## The Effects of the Language of Instruction on the Academic Performance of the Tsonga (Shangani) Speaking Grade Seven Pupils in Chiredzi South, Zimbabwe

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Abstract: This study was an endeavor to investigate the effects of the use of unfamiliar/foreign languages as mediums of instruction (English and Shona), to teach Tsonga (Shangani) speaking children in Chiredzi south district of Zimbabwe. Because of the nature of the study, quantitative methods were adopted to study the performance of the Tsonga (Shangani) language speaking learners in five purposively sampled schools. Two hundred and twenty two (222) learners participated in the study. The main aim of the researcher was to find out whether teaching learners in a foreign or unfamiliar language was a bridge or barrier to learning. In this case, the research did not only look at the effect of using English for instructional purposes, but also investigated how the so calledmajor or dominant indigenous languages which are used for instructional purposes in schools, affected the academic performance of Tsonga (Shangani) language speaking children in Chiredzi district of Zimbabwe. Data for this study were collected using lesson observation and a knowledge test. In doing so, fifteen lessons were observed. Fifteen children who came from Tsonga (Shangani) speaking homes were purposively selected and taught in their home language(Tsonga/Shangani) only and the other fifteen children who came from Shona speaking homes were also purposively selected and taught the same topic in their home language (Shona) only and a third group of fifteen Grade Seven learners per school, were randomly selected and taught in English only. A knowledge test was given to each group thereafter. Children from each language condition were allowed to answer questions in their home languages, except for the third group which was taught in English. This group answered the questions in English with a restricted use of Shona. Each of the test results from the knowledge tests were analysed using a One Way Analysis of Variance (ANOVA) and conclusions were drawn. Data were presented in tables. The results from the knowledge tests given showed a significant difference in the mean marks obtained from the three groups (the Shangani, Shona and English group). The result showed that language has a significant influence on the academic performance of learners since the p value was 0.000. This implied that the performance of learners between the three groups is significantly different. On the basis of these observations, the Null hypothesis was rejected. Consequently, conclusions were drawn and recommendations made.

**Keywords:** language; impede; performance; home Language (L1); unfamiliar/foreign language (L2); cognitive development

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#### I. Introduction

#### 1. Background of the study

Research has shown that language important for communication, learning, social interaction and identity (Golele, 2005). According to Vygotsky (1969) cited in Le Roux (1993), language is key to cognitive development and the way language is used at school; has a bearing into scholastic achievement. However, people across globe speak a variety of languages. In a multicultural society such as a Zimbabwe, South Africa, Nigeria, the Democratic Republic of Congo, the USA and others, language diversity exerts a powerful influence on the content, methods of instruction and outcome of school. Lemmer, (1993), observes that in learning institutions, when language is linked to a particular race, cultural group or social class, it becomes a highly contentious issue and may affect the teaching and learning process. Such is the situation in Zimbabwe where some of the former minority language speaking children such as the Tsonga (Shangaans), Vendas, Tongas, Kalangas, Sothos and others, are still compelled to learn in English and Shona or Ndebele. The new constitution of Zimbabwe recognises all the sixteen (16) languages of Zimbabwe as official and could be used for instructional purposes in schools. However, the researcher noted that some conservative elements in some schools in the Chiredzi district of Zimbabwe still resist teaching Tsonga (Shangaan) as a subject and or code switching to Shangani where children fail to grasp certain concepts taught in English or Shona. Consequently, most former minority language speaking children at primary and secondary school level are denied the chance

to express themselves freely and accordingly in their home languages due to resistant teachers and headmasters who still compel them to use English or any of the two former national languages; Shona or Ndebele to do school exercises and examinations. This departs significantly on the constitutional requirements and the proposal put forward by Lev Vygotsky.

Consequently, the researcher's observation is that, this has an effect on the academic performance of learners at Grade Seven Public Examinations. Thus, this study sought to investigate the effects of using an unfamiliar/foreign language in teaching primary school learners in Chiredzi district of Zimbabwe. Although the statistical population figures do not agree, in Zimbabwe, Shona speakers are in the majority, followed by the Ndebele. According to the report by the Zimbabwe Surveyor General, the Shona make up for the 73% of the Zimbabwean population and 20% are Ndebele speaking. Thus, from the remaining 7%, 3% of them speak the indigenous minority languages (Government Printers, 1998). The other 4% is made up other languages.

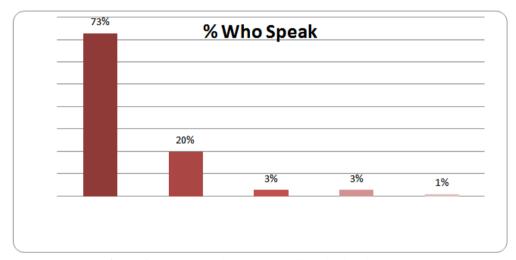


Figure 1: Graph showing language diversity in Zimbabwe

The above graph was adopted from the 2002 Zimbabwe Population Census with statistics showing that Tsonga/Shangani and other languages are minority languages in Zimbabwe.

