learning strategies in Grade 11 Geography.

1.5 Research Methodology

The study followed a qualitative research design to determine the extent to which Grade 11 Xhosa-speaking learners were able to understand Geography concepts in English and their academic performance in Geography. Furthermore, a qualitative research design which is naturalistic, was deemed suitable for this case study (Reichardt and Cook, 1979). For triangulation purposes, the data was also collected through observation in the classroom in order to find out what teaching and learning strategies were employed in the Geography classroom. Classroom observations were also used to establish the extent of teacher-learner interaction in Geography lessons taught through the medium of English, and how such interaction influenced learners’ understanding Geography lessons.

Data was collected by means of classroom observations and interviews. These qualitative research methods (classroom observations and interviews) were conducted with Grade 11 Xhosa mother tongue speakers where the language of instruction was English. This was done to discover whether formal instruction in the additional language (English) would result in better understanding of the Geography concepts by Xhosa-speaking learners. The methods were also used to observe how teachers who were Afrikaans mother tongue speakers facilitated Geography learning in English where learners were speaking a different language (Xhosa). Such an investigation aimed at finding out how English influenced teachers’ teaching styles and the learners' academic performance in Geography.

The major participants of this study were Grade 11 learners who were mother tongue speakers of Xhosa. The Grade 11 Geography teachers were also involved in the study. The teachers were expected to speak about their experiences in the class where the medium of instruction is different from the teachers’ and learners’ home languages.
Through interviews, the researcher wanted to assess to learners’ proficiency in their additional language (English) and the extent to which such proficiency would enable them to understand Geography lessons (in English) and to achieve academic success. The interviews provided the most direct evidence of how the learners experienced the learning process an how English additional language influenced their performance in Geography.

1.6 Significance of the study

Firstly, by conducting this research study, the researcher hopes to awaken the Department of Education, teachers, learners and parents about the disadvantages of second language instruction and the importance of instruction in the home language in terms of learners’ affective, cognitive and linguistic development.

Hopefully, through this research different stakeholders in education will embrace the aims of the Language-in-Education Policy to promote equitable access to education through the learners’ home language.

Thirdly, this research contributes to teacher reflection as an important aspect of teaching and learning. This involves teacher development in terms of how to devise intervention strategies to support learners who are educated in a foreign language.

Finally, the study seeks to guide learners on how to employ effective learning strategies that will enable them to comprehend Geography concepts which can be applicable to other learning areas or subjects.

1.7 Organisation of the study.

The study is organised in five chapters as follows:

The first chapter outlines the background and context of the study. It also gives a brief background
on the research problem, research objectives, the rationale, research methodology, significance of
the study and how the research study is organised.

In the second chapter literature review is dealt with. Policy documents and other literature on
language and language policies are reviewed in relation to research questions.

The third chapter is a discussion of the research design and methodology while the fourth chapter
focuses on detail on data presentation and analysis.

Chapter 5 deals with research findings and in Chapter 6 conclusions are drawn from the findings
and recommendations are made.

1.8 Summary

In summary, this chapter deals with the South African language history, in particular the three
significant periods in South African language history, namely colonial, apartheid and democracy. In
addition, it looks at how the choice of medium of instruction at schools had been influenced by the
language policies of the past. It also highlights the research problem and the questions it aims to
address. The following chapter will focus on literature review in order to get an insight into how
existing literature and research inform the current study.
CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

The first chapter discusses the research problem underlying this study, as well as the research questions and aims that the current study seeks to address. In relation to the problem under investigation, this chapter focuses on literature review in order to explore the relationship between language of instruction and learners' academic achievement in Grade 11 Geography. The reviewed literature is drawn from medium of instruction policies and cognitive development theories. The chosen theories are used to make sense of how the language of instruction influences pedagogy and learner's cognitive development. Through the literature review, the researcher wishes to identify difficulties in learning Geography through the medium of English in Grade 11.
2.2. UNDERSTANDING LANGUAGE POLICY

2.2.1. Medium of Instruction Policies

In the context of this study, language policy can be defined as the country's plan to overcome its language problems (Bamgbose, 1991). The language planning framework includes the vision of what the country wants to become. The framework is expressed in the national ideals accepted by the political leaders. These ideals include: (a) establishing democracy; (b) promoting equality and human rights; (c) developing national unity and promoting mutual tolerance and respect among different cultural, linguistic, religious, racial and socio-political groups (Tollefson, 1991). Usually, such language policy activities are decided at the highest level of the government (Webb, 2001; Heugh, 2003; Nomlomo, 2007). A comprehensive language policy and plan of implementation for South Africa is expected to give expression to these visions and values.

Empirical research in Africa and in many other parts of the world shows that cognitive development is achieved faster in the mother tongue, rather than when a Language of Wider Communication (LWC) is used as the language of instruction in primary education (Bamgose, 1984; Yates, 1995). In many instances the African child has to struggle with two languages, one of which he is unfamiliar with, instead of learning through an African language with which he is familiar (Brock-Utne, 2007). For example, Brock-Utne’s (2006) study in Madagascar in where Malagasy is used as language of instruction all the way through the educational system has shown that home language of instruction was not a barrier to learning (Brock-Utne, 2006). On the other hand, classroom observation studies conducted in several countries in Africa (Benin, Burkina Faso, Guinea-Bissau, Mali, Mozambique, Niger, South Africa, Togo, Tanzania and Botswana) reveal that the use of unfamiliar languages in education forces teachers to use traditional and teacher-centered methods as learners become less active in the classroom (Benson, 2004). If we look at the South African situation, for example, where African language speaking children shift to English medium of instruction after Grade 3, it is obvious that the child is cognitively disadvantaged by the early shift to English medium of instruction (Desai, 2003; Nomlomo, 2007). As a result most of the
learners survive in class through rote learning.

The above scenario is an example of a weak form of a language policy because the home language is used only as a bridge to the second language (Baker, 2001). It is a subtractive approach undervaluing the first language and culture whilst prioritizing the second language. It is associated with colonial practices as English was introduced from the fourth grade up to secondary education during the British colonial period (Alidou, 2004). This kind of language policy is transitional as African languages are only used as transition to English medium of instruction in the higher grades. The transitional language policies usually expose African language speaking learners to their home languages for a very limited time for them to develop strong language skills in their home languages which are important in learning additional language(s) (Nomlomo, 2007).

The colonial language policies can also be described as being assimilationist or exclusivist (Alidou, 2004). The assimilationist language policies submerge the learners into the language and culture of the colonizer. For example, under British and French colonization the Africans became assimilated into the British language (English) and French, as well as into the culture of the two colonizers. In the case of French, for example, the learners had to learn the French language and academic success in school and access to jobs and colonial administration were dependent on the mastery of French (Alidou, 2004).

The exclusivist language policy, on the other hand, excludes learners from a certain language because of economic and political reasons. For instance, countries which were colonized by Germany were denied access to the German language because Germany wanted a monopoly on its own language for technological advancement (Alidou & Mazrui, 1991). So, the colonized countries did not have access whatsoever to the language of the colonizers. This model advanced the indigenous languages of African countries, like Kiswahili in Tanzania as a national lingua franca due to the fact that German as a language was inaccessible to the colonized country (Alidou, 2004).

The current Language-in-Education Policy of South Africa aims at redressing the linguistic imbalances of the past. However, the reality is that it still benefits the non-mother tongue speakers
of the African languages as Afrikaans and English are the only languages of teaching and learning from primary to tertiary education (Nomlomo, 2007). The underlying principle of the current Language-in-Education Policy is to maintain the home language(s) while providing access to the effective acquisition of an additional language(s) (i.e. additive bilingualism). The right to choose the language of learning and teaching is vested in the individual. This policy promotes subtractive bilingualism as the African language speaking learners are not taught in their mother tongue after Grade 3. As a result, there is a movement to mostly English and Afrikaans medium schools especially in the Western Cape. In other words, African languages are used for transition from mother tongue education in the foundation phase (Grades 1-3) to second language medium of instruction from Grade 4.

At the same time, the Language-in-Education Policy can be viewed as assimilationist in that it submerges African language speaking learners into a second language medium of instruction which is usually English for African language speaking learners. In the context of this research, the Xhosa speaking learners are not afforded the opportunity to learn through their mother tongue after Grade 3, although the policy aims to facilitate learning and to promote communication between South Africans through the development of “additive bilingualism” (Desai, 2001).

2.2.2. The benefits of Mother Tongue Education

There are various definitions of the term “mother tongue”. The definitions are differentiated in terms of origin, competence, function and identification (Skuttnabb-Kangas & Phillipson, 1989). In terms of origin, mother tongue is the language(s) one learns first. While the criterion of competence defines mother tongue as the language(s) one knows best. Mother tongue is also defined the function as the language(s) one uses most. Identification criterion states that mother tongue is the language one is identified with as a native speaker of that particular language.