## II. The Zimbabwean Language Policy

It is important to note that before the new Zimbabwean constitution, Zimbabwe did not have a comprehensive language policy. The legal status of languages in Zimbabwe was stipulated in the 1987 Zimbabwean Education Act, revised in 1996 and in 2000. According to this Act, English was the only official language of Zimbabwe. It was also the language of commerce and government, Shona and Ndebele were taken as National languages and they had restricted official use (Hachipola, 1996). These national languages could also be used for commerce, in parliament and at other official meetings. However, the minutes were finally captured and written in English. Although prominence was given to English, Shona and Ndebele, Zimbabwe, like other African countries, is multilingual. Other languages like Shangani (Tsonga), Venda, Tonga, Kalanga, Nambya, Chewa and others are also spoken. Hence the New Constitution recognises sixteen (16) official languages. The 1987 Zimbabwean Education Act, and its subsequent amendments, took these other languages as minority languages (Zimbabwean Education Act, 1996). Thus, the 1987 Zimbabwean Education Act was clear that the three main Languages, Shona, Ndebele and English were supposed to be taught in schools from first grade as follows:

- 1. English and Shona in areas where the mother-tongue of the majority of the residents is Shona.
- 2. English and Ndebele in areas where the mother-tongue of the majority is Ndebele.
- 3. In areas where minority languages exist, the minister could authorize the teaching of such languages in primary schools in addition to those specified above.
- 4. Either of the languages in "1" and "2" above may be used as a medium of instruction, depending upon which language was more commonly spoken and better understood by the pupils (Nziramasanga, 1999: 79).

The implication of "4" above was that there were no schools that were dominantly non Ndebele or Shona speaking at all. The picture on the ground shows that there are many areas if not districts which are predominantly non Ndebele or Shona speaking at all. To code switch into either Shona or Ndebele seemed to be a worsening the situation to the Tsonga/Shangani speaking children in Chiredzi South district of Zimbabwe. The 1987 Zimbabwean Education Act; therefore created the current language imbalances and some educators in schools still clinch to the old order of teaching children who do not speak neither Shona nor Ndebele at home in

either of the two said languages. The former minority language speakers had to learner speaking either of the two languages and English first, before they could use them for learning.

**Table 1:** Languages of instruction and level in the Chiredzi district of Zimbabwe before the New Constitution.

Table 1: Languages of Instruction and Level before the New Constitution

Grade Level	Language of Instruction
Grades 1-3	Tsonga (Shangani)
Grades 4 - 7	English and Restricted use of Shona
Form 1 - 4	English and Restricted use of Shona
Form 5 - 6	English
Tertiary Level	English

A study by Hachipola (1996) showed that districts like Chiredzi, Beitbridge, Binga, Kariba and Gwanda are predominantly Shangani, Venda, Tonga, Nambya and Sotho respectively (Hachipola, 1996). The results of his study confirmed that the so called minority language speaking learners are in the majority in the aforementioned areas but the educators there still code switch to either Shona or Ndebele where learners fail to master concepts taught in English. This means that before they could start effective learning of the various subject matters, they are compelled to learn and master the two unfamiliar languages first. The researcher observes that not all the learners could effectively master these languages in time to an extent that they could effectively and efficiently utilize them for effective learning and mastery of pedagogic content knowledge in a classroom situation. This observation, prompted the researcher to investigate the effect of using an unfamiliar/foreign language for effective teaching and learning in Chiredzi south district of Zimbabwe.

**Table 3** below shows school performance and district ranking in the General Paper (in which Environmental Science is included) for the years 2005, 2006 and 2007 for Chiredzi district schools in Zimbabwe.

Table 3 Result analysis for the selected schools in Chiredzi district.

YearSchool	2005		2006		2007	
	GP%	Pos.	GP %	Pos.	GP %	Pos.
Mpapa P. School	100	1	93,75	6	100	1
Mtirikwi P. School	100	1	75	33	100	1
Chiredzi Govt. P. School	97,37	4	100	3	98,80	5
Citrus P. School	88,89	21	100	1	100	6
Kamba P. School	93,02	8	96.30	7	98,17	11
Kyle P. School	100	1	96.77	15	98,86	3
Muhlanguleni P. School	43	71	41,43	69	60,78	81
Chingele P. School	51,11	53	63,64	49	70,21	46
Chikombedzi P. School	68,97	47	50	54	54,16	70
Machindu P. School	41,32	49	40,32	81	55,79	49
Gurungweni P. School	40.2	72	50.79	61	79.37	38

*Note*: The first six schools are bilingual.

The first six schools use Shona as their home language and they are taught in English with code switching to Shona, but they can also speak Tsonga (Shangani) while children from the last five schools, predominantly use Tsonga/Shangani as their home language. These are taught in English with code switching to Shona which is an unfamiliar language to them.

According to Gudhlanga (2005), the term "minority" is in itself denigrating. Hence, if a language is denigrated, the culture embodied in that language is also denigrated and the same applies to the people who speak that language. Gudhlanga (2005) argues that compelling children to use an unfamiliar language as a medium of instruction, alienates them from their culture and identity since language is an embodiment of a peoples' cultural values and symbol of identity. Thus, such an observation, prompted the researcher to find out if this is true of the language situation in the Chiredzi south district of Zimbabwe. A report by the Zimbabwe Schools Examination Council (ZIMSEC) on the performance of learners from the Chiredzi district showed that language problems, among other things, were responsible for poor results at both Grade Seven and "O" level (ZIMSEC Report On The 1994 Examinations, 1995). To this effect, part of the report reads:

The perennial problem of poor language usage was still evident. Candidates should be made to realize that one's thoughts can only be understood by other people when these thoughts are clearly communicated. Language is therefore important in achieving the intended objectives. Literal translation from some home language to English has some bizarre ideas being conveyed to some examiners. It was not rare to read about "the man was beaten by lightning" or "I climbed a bus" (ZIMSEC, 1995: 11)

According to this report, the use of unfamiliar languages as mediums of instruction is creating perennial problems for the former minority language speaking children in Zimbabwe's Chiredzi district. Thus, ZIMSEC's observations imply that the language policy which compels candidates to answer questions in unfamiliar languages (English or Shona), compromise the quality of results at Grade Seven level in former minority language schools of Zimbabwe. Hence the need to carry out a study of this nature.