In the context of this study mother tongue refers to the language which the learner first came into contact with and with which he is most comfortable. The mother tongue of the learners involved in this study is Xhosa which is the second largest African language in South Africa. These learners are
taught all the subjects through the medium of English. Unfortunately Xhosa does not form part of the school’s curriculum as it is not offered as a subject at any education level (i.e. Senior and Further Education and Training Phases) in the school where the research was conducted.

Mother-tongue-based education, therefore, is when the mother tongue is used as a medium of instruction, either alone or alongside a second language. For example, for Afrikaans or English speaking learners in South Africa, the mother tongue is used as medium of instruction throughout schooling and at tertiary education, while African language speaking learners are taught through their mother tongue for the first three years of schooling only.

With the influence of liberalised economy and globalisation, there is a tendency to introduce European languages in the first year of school, with the intention that children become bilingual or multilingual in these languages while they are still young. Mother tongue education in many African states is offered for the first three years of schooling before transitioning to a European language such as English, French or Portuguese (Qorro, 2004). In other African countries such as Tanzania and Ethiopia the local languages (Kiswahili and Amharic) are used as languages of instruction in the first five to seven years of primary education, and English is only taught as a subject from the fifth year. In this case, English becomes the language of instruction from the last two years of primary school up to the end of secondary and teacher education. This system of education which is more dominant in Tanzania turned out people who are bilingual, i.e. proficient in both an African language and a European language (Qorro, 2004). Ranaweera (1976), a Sri Lankan researcher and former director of education at the Curriculum Development Centre of the Ministry of Education in Sri Lanka supports mother tongue education. He writes thus:

The transition from English to the national languages as the medium of instruction in science helped to destroy the great barrier that existed between privileged English educated classes and the ordinary people; between the science educated elite and the non-science educated masses; between science itself and people. It gave confidence to the common man that science is within his reach and to the teachers and parents that a knowledge of English need not necessarily be a prerequisite for learning science.

(Quoted from Brock-Utne, 2002)
In the light of the above, it is a myth that a student learns a foreign language better without learning the mother tongue first (Cleghorn et al, 1998). The danger of not offering mother tongue education is that students will end up not mastering any of the languages sufficiently for use in a school-based learning situation. This is because it is necessary for a child to develop an understanding of the language and a mastery of the concepts at a certain level within the known language before learning a new one. Research also shows that the learners will not develop the necessary understanding of more advanced concepts and will face difficulties when learning other subjects such as history and geography in the second language (Schlebusch, 2002). Langenhoven (2006) and Nomlomo (2007) found that Xhosa-speaking learners tended to understand concepts of natural science better through exposure to Xhosa teaching and learning. For example, there is also a risk that children who have not learned either the home language sufficiently might perform at a lower level in school. Thus mother tongue instruction is associated with better understanding of concepts and better academic achievement.

In order to develop African languages meaningfully, there should be recognition of learners' home languages as valuable resources in the classroom. The African languages should be used for communicative purposes and for literacy purposes (including poetry, literature, writing compositions, etc.). Mtuze (1992: 48) also suggests terminology development as a means of upgrading the status of African languages:

"... if these Africans want to demand equal language rights, they should obviously have to develop their languages 'terminology, failing which, these languages would dwindle to insignificance as medium of meaningful communication in technical discourse." (Mtuze, 1992: 48)

Mtuze's (1992) comments have implications for the innovativeness in the classroom which should address the lack of teaching and learning materials in African languages.

2.2.3 English hegemony
The role of English in post-colonial societies has served to maintain western interests at the expense of African languages. In other words, the language policies have remained unchanged during the post colonial period (Phillipson 1992; Pennycook, 1994). Many African communities still prefer English as the language of instruction as it is regarded as the language for better socio-economic opportunities than African languages (Sigcau, 2004). It is regarded as a global and universal language through which Africans can achieve development (Phillipson, 1999). In other words, knowledge of English opens up the opportunities of getting good jobs, a competitive edge in the global market economy and the recognition by the elite group. As such parents and students regard English as a language of success, power and social prestige (Phillipson, 1999). The current high status of English in post colonial Africa can be associated with linguistic imperialism (Phillipson, 1996).

Linguistic imperialism is characterised by inequality and injustice, which have to do with the economical, political and cultural aspects of different societies. It shows the linguistic discrimination between rich countries and poor countries (Phillipson, 1996). Linguistic imperialism has to do with more than language. Linguistic ideology has similarities with racism in that the dominant language presents an idealised image of itself and portrays the other languages to be less important (Preisswerk, 1980).

According to Pennycook (1994) the Third World countries are dependent on industrialised countries in terms of communication equipment, technology and skills. Education in the Third World countries has been influenced by the West, as a direct consequence of the 'aid' the West provided in colonial times. English language promotion, for the Americans, has been an integral part of a foreign policy aimed at global hegemony. Dependency in the Third World countries reflects neocolonialism and imperialism as it is to the advantage of the former colonizers (Nomlomo, 1997).

Globalisation also plays a role in marginalizing African languages in education and in the global market. Its policies serve to ensure that the role of English is maintained and perpetuated in terms of being the main language of global and technological communication. Another key role player in
language policy is the World Bank which encourages the consolidation of the imperial languages in Africa (Brock-Utne, 2002). The World Bank is the main provider of educational materials for schools in the United States, Canada and other countries worldwide. Its policies are also influential in determining the content of education worldwide. As a result, the role of African languages in the economy and in secondary and tertiary education is weakened as all transactions are conducted mainly in English (Mazrui, 1997; Spring, 1998). It is clear that the World Bank is only interested in producing consumers rather than critical citizens as it does not serve the interests of African language speakers (Mander, 1996). English is also dominant in international politics and commerce. Its privileged role is strengthened through such bodies as the United Nations, the World Trade Organisation and regional groupings such as the North American Free Trade Agreement and the European Union (Phillipson, 2001).

In the African continent the effects of colonial language policies have led to the stigmatization and marginalization of indigenous languages. Unfortunately, most of the people in African countries do not use English in their daily communication. For instance, in Namibia there is a real concern among language and culturally conscious people that the growth of English has happened not only to the detriment of Afrikaans but also to the detriment of Namibian languages (Brock-Utne, 2001). Likewise in Tanzania, English is a foreign language, a language children are not exposed much to outside of school – yet it is language of instruction in secondary and tertiary education. Many children in Tanzania who may speak a vernacular language at home speak Kishwahili with their peers. English is a foreign language to most Tanzanians that they do not feel comfortable communicating in even after having been taught in that language for nine years. For example, Puja (2001) found in her research that the language policy in Tanzania which promotes the use of English in secondary and tertiary education has serious consequences for teaching and learning in Tanzanian schools (Puja, 2003). Firstly, it forces teachers who are concerned, to disregard a policy saying “no code-switching, no code-mixing, no translations in the classroom” so that learners should grasp difficult concepts. Secondly, it forces learners into a situation of rote learning, memorisation, parroting and cheating in examinations. It further prevents the use of learner-centered and interactive teaching methods and it, therefore, becomes a barrier to critical thinking and understanding of academic subject matter. Another consequence is that it prevents the learning
of correct English and it halts the development of the Kishwahili language. Therefore, whilst English is a global language and gives access to technology and other means of communication, it is also barrier to learning for many learners in the African continent.

\section*{2.3 THE ROLE OF LANGUAGE IN CLASSROOM INTERACTION}

\subsection*{2.3.1 Languages used in teaching and learning}

Ringbom (1987) makes a useful distinction between a second language and a foreign language. He suggests that in the situation of second language acquisition, the language is spoken in the immediate environment of the language learner. In this environment the learner has positive opportunities to use the language in natural communicative situations and that the language being learned may or may not be supplemented by classroom teaching. On the other hand, a foreign language is not spoken in the learner's immediate environment. Although the mass media may provide opportunities for practising receptive skills in the language, there is little or no opportunity for the learner to use the language in a natural communicative situation (Ringbom, 1987).

The National Education Policy Investigation (NEPI) Report (1992) defines a second language as a language which is acquired or learned after gaining some competence in a first language. It further states that such a second language is not usually used in the learner's home, but is used in the wider society in which the learner lives. In some cases, what is termed a 'second language' may in fact be a 'foreign' language if the learner has no adequate exposure to the language outside the classroom. Adhering to this definition, one might come to the conclusion that English for the Xhosa speaking learners who participated in this research may not be a second language, but a foreign language as they have little exposure outside the classroom. In other words, English is not used in their immediate environments such as families, friends, the larger community, etc.

In relation to the above, Holmarsdottir (2003) devised a model to illustrate the distinction between foreign language learning and second language learning. This model fits the situation of Tanzania well. For instance, those Tanzanians for whom Kishwahili is not a first language, it is a second
language, a language they hear around them and use when interacting in larger society.

In the education context, Cummins (2000) asserts that if children continue to develop their abilities in two or more languages throughout their primary school years, they gain a deeper understanding of language and how to use it effectively. He believes that the level of development of children's mother tongue is a strong predictor of their second language development. Children who come to school with a solid foundation in their mother tongue develop stronger literacy abilities in the school language. When parents and other caregivers (e.g. grandparents) are able to spend time with their children and tell stories or discuss issues with them in a way that develops their mother tongue, children come to school well-prepared to learn the school language and succeed educationally (Cummins, 2000). It is therefore important that parents should read to their children and use the home environment to establish a sound vocabulary bank in the child.

In cases where the language of learning and teaching is different from learners' mother tongue, code-switching and mixing have been reported (Holmarsdottir, 2003). Although code-switching is generally looked negatively upon, and often indicates language competence in either languages involved, it does not necessarily indicate a deficiency on the part of the speaker, but may be the result of complex bilingual skills (Meyers-Scotton, 1993). It is a strategy often used by teachers who are have profiency in the first language of the learners as well as in the language of learning and teaching (LOLT). Unfortunately, at the school where the research was conducted code-switching was not possible because the teachers could not speak nor understand the learners’ home language (Xhosa) as they were Afrikaans mother tongue speakers. In other words, teacher-learners interaction occurred in unfamiliar languages for both parties and that had serious implications for the teaching-learning process as illustrated in Chapter 5.

2.3.2 Language proficiency and knowledge construction

The constructivist approach suggests that knowledge is actively constructed by learners as they are trying to make sense of their learning experiences through meaningful activities (Duffy & Jonassen, (1991); Wertsch, 1997; Driscol, 2000). Learner's ability to participate meaningfully in school
learning activities is intimately linked to their proficiency in the language of learning in school (Cummins, 1984). In other words, the child's mother tongue is important for overall personal and educational development. This implies that children who come to school with a solid foundation in their mother tongue, are likely to develop stronger literacy abilities in the school language. From an educational perspective the use of mother-tongue instruction in primary school has the advantage of allowing teachers and pupils to teach and learn in a language in which they are both competent (Sigcau, 2004). Thus language proficiency can be associated with better knowledge of construction during the learning process.

Mother tongue based educational systems lead to good literacy learning and constitute a solid platform for enhancing teaching and learning. Mother-tongue medium of instruction in the initial years of schooling at least is crucial for cognitive development which includes thinking skills such as contrasting, analysing, and conceptual understanding (Langhan, 2002). The learning environment should be designed to support and challenge learner's thinking. Learners should be supported in becoming active thinkers which is possible through the mother tongue (De Vesta, 1987).

When teachers and learners interact in the classroom in second language, they have to cope with some difficulties because both teachers and learners are not well-skilled in the language of instruction. The use of a second language as medium of instruction often leads to teacher's and learner's lack of confidence and this has a negative effect on classroom interaction (Koole, 2006). Inadequate language skills in English are a fundamental retarding factor for low English proficiency for learners whose first language is not English. This is due to the difficulty these learners experience in comprehending subject associated concepts (Tharp, 1997).

The present situation in which English is the preferred medium of instruction is thought to impede learning, and that it only leads to poor mastery of both English and the mother tongues. Banda (2000) believes that the poor matriculation results and the general lack of academic skills and intellectual growth among blacks at high school and tertiary levels can be attributed to the use of English as a second-language medium of instruction in many South African schools.
With regard to the South African Language-in-Education Policy (1996) which suggests that the learning of more than one language should be general practice and principle in our society, it is crucial that learners’ home languages be at the core of bilingual programmes (Banda, 2000; Pluddeman, 1996; Alexander, 1995; Heugh, 1995; Luckett, 1995). Thwala (2007) also cautions that if there is a limited discourse space for the mother tongue in education, this may result in limited literacy development which may affect further academic development of learners who are taught in a foreign language.

2.3.3. Language and cognitive development

Cummins' concepts of Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) are helpful in spelling out the two kinds of competence learners need to function effectively in academic contexts. Cummins (1992) explains the cognitive dimension of CALP through the Four Quadrants model as follows:

<table>
<thead>
<tr>
<th>COGNITIVELY UNDEMANDING</th>
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<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>CONTEXT</td>
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</table>
This model shows that for a learner to both process and produce cognitively-challenging texts and tasks as suggested in Quadrant D, he must have had a sound platform where forms of support through scaffolding and mediation are provided by both teachers and learners. He must, therefore build on the knowledge that he has already acquired and move from the known to the unknown through a process of scaffolding. It is through the knowledge that they have already achieved, that learners achieve proficiency, i.e., creating new knowledge (Ramani, 2006). What this means in the context of this study is that the Xhosa-speaking learners must have a sound platform in their home language to be able to comprehend the concepts of Geography through the English medium of instruction. A learner might be in a better position to grasp concepts, establish relationships between concepts, and analyse, synthesise, classify, store and retrieve information if he acquires Quadrant B (Cummins, 1992). This requires sound literacy skills in the language of instruction.

Constructivists like Vygotsky, Piaget, Dewey and others believed that young children develop their thinking abilities by interacting with other children, adults and the physical world. From the social constructivist viewpoint, it is thus important to take into account the background and culture of the learner throughout the learning process, as this background also helps to shape the knowledge that the learner creates, discovers and attains in the learning process (Wertsch, 1997). Vygotsky, (1978) highlighted the convergence of the social and practical elements in learning by saying that the most significant moment in the course of intellectual development occurs when speech and practical
activity converge. He uses his Zone of Proximal Development theory to explain how learners acquire knowledge through the intervention of teachers, parents, peers and other role players. The Zone of Proximal development is defined as the distance between the actual development level. It is determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers. Through a process of 'scaffolding' a learner can be extended beyond the limitations of physical maturation to the extent that the development process lags behind the learning process (Vygotsky, 1978).

It is interesting to note what Cummins (1979, 1981) has to say about second language learning and the effect that it has on the academic performance of learners as well as their cognitive development. He notes that it takes about two years for a child to acquire Basic Interpersonal Communication (BICS) that are needed for informal communication or conversation. But it takes five to seven years to acquire sufficient Cognitive Academic Language Proficiency (CALP) i.e. sophisticated language required for academic success. However, Cummins has done his research on minority populations in industrialised countries, where these populations, though they speak another language than the language of instruction in the schools they attend, still can pick up this language rather easily since it is the language of the majority around them (Brock-Utne, 2005). This, however is not the case for many African children. Children living in the outskirts of Cape Town such as where the current research was conducted (Kraaifontein), for instance, do not hear English around them all the time (Holmarsdottir, 2005; Nomlomo, 2007). Their parents, teachers, friends and school-mates speak Xhosa to them. These children often have to acquire CALP before they have sufficient BICS to cope with classroom challenges (i.e. content subjects taught through the medium of English). A more refined command of language or CALP is necessary if they are to achieve academic success. In the context this research, it means that the Xhosa speaking learners have limited Basic Interpersonal Communication Skills (BICS) in the medium of instruction and they are also faced with a challenge of acquiring Cognitive Academic Language proficiency (CALP) to understand Geography concepts. This causes some difficulties for learners to cope in Geography lessons taught through the medium of English.
2.4 Summary

Taking into account what has been discussed in this chapter with regard to language of instruction policies internationally and learners' cognitive development, it may be concluded that the use of English as the language of instruction (where it is a second language) seems to be a barrier not only to knowledge construction but also to the teaching of Geography through the medium of English. The next chapter discusses research methodology and data collection strategies in order to address the research problem stated in the first chapter.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

This chapter focuses on research design, methodology and techniques employed to investigate how
Grade 11 teachers and learners interact in Geography lessons conducted through the medium of English. The study is following a qualitative research design, and for triangulation purposes different techniques were used to collect data, namely observation of classroom interaction and interviews. The use of qualitative research in this case helped the researcher to interact with people's own written or spoken words and observable behaviour in a naturalistic way. It is therefore important to take a look at what qualitative research is.

3.2. Research Design

As mentioned above, this study followed a qualitative design. Qualitative research is concerned with the understanding of human behaviour from the researcher's own frame of reference. (Grotjan, 1987). According to Cresswell (1994), a qualitative study is an inquiry into a social or human problem, based which is on building a complex and holistic picture formed with words. It reports on detailed views of informants, and it is conducted in natural settings. Thus, the goal of qualitative research is to discover patterns which emerge after close observation, careful documentation, and thoughtful analyses of the research topic.

For qualitative researchers, a particular setting is important, because they are concerned with a particular context. It places an emphasis on understanding through looking closely at people's words actions and records. Thus, qualitative research examines the patterns of meaning which emerge from the data and these are often presented in the participants' own words (Cresswell, 1994). Qualitative research is subjective and depends much on what the researcher sees and hears, and much rests on his / her powers of observation and listening. In qualitative studies the researcher needs skills for interviewing and must show understanding and empathy with the interviewee, through active listening, checking and identifying. Qualitative researchers wish to discover how understandings are formed, how meanings are negotiated and how roles are developed (Cresswell, 1994).