#### **III. Statement Of The Problem**

Use of unfamiliar languages for instructional purposes at primary school level affects academic performance at Grade Seven level.

## IV. Aim Of The Study

This study investigated the effects of using an unfamiliar language in teaching Tsonga/Shangani speaking children in the Chiredzi district of Zimbabwe.

## V. Objectives Of The Study

The major objectives of this study are to:

- a. Examine the effects of the use of anunfamiliar language (L2) as a medium of instruction in teaching primary school children.
- b. Discuss the relationship between language and classroom performance.
- c. Explore how the indigenous Tsonga (Shangani) epistemologies could be studied using the home language.
- d. Suggest some intervention strategies to address the situation.

## VI. Hypotheses

- **H**<sub>1</sub>. Use of a second language as a medium of instruction and learning at primary school level affects academic performance at Grade Seven level.
- $\mathbf{H}_0$ . Use of a second language as a medium of instruction and learning does not affect academic performance at Grade Seven level.

## VII. Rationale

This study was concerned with unveiling the effects of using an unfamiliar/foreign language as a medium of instruction in teaching primary school children in the Chiredzi district of Zimbabwe. A lot has been done in studying the effects of using English language for teaching Shona or Ndebele speaking children but very little has been done in studying the effects of both English and either of the two former national languages on the former minority language speaking children. Thus, from the literature review done, the researcher noted some gaps in that regard. The study paid particular attention to Shangani (Tsonga) learners who; among other minority language speaking children, are often ignored by policy makers and currently, there is no national budget to deliberately support the development of the former minority languages in Zimbabwe to redress the past imbalances that were created by the 1987 Act. This again, places the former minority language speaking children at a disadvantage.

## VIII. Significance Of The Study

From the literature reviewed, the researcher observed that there is no study of this nature which seeks to investigate the effects of using unfamiliar/foreign languages in the teaching of Tsonga/Shangani former minority language speakers in Chiredzi district of Zimbabwe. Several studies concentrated on the effects of using English as a medium of instruction in teaching black African children in general. Little was done to look at the effects of using both English and other dominant African languages in teaching other indigenous minority African children in Zimbabwe. Therefore, a study of this nature is both educationally and practically significant because it is hoped that its results shall go a long way in influencing policy makers to formulate policies that encourage use of bilingual or multilingual programmes for instructional purposes in areas that are linguistically diverse. The researcher hopes that code-switching to the learners' home language will bridge the gap between the formal language of instruction and the learner's mother tongue. This, it is hoped, shall enhance understanding of new concepts and concept formation. Thus, the researcher believed that the study of this nature was quite critical for minority language speaking people the world over, and to the children of Chiredzi in particular.

#### IX. Limitations Of The Study

Although a lot of effort was put to address challenges and bias in this research, the study was not without its own limitations and constraints. The target population of this study is a population that has been subjected to alien/unfamiliar languages for so long and as a result, the participants attached emotions when they gave their responses. This had the potential to distort the results of the study. To guard against this, the researcher remained focused on his research objectives and constantly relied on his research instruments to collect data.

## **X.** Delimitation Of The Study

This study targeted the indigenous Tsonga (Shangani) former minority language speaking Grade Seven children in Chiredzi South. The study focused on the effects of using a foreign/unfamiliar language as a medium of instruction at primary school level. In particular, this study focused on how pupils' conceptual frame works in the classroom were affected by the use of a foreign/unfamiliar language.

## **XI.** Literature Review

Before a review of literature was given, this study started off by unpacking the theoretical framework guiding this study. Lev Vygotsky's (1939) socio-cultural theory was selected as the principal guiding theoretical framework for this study.

## XII. Theoretical Framework Of The Study

Issues on the relationship of language and thought and the origin of language have attracted considerable attention to a number of scholars. Accordingly, it has been a subject of debate for a long time and it is still an ongoing debate. Many theorists and scholars have given different explanations to the relationship of language and thought and also on the origin of language. However, this study used Lev Vygotsky's(1939) Socio-cultural theory as its theoretical framework.

### 12.1 The Socio-cultural theory of Lev Vygotsky

Lev Vygotsky wrote extensively on the relationship of language and thought. In his argument, Vygotsky theorised that language and thought are significantly related. On that note, he agrees with Whorf and Sapir (1956) who also theorised that language and thought are related and develop together. But, Vygotsky (1896-1934), unlike Whorf and Sapir saw a powerful interplay between the mind and language (Miller, 2000). He proposed that speech and thought at first are independent of each other and he argued that babbling and other such sounds are speech without thought. For him, these utterances are just automatic reflexes. For example, a child would cry when he/she is uncomfortable. Vygotsky (1939) theorized that at age 2 onwards, language and thought merge or fuse and function together. He argued that from this age, children learn that objects have names and thus, they use words and symbols (Miller, 2000). Thus, for Vygotsky, after two years, the development of language influences the development of cognition. According to him, if one has not learnt to talk; then one hasn't learnt to think either (Gibson, 1980). The implication of this assumption is that, if we do not have a word, or words for a concept, then, we can't think about that concept. Thus, Vygotsky (1969) views vocabulary deficiency in a certain language, especially where it is used as a medium of instruction, as an impediment to classroom performance.