In relation to the current study, the qualitative research approach sought to understand the nature of interaction between teachers and Xhosa-speaking learners in Geography lessons when the language
of instruction is English. The researcher wanted to find out what strategies Xhosa-speaking learners employed in order to understand the concepts in Geography as well as strategies employed by teachers in mediating learning in Geography lessons. The research, therefore, attempted to identify various factors that had to do with the use of English as a medium of instruction in Geography to Xhosa-speaking learners. This approach enabled the researcher to present the collected data in a narrative and descriptive formats (Bogdan & Biklen, 1992).

3.3. Research site and Participants.

This research was conducted at one secondary school in Kraaifontein which previously fell under the House of Representatives. The school is situated in a sub-economical housing area and learners from this area mostly attend the school. There are 1500 learners attending school, of whom, the majority are Afrikaans home language speakers. The rest are Xhosa home language speakers and a very small minority are English home language speakers. The school draws learners from the two informal settlements in close proximity of the school. The learners from the sub-economical area are mostly Afrikaans mother tongue speakers whereas the learners from the informal settlements are mostly Xhosa mother tongue speakers.

There are 44 teachers at the school. Thirty four (34) of these teachers are post level one who do most of the actual teaching at the school, as they have more teaching periods than post level two teachers. Post level 2 teachers have to cope with the administration of the school and give leadership on curriculum issues as they form part of the School Management Team which comprises of the principal, and the two deputy principals. All of these teachers at this school are Afrikaans home language speakers. This site is therefore ideal for the purpose of this investigation as the researcher had access to the research subjects as a teacher and a colleague at the school.

The language policy at the school favours Afrikaans speaking learners as Afrikaans is the main language of teaching and learning at the school. Xhosa as a subject is not offered at this school as there are no Xhosa speaking teachers at school. As a result, all Xhosa speaking learners have to opt for English as language of instruction. There are also English Home language learners in the same
class and this was an advantage for me to observe and investigate the possible contrasts in classroom interaction and learners’ performances between the two groups of learners (i.e. Xhosa-speaking and English-speaking learners). This easy accessibility made it easier for the researcher to repeat certain methods of data collection or to change it if necessary. The researcher found, because he knew the research subjects, there was a fair amount of openness and co-operation. As this was case study done at a particular school, all the research participants were taken from that particular school.

3.4. Research participants

Research participants in this study were Grade 11 Geography teachers and Xhosa-speaking learners. Three (3) Geography teachers were used in this research and two of them were male and one female. One teacher had a university degree (BA) with a major in Geography, whilst the other two had college diplomas and only one of them majored in Geography. They were all experienced teachers as their teaching experiences range from 15 to twenty years. All three of them were Afrikaans home language speakers and the medium of instruction that they were most comfortable with is Afrikaans. However, they had to teach Geography in English to the Xhosa mother tongue speakers, as well as the few English home language speakers.

There were seventeen learners used in this research. These learners were all Xhosa mother tongue speakers who were taught Geography through the medium of English and thus they were ideal subjects for the study. Their ages ranged between sixteen and eighteen years old. Twelve of the learners were females and the other five were males. Geography as a subject was chosen because almost all of the learners in the class took the subject and the researcher is also well acquainted with the subject as he had taught the subject for a considerable amount of years in the Further Education and Training band.

3.4. Research Methodology

For this research, observation and interviews were used as the main data collecting tools. The
different data collecting techniques were used for triangulation purposes. The data collecting techniques are described in detail below.

3.5.1. Classroom observations

Classrooms are specifically constituted to bring about learning and it is therefore not unreasonable to collect data about what goes on there in order to enrich our knowledge on language use (Nunan, 1992). For the purpose of the study observation aimed at investigating how learners interacted with each other, and with their teachers in Geography lessons. He also focused on the kind of pedagogy or methodology teachers used to impart knowledge to learners through the medium of English. The researcher also sought for information on what texts and resources were available to support both teachers and learners in the Geography classroom.

For consistency and accuracy, the researcher used an observation schedule to record the kind of interaction in the teaching and learning process where English was used as a medium of instruction. The researcher observed six Grade 11 Geography lessons where almost 17 of the learners were Xhosa home language speakers. The main focus was on how Xhosa-speaking learners made meaning of Geography concepts when teaching took place in English, and a detailed analysis report is given in the next chapter. The observation schedule focused on the teaching-learning process as reflected on Appendix 1.

Concerning the learning process, the observation focused on how the learners achieved the required Grade 11 Geography outcomes, through the assessment standards. I drew up a checklist with the learning outcomes and assessment standards for Grade 11 Geography and used them as guideline to check if the learners understood the work that was done in class. I checked against each set of learning outcomes whether the learners, through the assessment standards, achieved the required outcomes. It was important to find to which extent the language of instruction influenced the Xhosa-speaking learners’ performance in Geography when they were taught through the medium of English.
The observation checklist also contained items on learner's performance behaviours as they were learning. These items included the learner's responses to the teachers' questions. I observed and noted their responses to the teachers' questions and whether they approached the teacher for further clarification. I also ascertained whether their answers and questions and other interactions with the teacher and peers showed any achievement of the learning outcomes.

I used a narrative sheet when observing the lessons where I wrote down all behaviours, responses, questions and activities of learners noted during the teaching-learning period. The rationale for using observation lists was not to create unnatural atmosphere by using a video recorder and or a tape recorder, which would perhaps inhibit the learner's actions in the classroom. In doing this, I wanted to be as unobtrusive as possible to maintain a dynamic reality. I briefed the learners thoroughly as to my presence and I could immediately start to collect data as the learners were already used to me.

There were, however, advantages and challenges for me as a researcher, linked to my background as language teacher as well as my past experience of teaching Geography in the same phase. The advantages I had were that I understood how language across the curriculum could assist the learners in coping with the constraints of learning in an additional language. I was also no stranger to the learners and thus my presence in the classroom was not too disturbing and disruptive. I also had a good understanding and interpretation of Geography learning outcomes and assessment standards. I had to deal with challenges as a non-participant observer as I could not intervene or give my input into the lesson. I did not have the power to change the classroom atmosphere. As a silent observer, I had to accept the shortcomings, and had to adapt my observation to suit whatever transpired in the classroom.

Like learning, teaching is also broadly guided by the learning outcomes. It became important for this study to observe how the teachers approached the subject content in English and how they applied the assessment standards as set out in the National Curriculum Statement (NCS, 2002). The main aim was to observe their interaction with Xhosa-speaking learners when facilitating learning.
To put the teachers at ease, I had to assure them that my role was just to observe them and that the data I had collected was merely for academic purposes and was not to put them at risk. I made sure that the teachers fully understood my role in the classroom. The checklist for teaching in the classroom included the following items:

(i) how often were the teachers giving directions or instructions and the extent to which the learners understood the instructions in English.

(ii) How teachers tried to explain certain difficult and new Geographic concepts to learners in their home language and whether they used other learners as resources in terms of translation or interpretation. In other words, the observation sought to identify kinds of support available to learners who do not speak the medium of instruction.

(iii) The extent to which teachers gave and expanded on information, using other innovative teaching methodologies like demonstrations, role plays, projects, etc. and the role of language of instruction in such interactions.

(iv) The teacher-learner interaction was also observed. That is: how teachers made use of language in facilitating learning in the classroom.

3.5.2. Interviews

I conducted interviews for the learners and teachers as follow-up to the classroom observations. Most of the questions on the interview schedules related to what was observed in the classroom. In this way, I could make comparisons between the answers of the learners and teachers and what actually transpired in the classroom observations.

3.5.2.1. Learner interviews

I made use of structured interviews, where I worked through a list of set questions in a predetermined order. The reason why I chose this kind of interview was to get focused responses from the participants. The interview questions captured the following:
(i) the problems they encountered when they were taught Geography through the medium of English.
(ii) how English as a language of learning and teaching influenced their understanding of concepts in Geography.
(iii) how they felt about the medium of instruction used at the school.

The interviews were conducted in English and they were recorded with individual learners. The reason for individual interviews, was because they were a small group and the learner would answer the questions more easily than in a group. I used English for the interview because it was the only language I could communicate with as I could not speak Xhosa.

3.5.2.2. Teacher Interviews

In the teacher interviews, I used structured questions. The questions focussed on the teaching-learning process. I wanted the teachers to give their input and comment with regard to:

(i) the effects that English has on the performance of Xhosa-speaking learners' performance in Geography.
(ii) What are their experience of Xhosa-speaking learners' understanding of the concepts in Geography, compared to mother tongue speakers of English.
(iii) what support do they think was needed to overcome the barriers of teaching and learning, caused by foreign language of instruction.
(iv) the resource material and other support that were needed to overcome the barriers of learning and teaching in the additional language.