Vygotsky (1969) cited in Dyanda and Mclane (2000), theorized that at age three, speech between people splits into communicative speech (sometimes called "egocentric speech" or speech for oneself) which is audible speech for oneself. According to him, private speech takes place in the child's mother tongue (L1) and it increases when children meet a difficult task to learn. Vygotsky (1939) unlike Piaget (1939), points out that private speech does not disappear, but it becomes inner speech and it becomes a critical tool in influencing thought because it is particularly used on higher cognitive operations. Based on this, therefore, use of the home language is critical for people's learning. Hence, Vygotsky's socio-cultural theory is a relevant theoretical framework for this study.

According to Vygotsky (1964) language is a semiotic system that acts as a "psychological tool" in transforming natural impulses into higher mental processes. In this case, Vygotsky tried to create a theory that allowed for the interplay between two "lines of development". These are the "natural lines" that emerges from within and the "social historical line" that influences the child from outside (Vygotsky, 1931). Vygotsky called various psychological tools that people use to aid their thinking and behaviour 'signs' and he argued that human thinking cannot be understood without examining the 'signs' the culture provides (Crain, 2005). For him, speech is the most important sign system because it enables us to reflect on the past and plan for the future. Vygotsky argued that language, especially the mother tongue, is essential to cognition because it helps us to think about the world and it also gives us the means to reflect on and regulate our own thinking by use of inner or private speech. For Vygotsky, a person thinks in his home language and then translates it to another language where

necessary. Where this translation fails, there is cognitive dissonance and learning fails to take place. On the basis of this therefore, a child's home language is critical for a child's learning.

According to Vygotsky, the mother tongue is central in the learning of a growing child. Vygotsky maintains that speech facilitates the child's own individual thinking. He argued that by the age of 3 or 4 years, children begin to carry out the kinds of dialogues they had had with others with themselves alone. At first, they do it aloud and later, at the age of 6 or 7 years children tend to carry out such dialogues more inwardly and silently (Crain, 2005). Thus, for Vygotsky, private or inner speech facilitates thinking. What comes out as vocalized material is a product of refined inner speeches that are taking place inside a person before final utterances are made. On the basis of all this, Vygotsky's theory framed this study.

## XIII. Empirical Studies

In this study, a review of literature took a funnel shape. A review of related literatureon the effect of the use of an unfamiliar/foreign language as a medium of instruction was done globally and this was guided by subheadings generated from the research objectives.

### 13.1 Language and Cognition in Bilingual Children

Studies have shown that there are many myths about bilingualism in children. According to Hakuta (1990) some educators have cautioned against the use of two languages in children's learning, claiming that bilingualism causes cognitive, social, and emotional damage to children. Although few scholars today would claim that bilingualism could cognitively harm children, this view has been advocated in the past, and is still occasionally witnessed in the media and even some educators take it as a concern in the schools where they are working. This researcher and many others, consider this opinion as championed by agents of dominant communities whose aim is the perpetuation of the dominance and subjugation of weaker and numerically less privileged societies by bigger and powerful language groups. According to Hakuta (1990) language is a central part of cognitive activity. Therefore, according to his theory, bilingualism can have profound effects on cognitive processes. This study concurred with both Vygotsky (1929) and Hakuta (1990).

## 13.2 The foreign language and classroom performance

A study carried out by United Nations Children's Educational Fund (1999) of African countries which use a foreign language as a medium of instruction, showed that school can be an alien and daunting place for millions of young children who begin class work in a language different from their own. The study observed that compelling children to adopt a foreign language as a language of school would mean that children must give up an entire universe of meaning for an unfamiliar one. According to this study, children may come to believe that the language they have known from birth is inferior from the language of school (United Nations International Children's Emergence Fund 1999).

## 1.4 The hurdles of learning English and learning American culture by immigrant children in the USA

Some recent studies carried out in the USA on the challenges faced by USA immigrant minority language speaking children at school showed that there is a struggle to learn the English language and be accepted in a society that is not always accepting and not always willing to embrace diversity. A study by Olsen (2000) showed that the immigrant learners struggle to master the English language and then use it for school work. These are some of the many obstacles encountered by immigrant children in their efforts to become proficient in the English language; the language of school in the USA. In his study Olsen (2000) showed that these learners often come to realize that in order to be fully accepted, they must abandon their native language and this implies surrendering an aspect of their identity. In his study, Olsen (2000) pointed out that educators need to realize that education occurs in the context of a socially welcoming environment. The same observation was made for the Tsonga (Shangani) children of Chiredzi district of Zimbabwe who struggle to learn in English and some code switching to Shona; two unfamiliar/foreign languages introduced at the same time.

## 1.5 The effects of the use of a foreign language in Ghanaian schools

Owu-Ewie (2006) attributed the students' underachievement, despite starting their education in their home languages to the type of bilingual education model practised in Ghana. The type of bilingual education that was practised in Ghana before the change of policy was the early-exit transition model. To restate the policy, a Ghanaian language was used as the medium of instruction at the lower primary level (P1-3, equivalent to Grade 1-3 in Zimbabwe), and English as the medium of instruction from class four (Grade 4). At the lower primary level, English was taught as a subject (Owu-Ewie, 2006). In Owu-Ewie's (2006) opinion, besides the teacher factor, lack of materials, supervision, and lack of exposure to the target language, was some of the factors which worked against the model, and this may explain why the Ghanaian child is performing abysmally

in English language in particular, and in the academic subjects in general. He observed that in the first place, learners were prematurely transitioned into the use of English as medium of instruction, and second, the transitional process was abrupt. Owu-Ewie (2006) and Lewelling (1991) further pointed out that second language acquisition research has shown that the level of proficiency in the home language has a direct influence on the development of proficiency in the second language and that a disruption in home language development has been found, in some cases, to inhibit second language proficiency and cognitive growth.