I carefully showed flexibility through acceptance of the interviewees' input on the issues, even when the responses were not directly answering the questions.

3.5.4. Analysis of learners' workbooks

Through analysing the learners' workbooks, whether there were any differences in terms of conceptual development in Xhosa-speaking learners taught Geography through the medium of
English, and that of English first language speakers in the same class.

For the purpose of this activity, I analyzed 17 Xhosa-speaking learners' workbooks and that of 12 English home language learners. The analysis started in Grade 10 in July 2007 and continued until June 2008 to find out whether there was any improvement or development in learners' performance over this period.

### 3.6. **My hypothesis**

My hypothesis underpinning this research study was that some of the factors which had an effect on Xhosa-speaking learners' performance in Grade 11 Geography had to do with teaching or pedagogical strategies used by teachers, as well as learning strategies used by learners to teach and understand the concepts in the language of learning and teaching. As there is a mismatch between teachers' home language and the home language of the learners, teaching and learning cannot be effective as they could not code-switch to Xhosa to facilitate learning. Therefore they had to devise other pedagogical strategies to assist learners to comprehend the concepts in Geography in order for them to achieve the required learning outcomes. My hypothesis was vested in the strong research evidence in favour of mother tongue education as opposed to the use of a second language as language of learning and teaching.

### 3.7. **Summary**

In this chapter triangulation was used in data collection in order to probe deeper into issues pertaining to the teaching and learning of Grade 11 Geography through the medium of English. Data collection was informed by the research questions stated in Chapter 1. In the next chapter data is presented interpretively into themes through qualitative research analysis.
CHAPTER 4
PRESENTATION AND ANALYSIS OF DATA

4.1. Introduction

The aim of this study, as stated in the first chapter, is to investigate how Grade 11 Xhosa-speaking learners interact with their teachers and peers during Geography lessons where English is used as the medium of instruction. In the previous chapter the data collection techniques were discussed. This chapter deals mainly with data presentation and analysis.

In this research the data is analysed interpretively and has been reduced to themes, through the qualitative research approach. The emphasis is based on description and not testing the hypothesis as in quantitative approach (Glesne & Peshkin, 1992). Rather than a statistical presentation, the facts are presented in a descriptive manner. The researcher accepts that although qualitative research is subjective, it is still regarded as reliable and valid (Reichardt and Cook, 1979).

4.2. Xhosa-speaking learners' participation in English

Classroom observation indicated that there were some factors that influenced Xhosa-speaking learners' participation in a Geography lesson when the language of instruction was English. These factors are closely linked to the learners' proficiency in English and how such competence affects their understanding of Geographical concepts. It also influenced learners' attitudes towards the lessons.

Firstly, with regard to classroom observation, it was noted that the learners had difficulty in
responding verbally when learning through English. This became evident through their continuous
code-switching from English to their home language (Xhosa), because they could hardly come up
with correct grammatical sentences in English. This was displayed when the learners were
responding to teachers, questions and asking questions and through other classroom activities like
group discussions. The Xhosa-speaking learners in the class had a tendency to communicate in their
home language amongst each other, even during group discussions. This was a clear indication that
they felt more at ease to communicate in their mother tongue as opposed to English, which is the
language of instruction.

The Xhosa-speaking learners in class were also more passive in the learning process because they
found it difficult to give full responses since their command of English was poor. They were thus
forced to resort to non-verbal and monosyllabic responses. Some learners would use their hands and
made use of body language if they could not express themselves in the language of instruction.
Others would just answer 'yes' or 'no' or give a one word answer to questions that required full
explanation as shown in the following examples:

Teacher: 'What is energy?'
Learner: 'A power'
(Instead of answering: 'A power which causes movement or action, or the ability to work')

Teacher: 'What is hydraulic action?'
Learner: 'The force of water.'
(Instead of: It is the force of water that erodes the walls and banks of the canal or river.)

Teacher: 'Explain the process of corrosion'
Learner: 'Acid in the water.'
(Instead of: 'It is the acid in the water that dissolves that rock in the river.')

Secondly, learners were not very eager to give information voluntarily. The learners' poor command
of English evidently inhibited their initiating of activities in the classroom. The learners were not
very conversant with the medium of instruction. They almost never disagreed or argued with the teacher when they could not understand or follow the lesson.

Thirdly, most of the Xhosa-speaking learners refrained from asking questions for further clarification because they might have felt inhibited by their poor command of English. They clearly had difficulty in relating aspects of the lesson to daily experiences. This became evident when the teacher asked questions or gave tasks where the learners had to bring what knowledge they had acquired in class into relation with the real world.

The learners also displayed low self-esteem, especially during the interviews and they were not very confident when they had to answer questions in English, and when they had to relate what they had learned in class to reality.

All the above mentioned learner behaviour patterns indicate lack of full learner participation which is due to low proficiency in the language of learning and teaching (English). These patterns were barriers to learner-centered education and might have had a negative influence on their academic achievement.

4.3. Teachers’ pedagogical strategies

With regard to teaching strategies, I observed that teachers had to speak very slowly and clearly when they gave instructions to the learners in English. Very often the teachers had to repeat the instructions as learners did not understand the instructions the first time around. Another teaching strategy that was employed by the teachers was to try and explain new Geography concepts to learners in their home language using other Xhosa speaking learners as resources in terms of translation or interpretation.

It was clear that there was a need for supplying and expanding on information, using other innovative teaching methodologies like role plays, projects, demonstrations and the role of language of learning and teaching when interacting in the classroom. The interaction between teachers and
learners as facilitated through classroom atmosphere as brought about by the teacher. Thus, it was noted that the teachers used the telling method, mixed with questions on which the learners had to respond. The learners were, however, not very keen to respond to the questions and there were mostly no response. During a lesson on the climate of the South Western Cape, for example, when the learners did answer, it was in short or one word answers to questions that required longer answers as shown in the following examples:

Why does it rain in the Western Cape during the winter?
Answer: cold fronts.

What is the effect of the South Easter on the weather conditions in the South West Cape?
(Answer: veld fires)

What are the effects of the cold fronts on the weather conditions in the South Western Cape?
(Answer: rain)

How does these weather conditions influence the grape and wine farming in the Western Cape?
(Answer: sunshine in summer)

In one of the lessons observed, learners were encouraged to work in groups on an investigation task. It became obvious during the lesson that the instructions to the learners were not very clear and that the group work was not properly managed. The learners were not very clear whether they should do the task in their books first or whether they should report back to the class first. A discussion that had nothing to do with the lesson and that took up a quarter of the lesson time.

In some of the lessons I observed, I noticed that the teachers made use of repetition and used code switching into Afrikaans, which did not suit any of the learners in the class as they were either Xhosa home language speakers or English home language speakers. Most evident in my observations was that the teachers mostly made use of questions and answers, group work and the
telling method, although on rare occasions they also made use of other innovative teaching strategies like research, role play, investigations and poster designing.

4.4. **Problems with teaching in English**

The observation of teaching in the classroom clearly showed the extent to which teachers’ behaviour was influenced by the language of instruction. It was evident from the observation of classroom teaching that the teachers were faced with a lot of obstacles like the teacher's inability to code switch into the learners' mother tongue regarding the teaching of Geography to Xhosa-speaking learners in English. What made it even more difficult was the fact that the teachers themselves where Afrikaans mother tongue speakers, who, sometimes had difficulty in expressing themselves in English. As a result, the teachers would regularly code switch from English into Afrikaans, especially when they were confronted with the more difficult concepts in Geography. During a lesson on the Earth and its atmosphere a teacher made the following code-switching:

(i) **Teacher 1**: The atmosphere is the narrow layer of gases that surrounds the earth and enables life to exist. Dit word deur die aantrekkingskrag van die aarde vasgehou en bevat 78% percent nitrogeen, omtrent 21% suurstof en een percent argon.

Another teacher, when teaching a lesson on Erosion made use of the following code-switching:

(ii) **Teacher 2**: Erosion is the 'geleidelike' (gradual) breakdown of landforms and removal of the 'steengruis' (debris) to another place, by ice (especially during the period of 'gletservorming' (glaciation)

It became evident that the teachers were sometimes unsystematic when applying code-switching. They clearly did unplanned code switching into Afrikaans, which was not very helpful to the Xhosa speaking learners. This code-switching and rephrasing was very time consuming and only half of the work that was planned for the period of 50 minutes could be covered. There was therefore a high probability that teachers could not complete work prescribed in the syllabus for the academic
year. This could negatively affect the academic performance of the learners.