#### 13.6 Educational Hurdles faced by minority language speaking children in Botswana

A study by Nyati-Ramahobo (1996) looked at minority language use and early educational hurdles for minority language speaking children in Botswana. The results of the study showed that in an almost monolingual country such as Botswana, it is easy for people to take minority language users for granted. Nyati-Ramahobo observed that their linguistic problems, especially in education, can become easily overlooked. Although Setswana is the national language with 90% of the population speaking it, either as a first or second language, 10% of the people do not speak Setswana at home. As such, they have to learn Setswana at school and use it as a school language for the first four years before switching to English, a third language (Nyati-Ramahobo 1996). The study showed that English and Setswana determine the educational achievement of minority language users for the rest of their lives. The situation of minority language speaking children in Botswana is similar to those of Zimbabwe.

## 13.7 The effects of English instruction on isiZulu home language as experienced by Grade Seven learners in South Africa

A study carried by Morrow, Jordaan, and Fridjhon, (2005) investigated the effects of English instruction on home language (isiZulu) competence on Grade 7 learners from three different contexts (rural, urban, and township), where the exposure to and instruction in English and isiZulu vary considerably. In their study, eight schools including 181 learners participated. The assessment tool was constructed in English and translated into isiZulu. The tool was based on the frequency of occurrence of key concepts in a published curriculum package. The learners showed specific patterns of performance dependent on context (Morrow et al, 2005).

The results of their study showed that Johannesburg (JHB) learners performed significantly better in English than in isiZulu, demonstrating the highest level of competence in English, but they recorded the lowest in isiZulu. Similarly, Soweto learners showed similar proficiency in both languages, demonstrating the same level of competence in isiZulu but significantly higher English scores than the Kwa-Zulu Natal (KZN) learners, who did much better in isiZulu than in English (Morrow, et al 2005). The results from Morrow, et al (2005), showed that language proficiency is central to academic success.

The study also showed that the learners in Kwa Zulu Natal showed the opposite pattern to the Johannesburg learners. Their isiZulu performance was significantly better than their English performance, which clearly demonstrates lack of sufficient proficiency to cope with the academic curriculum in English. According to Bialystok (2001), education in a weaker language will lead to the learner having limited competence in school and may have a negative effect on cognition (Ndamba 2008; Owu-Ewie 2006; Adler, 2001; Cummins 1988).

Other related studies on languages of instruction showed that home language instruction is more important than second language instruction for ultimate literacy and academic achievement in the second language, and learners should be provided with a strong basis in the home language (Ndamba 2008; Adler 2001; Peresuh&Thondlana, 2002; Cummins, 1988). Thus, three researchers concluded that home language maintenance needs to be taken more seriously as a way of developing the cognitive academic language proficiency of learners in the South African context. According to them, the aim of all education should be to foster bi- and multi-lingualism at all levels of language usage (Morrow et al, 2005).

## 13.9 The effects of a foreign language on children's performance

As said in the background of this study, studies in Zimbabwe concentrated on the three major languages, English, Shona and Ndebele. Very little was done on the former minority languages. A study carried out by Chisaka and Vakalisa (2003) at Brickhill and Chikomo Secondary schools where English is used as a medium of instruction ahead of the children's home language (Shona), showed that the language of instruction contributed to the stratification of pupils. Those in high ability classes contributed more meaningfully in lessons while those in low ability classes had some problems with English language. When the home language (Shona) was used, a significant number of the learners were able to communicate effectively, competently, confidently and could articulate issues, feelings and experiences very well (Chisaka&Vakalisa, 2003). Although Chisaka and Vakalisa's (2003), study focused on ability grouping as an instructional strategy, their results also showed that a foreign language as a medium of instruction militated against children's performance. This is one of the

concerns of this study especially that if secondary school children had problems with the foreign language, the researcher assumes that primary school learners would have worse learning problems.

Another study carried out by Shumba and Manyati (2000) in Zimbabwe, showed that the more a person is confronted by a complex problem, the more important the mother tongue becomes. Shumba and Manyati (2000) observed that the issue of language of instruction, communication and conceptual development is critical in any content school subject such as Environmental Science. The duo observed that acquisition of, and development of communicative competencies in that area is crucial if the pupils are to appreciate environmental issues and understand scientific ideas related to Environmental Science. Their study is related to this study which is more on the psychological effect of the use of a foreign language in teaching minority language speaking primary school learners. The observations above seem to agree with Vygotsky (1969 & 1978), whose observations are that the more a person is confronted by a complex problem, the more important the mother tongue becomes.

During the Project Review Mission for Better Environmental Science Teaching (B.E.S.T), Hartmann, Mtetwa, Scheerer and Shumba (1998), noted many instances where pupils could discuss and explain their ideas clearly in their mother tongue, but become tongue tied when called to do so in English (Shumba&Manyati, 2000). Thus, most of the studies cited in this research, showed that the use of a foreign language as a medium of instruction in teaching, has detrimental effects on the performance of learners because the linguistic skills on which much of their cognitive faculties rest, are deemed irrelevant to the task at hand.

#### 13.10 Home language and academic performance in Zimbabwe

According to Westley (1992) cited in Mwamwenda (1996); Hawes (1979), and Hakuta (1986) cited in Travers, Elliot and Kratochwill, (1996) mother tongue education in the primary years offers the best introduction to literacy that eventually becomes useful in the acquisition of English as a second language. According to Ndamba (2008), research on second language acquisition shows that if a child masters the first language, then learning another language becomes less problematic because habits of speech, listening, reading and writing can be transferred to the learning of the second language. This agrees with Cummins' (1988) additive approach to language learning. On the basis of this observation, it seems many researchers and academics seem to agree that the home language is quite critical to human learning and performance; particularly at primary school level (Owu-Ewie, 2006; Adler, 2001; Cummins, 2000). Cummins (1981) in Kroll (1990:95) claims that there is an "underlying cognitive/academic proficiency" common to languages and this enables transfer of literacy related skills across languages.

A study by Ndamba (2008) showed that second language acquisition is closely related to the proficiency level of the first language. In fact, she argues that proficiency in the home language assist in the development of the second language. She calls this the additive approach (Ndamba, 2008;Owu-Ewie, 2006; Adler, 2001; Cummins, 2000). Therefore, Ndamba (2008) argues that it is important for bilingual education teachers and parents of children in bilingual education programmes in Zimbabwe to understand this. She also proposed that if her ideas are taken seriously, this can contribute to change of attitudes by teachers and parents who neglect the home language in learning for fear that the first language negatively interferes with the learning of a second language. Hence, Ndamba (2008) suggested that there is a need for an attitude change and thus, a serious campaign for all stakeholders to appreciate the role played by the home language in the early years of schooling.

However, Ndamba did not study the effects of the mediums of instruction (Shona and Ndebele included) to minority language speakers. She studied language preferences to Shona and Ndebele speakers. This study looked at the effects of Shona, Ndebele and English as mediums of instruction to former minority language speakers of the Chiredzi district of Zimbabwe. However, the observations by Ndamba, are quite critical to minority language speaking children such as the Tsonga (Shangani) children in Chiredzi district, the Venda children in Beit Bridge district, the Kalanga children in Plumtree, the Tonga children in Binga and many other minority language speaking children of Zimbabwe who are compelled to do school work in two unfamiliar languages (English and Shona or Ndebele) at the same time.

## 13.11 Use of a foreign language and classroom participation

Chaudron (1988) asserts that in a learning situation where only the second language (L2) is used as a medium of instruction, learners face problems because their task is threefold. The first is that the student has to make sense of the instructional tasks which are presented in a foreign language and secondly, the learner has to attain linguistic competence which is required for effective learning to take place. Thus, learners should have good receptive and expressive language competencies in order to understand instructions and to express themselves accordingly and meaningfully. Finally the last challenge is that the student is faced with the problem of mastering the content itself. Such is the situation in the Chiredzi district of Zimbabwe where Tsonga (Shangani) language speaking Grade Seven learners are compelled to learn in two unfamiliar languages (English

and Shona). Roy-Campbell's (1996:16) presented interview findings from a former Tanzanian student who recalled:

"... the feeling of incompetence and loss of confidence as a result of a poor or hardly any grasp of English. I know of classmates who stayed dumb in the classroom rather than to embarrass themselves in a language they were not even sure they understood".

#### 13.12 Conclusion

By situating the medium of instruction policies of a number of countries in their specific historic and socio-political contexts, the discussion in this section simply illustrated the central role that these policies have in socio-political and economic processes. This section also showed that the choices made in the medium of instruction, are not purely about educational efficacy but also about social, political and economic participation, social equality and human rights. They determine who has access to resources, power and control and who does not have. As shown in the reviewed literature, such policies are vehicles for political subjugation of minority groups by dominant and powerful groups and the masses by the elites both at intra national and international levels.

## XIV. Research Methodology

A study of this nature which sought to investigate the effects of the use of an unfamiliar/foreign language as a medium of instruction in teaching minority language speaking children compelled this research to take a quantitative approach. This was so because in this research, there were some questions that required some degree of measurement of the problems faced by the Tsonga/Shangani speaking children of Chiredzi district of Zimbabwe. The researcher observed that a quantitative inquiry had an advantage of the representativeness and generalizability of the findings (Greene & Caracelli, 2003). In this study the researcher's interest therefore, was the effect of the use of an unfamiliar/foreign language on the academic performance of Tsonga/Shangani speaking grade seven learners in Chiredzi district of Zimbabwe.

## 14.1 The true experiment

In doing so, the researcher grouped the learners into three groups; the X, Y and Z group. An attempt was made to hold all conditions constant except the independent (experimental) variable. To standardise the lessons, there was the utilization of a computer recorded voice for teaching. This ensured high internal validity (experimental control) in comparing the experimental group to the control group on the dependentor "outcome" variable. That is, when internal validity was high, differences between groups could be confidently attributed to the treatment, thus ruling out rival hypotheses attributing effects to extraneous factors. By doing this, the researcher was able achieve a better balance between internal and external validity levels. Data were collected through the knowledge test and a lesson observation. Specifically, this was meant to investigate the effect of using an unfamiliar/foreign language on the academic performance of Tsonga (Shangani) minority language speaking Grade Seven learners.

## **XV.** The Target Population

The target population for this study are the Tsonga/Shangani speaking Grade Seven learners in the Chiredzi district of Zimbabwe. Best and Khan (1993) view a population as any group of people or individuals that have one or more characteristics in common that is of interest to the researcher. Frankael and Wallen (1996) concur with Best and Khan (1993) and they view a population as a group of individuals to which the results of the study were applied. According to the Surveyor-General (1998), there were about seventy five primary schools in the Chiredzi district of Zimbabwe by 1998. Forty two of them are in Chiredzi South where the learners predominantly speak Tsonga/Shangani at home. The other thirty three are in Chiredzi North and are bilingual (they speak both Shona and Tsonga/Shangani). However, in this study, the researcher was interested only in Grade Seven learners of Chiredzi South's forty two (42) primary schools. These were approximately 3 864 at the time when the study was carried out (Government Printers, 1998).