It was observed that teachers were making more grammatical errors when teaching through the medium of English, because they were not competent in the language. This led to learners not properly grasping concepts in Geography which contributed to non-achievement of the learning outcomes. Learners made a lot of errors because they did not understand the language very well, and the teachers were also modeling bad English language. The teachers were then forced to correct these errors time and again. Examples of grammatical errors made by teachers:

(i) Teacher 1: In summer, the warm sun cause the water to disappear through perspiration.
(ii) Teacher 2: Hydraulic action is the waters strength that eats the walls of canals and rivers.

These teachers, teaching Geography through the medium of English, to Xhosa-speaking learners, were forced to use far more classroom management strategies than when teaching in the learners' home language. This was displayed when one teacher made use of Xhosa-speaking learners in the class, to explain some of the work because of the teacher's inability to code-switch to their home language. It also became clear during the lesson that he also made use of tape recordings of some of his Xhosa-speaking colleagues from other schools.

The teachers' classroom behaviour was influenced by the fact that both teachers and learners could not communicate effectively in the language of instruction, for the learners to understand the lessons. These teachers had to perform far more of the following operations when using English:

1) Instructions had to be given repeatedly, since the learners could not understand the concepts in Geography.
2) It was necessary for teachers to ask questions on previous lessons because the teachers had to ascertain whether the learners understood the lessons taught in English, as there was a general lack of learners' participation in this regard.
3) Thirdly, most of the lessons became teacher-centered because teachers dominated the lessons by giving more information due to learners' lack of participation in the lessons. Teachers were not very confident when they had to teach Geography in English.

4.5. Learners' academic performance in Geography

The following is a summary of the learners' responses to questions put to them in interviews about how the language of instruction affected their academic performance.

Responding to the question on what learning problems Xhosa-speaking learners encountered when taught Geography through the medium of English, they found it difficult to understand and follow the lesson because they felt that the teacher was unable to explain to them in a language they could understand well. According to them the teachers would rather code-switch to Afrikaans if they wanted to expand on a particular topic or fact. However, Afrikaans is a second additional (third) language to the learners and thus they were not very competent in Afrikaans. The majority of them felt that they were not at ease to respond to teachers' questions in English because of their lack of fluency in English. It was also very difficult for them to initiate activities in class and to give information voluntarily. During a lesson on energy and energy management, for example, the teacher had to explain the source of lightening and found it difficult to explain the terms “friction” and “resinous plants.” Thus the learners felt that they were sometimes at a disadvantage in the acquisition of the necessary Geography skills and techniques to succeed academically.

To the question of which of the language aspects they found to be most demanding to cope with, about 60% had difficulty in reading in the language of instruction and this made it difficult for them to research when they were given a task or assignments to do on their own. They could write notes from the board down into their books, but felt that they struggled to write coherent facts when they were tested or through assignments. They felt that they easily lost concentration when listening to a lesson, because they did not always understood the Geography concepts and jargon. In other words, the language of learning and teaching became another barrier to their learning.
Therefore Xhosa speaking learners felt that being taught in English had a negative impact on how they participated in the classroom, which also had a negative effect on their academic performance. Perkins (1999) believes that learners construct knowledge actively as they are trying to make sense of their experiences. Learning takes place in context and learning of knowledge could only be achieved through meaningful activity, learning is a continuous life-long process resulting from acting in situations (Brown, 1989). English to most of the learners is a language which they only speak, read, write and listen to in the classroom situation only. Thus learners need to be proficient in the language of learning at school, if they are to achieve academic success.

Table 1 below shows the difference between Grade 11 learners’ performance in Geography during their mid-year examinations in 2008. The table shows the learners’ performance according to their home languages (i.e. Afrikaans, English and Xhosa).

<table>
<thead>
<tr>
<th></th>
<th>AFRIKAANS</th>
<th>ENGLISH</th>
<th>XHOSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>Learner 1 : 63%</td>
<td>Learner 2 : 77%</td>
<td>Learner 3 : 52%</td>
</tr>
<tr>
<td></td>
<td>Learner 4 : 56%</td>
<td>Learner 5 : 82%</td>
<td>Learner 6 : 54%</td>
</tr>
<tr>
<td></td>
<td>Learner 7 : 49%</td>
<td>Learner 8 : 80%</td>
<td>Learner 9 : 47%</td>
</tr>
<tr>
<td>MIDDLE</td>
<td>Learner 10 : 49%</td>
<td>Learner 11 : 55%</td>
<td>Learner 12 : 42%</td>
</tr>
<tr>
<td></td>
<td>Learner 13 : 40%</td>
<td>Learner 14 : 61%</td>
<td>Learner 15 : 37%</td>
</tr>
<tr>
<td></td>
<td>Learner 16 : 45%</td>
<td>Learner 17 : 64%</td>
<td>Learner 18 : 30%</td>
</tr>
</tbody>
</table>
In the first category (High) there is a difference of 28% between learner 5 (English) and learner 6 (Xhosa).

The difference in the second category (Middle) is 34% between learner 17 (English) and learner 18 (Xhosa).

In the last category there is a difference of 20% between learner 23 (English) and learner 24 (Xhosa).

This table clearly shows that there was a link between academic performance of learner and the medium of instruction. A comparative analysis of the three top, middle and low achievers in each of the three language groups shows that the English speaking learners scored the highest marks, followed by the Afrikaans speaking learners. The Xhosa speaking learners generally scored the lowest marks and this could be attributed to the fact that the lessons were mostly in English with regular code-switching to Afrikaans.

Twelve (12) of the seventeen (17) Xhosa-speaking learners felt that mother-tongue teaching is important and would have liked it if the teachers were able to code switch between English and Xhosa. They felt that this could help to ensure that they acquired the necessary knowledge and skills from their learning. There were, however, a small percentage within the school who believed that for academic, social and economic purposes they would prefer English as medium of instruction although they admitted that they sometimes struggled to cope academically. This could be due to the fact that they as well as their parents see English as the gateway to economic prosperity.

As a result, when I checked the learners' books, I encountered most of the problems that emerged
during the observations and interviews. Firstly, when learners had to make summaries from their textbooks or other sources, it was mostly incoherent to unintelligible. Secondly, they misspelt words from the textbook. Thirdly, they could not distinguish between facts and generalizations. Lastly, it was evident from the tests that they wrote in class, that they did not acquire the knowledge to enable them to be academically successful.

To summarise, it clearly became evident through the responses of the learners, that there is a definite link between the language of instruction and learners’ academic performance in Geography. There is a clear indication that the learners find it difficult to learn Geography through the medium of English.

4.6. Support needed in Grade 11 Geography

It appeared from the teachers’ responses that there was a need for support to learners as well as teachers when the language of instruction in Geography is English. The interviewed teachers were unanimous in their response that the Xhosa-speaking learners struggled to acquire a variety of information from primary and secondary sources because they could not apply the language in order to collect the information by means of fieldwork. According to one of the teachers Xhosa-speaking learners have difficulty in conceptualising most of the information given to them, due to their lack of command in the language of instruction.

One teacher especially, felt that teaching Geography to a multilingual class made it difficult to plan and to devise techniques to support Xhosa-speaking learners to understand the concepts of Geography in English in order for them to achieve the required learning outcomes. In order to support the Xhosa speaking learners, the teacher had to be able to explain some of the more difficult concepts and terminology in the learners' home language in which they had no competence. Another teacher, however viewed this barrier to learning as a challenge and an opportunity to plan and devise techniques to support the Xhosa-speaking learners to achieve academic success. This teacher made use of Xhosa learners in the class who understood certain concepts better to explain it to the others. To support struggling learners, he made use of tape recordings of Xhosa teachers
from other schools to explain certain concepts in their home language.

Most of the interviewed teachers felt that some of the Xhosa-speaking learners found it difficult to demonstrate knowledge and what they understood in Geography through the medium of English. According to them, the English mother tongue speakers dealt more easily with challenges than the Xhosa speaking learners because they already developed an awareness of the medium of instruction which would make it easier for them to become orientated to the content (Duffy and Jonassen, 1991).

Some of the interviewed teachers were of the idea that Xhosa-speaking learners needed a variety of support to overcome the effects of English as a barrier to learning and teaching. They were of the mind that school management should plan better when drawing up a language policy for the school and that such a policy should fulfill the needs of all the learners at school to ensure that every learner has the opportunity to achieve academic success.

One of the most serious barriers to teaching Geography to Xhosa-speaking learners in English was the complete absence of support material to enable the teacher to lead the learners to acquire the expected learning outcomes. These teachers believed that the lack of support materials such as textbooks, multimedia laboratories and lack of easy access to the internet influenced learners' ability to master Geographical concepts such as development and sustainability, ecosystems and conflicts, values and attitudes in land use in more negative ways.

The interviewed teachers were also unanimous in their responses to the collaboration between learning area teachers and language teachers in support of Xhosa-speaking learners who were being taught through the medium of English. Though they admitted that there was very little or no collaboration between language teachers and learning area or subject teachers, they firmly believed that language across the curriculum is a teaching strategy worth of exploring.