## 17. The sample and sampling process

As said before, there are many Tsonga/Shangani speaking schools in the Chiredzi district of Zimbabwe. The study targeted only four hundred and fifty (450) Grade Seven learners. The researcher observed that not all the schools could be studied since the number was too big to manage and some schools had an insignificant number of Shona speaking learners. Another challenge was that some schools had no electricity for using a computer recorded voice for teaching. To deal with such problems purposive sampling was done to select schools that had both Shona and Tsonga (Shangani) speaking Grade Seven children (bilingual) and had electricity so that a computer recorded voice could be used for standardised lesson delivery. In addition to that, purposive sampling was again used to select those children who spoke a certain given language so that they

constituted one group. Thus, fifteen children who spoke Tsonga (Shangani) as their home language formed a group per school. The same applied to those who spoke Shona as their home language. These were code named X and Y groups respectively and these were the experimental group. The Z group were a control group and these were taught the same lesson but the medium of instruction was English with code-switching to Shona where it was assumed that the learners did not understand well. These fifteen learners were randomly selected and the language of instruction used was the one which teachers used on a day to day basis in the Chiredzi district schools.

Of the forty five participants, fifteen Tsonga/Shangani speakers were taught in Tsonga (Shangani), fifteen Shona speakers in Shona and a control group of fifteen was taught in English. See table 4 on page 23 below. The lesson that was taught was in Environmental Science which the researcher believes is rich in scientific terms which are also available in Tsonga and Shona. The topic taught was unfamiliar to all the participants but the content was relevant and appropriate to the grade level and was drawn from their Grade Seven syllabus.

#### XVI. Data Collection Methods

## 18.1 Multiple measures

As shown in Table 4 below, the researcher employed two data collection instruments. This included lesson observation and a knowledge test. How these were used is explained in the next page.

**Table 4** Showing data collection instruments

Home Language	Knowledge Test	Lesson observation
Tsonga (Shangani)	45	45
Shona	45	45
English	45	45

#### 18.2 Lesson observation

As shown above, in this study the researcher used two methods to collect data. The researcher used lesson observation in which the lessons were taught using a computer recorded voice. Fifteen selected Tsonga (Shangani) speaking children per school were taught in Tsonga (Shangani). This group was code named the X group. The same lesson topic was also taught to another fifteen selected Shona speaking children per school using their home language (Shona). This group was also code named the Y group. Lastly, another fifteen randomly selected children per school were also taught the same lesson; but this group was taught in English and some restricted use of Shona. For this group, code switching to Shona was done to facilitate maximum understanding. This group was code named the Z group. This was the control group and this was the usual way of conducting lessons in the Chiredzi district of Zimbabwe. This group was a mixed ability group. It contained learners who came from both language conditions. That is, Tsonga (Shangani) and Shona.

**Table 5** below shows the number of participants in the lessons that were taught per language condition per school.

Between Subjects Design

Table 5: Showing the number of	of participants in lesson observ	ation per lang	guage condition p	per school
Instructional Languages	Tsonga (Shangani)	Shona	English	Total Number of Participants
Home languages				•
Tsonga (Shangani)	15	15	15	45
Shona	15	15	15	45
Total	30	30	30	90

The researcher sat in class, controlled the computer taught lessons and observed how the learners responded to the questions, how the learners comprehended and communicated using different mediums of instruction. Observations were entered into lesson observation schedules. To guard against bias, Best and Khan (1993), advise that a lesson observation guide should be used to record the responses and proceedings of the lessons. An attempt to objectively capture what was seen and heard in the lessons; a well prepared lesson observation guide was used. The classes taught were of mixed ability and to this effect; grouping was randomly done to ensure that both fast and slow learners were represented in all three groups.

Thereafter, a knowledge test was given to ascertain the level of performance of learners when lessons are given in different language conditions. Learners were allowed to respond to the questions in their home languages. The test was marked, scores entered in a mark schedule and with the aid of the SPSS a One Way Analysis of Variants (ANOVA) was run to find out the effect of the language of instruction on the academic performance of learners at Grade Seven level by calculating the means, the standard deviation and also to find out if the P-Value is > or < 0.05 which was set as the standard or significance level. The P - value is the probability of observing a difference by chance. Therefore, if the P - value is less than 0, 05, then, it was

concluded that there is a statistical difference in the factors analysed. Details of the results of this study are shown in the result section.

## XVII. Ensuring the Reliability and Validity of the Instruments

#### 19.1 Reliability

Reliability is when an instrument measures consistently, that is, the same thing more than once and result in the same outcomes. Black (1999) says that reliability is concerned with the stability of an instrument over time, in other words, whether it provides much the same scores on two different occasions, that is, after test–retesting. To ensure reliability of my instruments, a test-retest was done. Test-retest reliability is a measure of how stable an instrument is over time.

#### 19.2 Validity

Validity is the ability of an instrument to measure what it is intended to measure. To ensure this, the researcher designed his data collection instruments in such a manner that they were logically consistent and covered comprehensively all aspects of the abstract concept to be studied. However, there are many types of validity (Black, 1998), but for this study, it is the construct and the content validity which were significantly relevant. To ensure construct validity, the observation schedules were drawn in a manner that they could incorporate sufficient characteristics that cover all relevant aspects of the concept or construct under study.