All the teachers that I interviewed were of strong belief that school management has a vital role to play in development of the status of African languages and the investment therein in order to
support and sustain language equity at the school. According to them African home language teachers should be appointed at the school. Teachers from different language background will be a valuable resource in terms of code-switching and translation from English into the learners’ home language.

4.7. Summary

In summary, data analysis shows that learning through an additional language presents both teachers and learners with difficulties. The teachers find it difficult to teach Xhosa-speaking learners through the medium of English as they do not have full competence in English and there is no support in the form of code-switching or translation. The findings of these emerging themes will be discussed in the next chapter.

CHAPTER 5: RESEARCH FINDINGS

5.1. Introduction

In the previous chapter, the data presented and analysed afforded the researcher the opportunity to investigate the main research objectives as well as find possible answers to the research questions of the study. This study is an investigation into the effects of English medium of instruction on Grade 11 Xhosa speaking learners' performance in Geography. The findings of the study therefore, are based on the themes which were developed from the data analysis.

5.2. Research findings

Most of the research findings of this study correspond with Nomlomo’s (2007) experimental and
longitudinal study in which she compared the teaching and learning of Science through the medium of English and Xhosa in the Intermediate Phase.

5.2.1. Poor communication and interaction between teachers and learners

Data analysis shows that teachers were faced with various obstacles regarding the teaching of Geography to Xhosa-speaking learners in English. The teachers could not speak or understand Xhosa and therefore could not code-switch into Xhosa. There was no effective communication in the classroom, as both the teachers and learners could not communicate very well in the language of instruction (English). As illustrated above, the teachers themselves were not English mother tongue speakers and could not always give clear instructions to the learners in English.

The learners that benefited most from the classroom interaction was the Afrikaans speaking learners because the teachers (who are Afrikaans speaking) code-switched into Afrikaans. However, this was to the disadvantage to both the Xhosa speaking learners and the English Speaking learners.

5.2.2. Inadequate teaching strategies.

The researcher found that the learning strategies that are currently employed when teaching takes place through an additional language seem to be inadequate to assist the learners to understand the concepts of the learning area in the additional language. There is a lack of strategies like the use of teachers and peers who are mother tongue speakers of Xhosa, even if, for example, it is through tape-recordings and resource materials in Xhosa with English explanations.

From the analysed data it appears that the teachers made more use of traditional teaching strategies than the more modern teaching strategies. Most of the lessons were characterised by teacher-talk and in a very few cases the learners were required to observe, analyse or predict data. Thus, the learners were not encouraged to think creatively and independently when they are confronted with problem solving.

The question and answer strategy used by the teachers led to the teacher doing most of the talking.
during the lesson, as the learners mostly did not answer and when they did participate, it was in short answers as shown in Chapter 4. The Xhosa learners' apparent lack of proficiency in the language of instruction prevented them from responding effectively to questions which were asked on Geography concepts.

5.2.3. Poor academic performance

The study further shows that the learners find it difficult to understand and follow the lesson because of the lack on the part of the teacher to explain the more difficult concepts to them in a language that they understand. English as medium of instruction for these learners, becomes a barrier to learning when they have to plan and structure Geography projects in which they have to apply their language skills in relation to Geography phenomena.

However, when one teacher saw these barriers as challenges and opportunities to plan and devise techniques to support the Xhosa-speaking learners to achieve the required learning outcomes, it assisted the learners to achieve academic success. This was achieved because thought of other means of involving learners by making use of Xhosa-speaking learners in class to explain certain concepts that they understood to others in class. Also he made use of tape recordings of Xhosa teachers from other schools to explain certain concepts in their mother tongue.

5.2.4. Lack of teaching resources

It also became apparent that there are no support materials to enable the teacher to assist the learners to acquire the expected Geography learning outcomes. It is clear that the absence of support material such as textbooks, multimedia laboratories and lack of access to internet, influenced negatively the learners' ability to master Geography concepts. The appropriate use of teaching resources may assist the teacher to give more meaning to the lesson content and could encourage the learners to become more interested in the lesson and pay attention, especially if they struggle to understand the language used in teaching. The use of teaching resources in Geography can help the learners to understand concepts that they otherwise would have struggled to conceptualise in
English (Nomlomo, 2007).

Teachers should explore their own talents regarding the development of teaching support materials. When developing these resource materials, the content should be effectively sequenced for learning, eg. The components will need to be broken down into a logical, progressive sequence that will support Xhosa speaking learners to achieve the outcomes in Geography through the medium of English.

5.2.5. Insufficient academic support to learners

The researcher found that there is a need for support for both learners and teachers for effective interaction in the Geography classroom. Firstly, the Geography teacher needed to understand the Xhosa speaking learners' home language in order to explain the difficult concepts that the learners struggled with. Secondly, learners needed to understand the language of instruction in order for them to participate meaningfully in lessons. Thirdly, very little translation and code switching by teachers took place during lessons and group work. Fourthly, there is clear evidence that teachers find it difficult to acquire the necessary support from the curriculum to teach Geography to Xhosa speaking learners through the medium of English. It has also been realised that Xhosa-speaking learners need a variety of support to overcome language of instruction as a barrier to learning in the form of materials in their language as well as teachers who can give linguistic support in terms of translation and code switching.

5.2.6. Limited proficiency in English

Xhosa-speaking learners found it difficult to comprehend some of the concepts in Geography due to their limited proficiency in English. Because they did not feel very comfortable with English they shied away from taking initiatives in lessons. They did not ask questions for clarification on work they did not understand and seldom responded to the teachers' questions in full sentences. The Xhosa speaking learners made use of their mother tongue when they were working in groups.
The teachers' lack of proficiency in the language of instruction made it difficult for them to give clear instructions to the learners. Thus, the learners had difficulty in responding to some of the instructions and could not work effectively especially when they worked in groups. As a result, they tended to code-switch to their own mother tongue, Afrikaans. It is very important for teaching that the teacher has a good knowledge of the medium of instruction.

5.2.7. Insufficient collaboration between Geography teachers and language teachers

The researcher discovered that there is a lack of collaboration between learning area (subject) teachers and language teachers in support of Xhosa-speaking learners who are being taught through the medium of English. This lack of collaboration poses a great threat to the notion of language across the curriculum, where language teachers could assist with explaining of certain and difficult concepts in the learning area.

5.2.8. Low status of African languages in education

The school management seemed not to acknowledge its vital role in the development of the status of African languages in the school. The low status of African language in the education is perpetuated by the fact that the school’s language policy is still rigid, and caters for Afrikaans speaking learners only, despite the changing demographics of its learners. Children take what parents and environments offer them (Tadadjeu, 2007), and in this case they become victims of the situation which is reflects past language policies and practices.

For historical reasons most African languages have not been developed to the same level as the former colonial languages English, French, Portuguese and Spanish. Learners who speak an African language at home bring to the classroom their own understanding of the world and unless the
language learners know best what is used as a basic tool for teaching, learning and assessment, the education system is failing them (Wababa, 2007). In the Western Cape, where this research was done, there is a great need to use Xhosa in the teaching, learning and assessment of content subjects or learning areas for the benefit of Xhosa speaking learners.

To conclude, it is clear that language of instruction has a definite influence on the academic performance of Xhosa-speaking learners in Grade 11 Geography through the medium of English. The findings discussed in this chapter have been used as a basis of the recommendations given in the next chapter.
Chapter 6: Summary, conclusions and recommendations

6.1. Introduction

This chapter gives a summary of research findings and conclusions. The conclusions are drawn from the findings obtained by using qualitative research instruments as explained in the previous chapters. On the basis of the research findings, recommendations are made. The chapter also gives a brief summary of study results.

6.2. Summary of findings

In view of the analyzed data pertaining to Grade 11 Geography teaching and learning through the medium of English, I would like to present the following brief summary of the study findings:

The findings of the current study can be summarized as follows:

( i ) The Xhosa speaking learners have limited proficiency in English and that has negative effects on their academic performance.

( ii ) The mismatch between the language of learning and teaching and learners' home language causes a lack of understanding of Geography lessons.

( iii ) The teaching strategies employed by the teachers to assist learners to comprehend Geography concepts in the learning area are inadequate.

( iv ) There is insufficient support for both teachers and learners to overcome the barriers to learning and teaching caused by the lack of proficiency in the medium of instruction (English).
There is a lack of teaching resources and insufficient collaboration between teachers of other subjects and language teachers. Therefore, teachers cannot make sufficient use of teaching resources to mediate communication and learning in the classroom.

Finally the school management disregards the status of African languages in education.

6.3. Conclusions

For the learner to participate actively in class, it requires of him to be able to think critically, communicate and develop an advanced ability for creativity. This is only possible if the learner learns through a language that he is comfortable with (i.e. the mother tongue). Although the Language-in-Education Policy states that every learner has a basic right to be taught in the language of his/her choice, there seems to be a lack of will on the part of school management to act proactively in language planning of their school.

It is clear from the research results that Xhosa-speaking learners find it difficult to learn Geography through the medium of English. In other words, learners fail to comprehend lessons taught through the medium of English. This results in learners' poor academic performances in Geography as shown in Table 2 of Chapter 4. In the context of this study, English is a barrier to effective learning of Geography by Xhosa-speaking learners in Grade 11. The research findings indicate that the use of additional language (English) as medium of instruction as supposed to the mother tongue, has a substantial impact on learners' academic performance in Grade 11. It could be concluded that the language of instruction becomes a major barrier to learning for Xhosa-speaking learners who attend schools that historically catered for either Afrikaans or English home language learners.

With reference to the research findings discussed in the previous chapter, the researcher came to the following summary of conclusions:

Learners' limited proficiency in English leads to learners' under performance in Grade 11 Geography. Learners cannot express themselves clearly if they do not have
proficiency in the medium of instruction.

(ii) The mismatch between the teachers' and learners' home languages leads to ineffective communication in the classroom which leads to passive engagement in lessons.

(iii) Lack of proficiency in the language of instruction has a negative effect on the learners' self-esteem.

(iv) Lack of Xhosa resources and other support materials in Geography contributes to learners' poor performance in Grade 11 Geography.

(v) Teachers whose home language differs from their learners' home language experience difficulties in supporting learners Geography work.

6.4. Recommendations

On the basis of the research findings discussed in chapter 5, I would like to make the following recommendations:

6.4.1. Promoting additive multilingualism in schools

Innovative teaching strategies should be devised in order to assist learners to cope in multilingual settings where the learners' home language is not the medium of instruction. These may include appointing Xhosa speaking teachers and introducing Xhosa as one of the subjects, and also encourage its use as the medium of instruction after Grade 4 in Western Cape schools. Learners can also be useful resources in terms of translating and code switching in the classroom. Teachers need to think of innovative teaching approaches, which would best serve the needs of multilingual classrooms. This could be done effectively through collaboration between colleagues of different languages within the South African language context.

6.4.2. Developing Geography teaching and learning materials
The absence or scarcity of textbooks in African languages has created a need for adapting and translating texts into African languages to suit the classroom needs (Wababa, 2007). Bilingual mother-tongue-based materials can be produced by translating and adapting existing textbooks and other teaching resources written in English. Learners could benefit from these materials as handy references.

Teachers should be encouraged to develop their own materials that would be suitable or relevant to all language groups. There is also an abundance of resources at the ex-Model C schools that could be utilised by the township schools through active collaboration. In this case, the Department of Education should play an active role procuring materials for the disadvantaged schools and overseeing a smooth collaboration between schools with better facilities. Teachers could also develop grade or phase-specific learning materials like integrated teaching lessons, bilingual posters and charts (English and Xhosa) and other teaching resources to help make African languages more visible in classrooms and to also make the curriculum accessible to all learners in the classroom.

6.4.4 Teaching language across the curriculum

Effective use of language is a central component in successful teaching and learning of content subjects. Language across the curriculum should be an avenue to be explored in education, as language teachers can work cooperatively with subject or learning area teachers. Teachers should plan together to develop learners' language skills. They need to accept that language related issues are also their responsibility as effective classroom interaction occurs through language.

6.4.5 Developing Geography terminology in Xhosa

A further recommendation is that an effort should be made to develop equivalent Geography terminologies in languages other than English that would make it easier for the teacher to explain during the lesson. This means developing Geography terminology in Xhosa. Since meaningful learning, particularly in the content subjects, depends heavily on the extent to which critical
concepts are understood, subject content should include terminologies that are in the language that the learner knows best. Again, collaboration between language and subject specialist teachers is crucial for successful translation of such terminologies into African languages like Xhosa. Developing terminology means finding technical or scientific concepts by borrowing from other languages such as English, Afrikaans and other African languages.

6.4.6. Transforming schools’ language policy

South Africa's new language policy promotes multilingualism and language rights or what Phillipson and Skuttnubb-Kangas (1996) call the ecology of language paradigm. Therefore, language policy planning at schools should fulfil the needs of all learners so as to ensure that every learner will feel comfortable with the language of instruction and thus promote academic excellence for all learners at school. African languages should play a more important role when the language policy of the school is drawn up. African language speakers should not think that it is only through English that they will achieve academic excellence. Of equal importance, is the correct language policy planning that could elevate the African languages as languages of instruction. With this barrier out of the way, Xhosa speaking learners could compete on the same level as their English counterparts at school.

6.4.7. Further research on medium of instruction policies in Western Cape schools

More research is needed to focus how to transform language policies in Western Cape schools to accommodate learners from diverse language backgrounds. Further studies should be conducted on how to raise the status of Xhosa as an equal partner alongside Afrikaans and English as language of instruction, particularly in the Western Cape.

The development of teachers' competence in the language of teaching and the home language of the learners might become an important issue for further research as this would help bridge the gap between the teachers' knowledge of the subject and their ability to transfer this knowledge to the
learners. In keeping with the national language-in-education policy for public schools (1997), the Language Transformation Plan (LTP) of the Western Cape Education Department, favours the use of home languages (Braam, 2007). The LTP is an initiative to develop all the dominant home languages, including Xhosa in the Western Cape. If the Language Transformation Plan is to be realised in practice, peoples' attitudes that perpetuate practices that accord English high-status in society, needs to be changed.

6.5. Concluding remarks

South Africa should, through its progressive language policy make immediate efforts to implement and monitor its language-in-education policy so that there is linguistic equality in the schools. This would help the African language speaking learners to excel academically, cognitively and emotionally if they are taught in their mother tongue instead of a foreign language. In shaping a dynamic identity for each learner the school, should acknowledge each learner's cultural and linguistic rights and build on that foundation for their future learning (Heugh, 2002).

Bibliography


Holmarsdottir, Halla, B. (2005) From policy to practice: *A study of the implementation of*


APPENDIX 1 : OBSERVATION CHECKLIST

1. Observation of teaching : Indicator: Formal instruction should include the mother tongue for effective learning and cognitive development.

Critical Question: Does formal instruction include the mother tongue?

Coding:
1 = not at all
2 = some of the time
3 = all of the time

<table>
<thead>
<tr>
<th>Language</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOLT</td>
<td>1</td>
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</tbody>
</table>

Elaboration:

2. Narrative Schedule:

Recording of the main sequence of events during the period, including the direct, selected
quotations of the teacher / learner communication.

Class : .............................
Teacher : ..........................
School : ..........................
Lesson : ..........................
Date : .............................

Narrative

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Reflections
APPENDIX 2 : INTERVIEW SCHEDULE

2.1. LEARNER INTERVIEWS

How do learners feel about the LOLT?

1. What learning problems do you encounter when you are taught Geography in English First Additional Language?

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2. Which of the following do you find difficult to cope with in the LOLT? (tick in the appropriate block)

A. Reading [ ]
B. Writing [ ]
C. Listening [ ]
D. Speaking [ ]
3. How does the language of teaching and learning influence your understanding of the concepts and learning material in Geography?

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4. How do you cope in understanding the concepts of Geography in the additional language?

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5. Do you think that mother tongue teaching is essential?

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6. Do you feel that certain terms in the learning area could be explained in the mother tongue?

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7. How can the mother tongue be utilised in the Geography classroom to ensure that skills, knowledge, values and attitudes are the results of learning.
8. In what ways can the teachers help you to establish a culture of mother tongue education at your school?

9. How comfortable are you as a Xhosa-speaking learner in planning and structuring projects in Geography where the LOLT is English?

10. Are you able to understand and explain certain processes that occur in Geography where the language of instruction is English?

11. How does the fact that the language of instruction is English, effect your understanding of Geographical concepts and influence your acquisition of the necessary Geographical skills and techniques?

2.2. GEOGRAPHY TEACHER INTERVIEWS

1. What do you think are the effects does English, have on the
2. What teaching strategies and techniques do you as learning area teacher employ to support learners to understand the concepts of Geography in the additional language?

3. How do Xhosa-speaking learner's understanding of concepts in Geography compare to mother tongue speakers, when the former are taught in the additional language?

4. What support do you think is needed to overcome these barriers of learning and teaching?
5. How available are resource material and other support material to the teacher who teaches Geography to Xhosa-speaking learners in English?

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7. To what extent does the language policy of the school support mother tongue education?

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8. Is there enough collaboration between learning area teachers and language teachers to support Xhosa-speaking learners who are taught in the additional language?

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9. How can school management's interest and involvement in the development of and investment in African languages as languages of
learning and teaching help the teachers to assist the learners to achieve the learning outcomes in Geography?

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10. How do you as teacher overcome the barriers and obstacles when teaching Geography to Xhosa-speaking learners in English?

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