#### XX. Data Analysis

Since this studywas quantitative, the statistical methods were used to analyse data. In analysing the results of the knowledge test scores, the SPSS was employed to run an Analysis of Variance (ANOVA) with the home language (Tsonga or Shona) and the language of instruction (Tsonga, Shona or English) as the between-subjects factors. To summarise data, percentage tables of responses were drawn and descriptive explanations of observed behaviour applied. Also, in lesson observations, a lessen observation guide was drawn and applied to investigate the set objectives.

#### 21. Ethical considerations

Research with human beings must be carefully thought out and carefully planned. Experience has taught the researcher that participants are usually suspicious of investigative strangers and they may choose not to participate or open up for fear of victimisation. To avoid this, the researcher introduced himself to the participants and all the stake holders. With the aid of a covering letter from the Provincial Education Director for the Masvingo Province, the researcher acquainted the respondents with the purpose of his study. Best and Khan (1993), have this to say on the covering letter:

The cover letter should assure the respondents that all information will be held in strict confidence or that the questionnaire is anonymous ---. To omit this would virtually guarantee that many of the questionnaires would go into the waste basket.

Hence the researcher took care of this. In addition to that, before carrying out a study of this nature, consent with the Provincial Education Director for the Masvingoprovince and the chairpersons of the Parents-Teachers Associations of the affected schools were sought.

## 22. Delimitation of the study

This study targeted the indigenous Tsonga/Shangani language speaking primary school children in the Chiredzi district of Zimbabwe. Chiredzi is found in the South Eastern part of Zimbabwe's Masvingo province. The majority of the people in this district speak Tsonga/Shangani as their home language and therefore it follows that most of the children in this district speak Tsonga/Shangani as their home language. The study also focused on the effects of using a foreign language as a medium of instruction at primary school level. The study was done in the context of Environmental Science since the researcher assumed that it is in that subject area where there are a lot of new and scientific terms. Many of these terms also have other names in Tsonga/Shangani.

## 23. The importance of triangulation in this research

Ary, Jacobs and Razaviel (1996) view triangulation as the use of multiple sources of data, multiple observers and multiple methods to collect data. In this study a two data collecting instruments or procedures were employed to make up for the limitations left out by the use of other research instruments.

The researcher used triangulation to cross-validate the data sources and data collection strategies and this enhanced the validity of his research. Babbies (1990) also adds that when a conclusion is supported by data collected from a number of different instruments, its validity is enhanced. Denzin (1989) advises that the flaws of one method are often the strengths of another. Consequently, the researcher saw it fit to employ multiple

methods to validate his research findings since, as said above, the inadequacies of one method would be offset by the strengths of another. At the same time, the strengths of one method can be enhanced by the strengths of other methods. Thus, in a study where human participants were involved, the researcher observed that triangulation promoted validity and reliability in the study because human beings have minds and they can change or pretend, to influence the outcome of the results or to go by the interests of the researcher.

#### 24. Data Presentation

As said above, data was collected through the use of four data collection instruments which are lesson observations and a knowledge test. In lesson observations, the researcher was interested in the learners' the level of performance in the knowledge test given after computer assisted lesson delivery. The performance of the learners from all the three groups, X, Y and Z who participated in the study in each of the five selected schools was recorded. As said before, each of the three groups was taught using a computer recorded voice and this was meant to standardise the lessons. The X group was taught in Tsonga (Shangani) which is the home language to 76.1% of the participants. The Y group was taught in Shona; which is a home language to 23, 9% of the participants in the area under study. Lastly, the Z group was taught in English with code-switching to Shona to enhance understanding. This was in line with the previous government policy as stipulated in the 1987 Education Act. The legacy of which is still rife in the schools.

These tables depicting the information gathered by use of lesson observation and a knowledge test were used as the main forms of data presentation. From the tables, the patterns and relationships between and among respondents, were discerned and described. Since this study was quantitative, data collected from the study were analysed statistically. A One Way ANOVA was used to analyse data from the knowledge test given to the learners after the lesson observations. As said above, data presentation was done showing how respondents felt about the variables and sub-variables drawn to answer the research questions or sub-problems mentioned in background section.

#### 24.1 Results from Lesson Observation

## 24.1.2 The effects of using an unfamiliar/foreign language as a medium of instruction on classroom performance

Table 6 is a summary of the lessons observed on the learners' interaction or use of English language as a language of instruction. As shown on the lesson observation schedule, each sub-problem was investigated during lesson observations. These sub-problems help to investigate the effects of using an unfamiliar/foreign language as a medium of instruction in the teaching of Environmental Science at Grade Seven level.

Table 6 Lesson observations on the learners' use of English language. This was the Z group

		Percenta	ge Ratings		
Rating —	1	2	3	4	5
Variable (Observed behaviour)	Very weak	Weak	Not sure	Satisfactory	Outstanding
Level of pupils receptive language	20%	40%	-	-	-
Level of pupils expressive language	20%	20%	-	40%	20%
Level of participation in the lesson taught using English language	-	40%	-	40%	20%
Appropriateness of terms used in sentence construction	20%	20%	-	60%	-
Appropriateness of terms used in concept formation and development	40%	20%	-	40%	-
Level of performance on the assignments given	-	60%	-	40%	-

Key	
1	= Very weak,
2	= Weak
3	= Not Sure
4	= Satisfactory

## 5 = Outstanding

As shown on Table 6, the researcher's observation ratings on the Z group were spread from very weak (1) to outstanding (4). On the sub-variable: level of learners' receptive language: the results on Table 6 show that the researcher rated 20% of the learners as very weak, 40% as weak and the total percentage of those who were weak is 60%. Forty per cent were rated as satisfactory and none of the learners were rated outstanding or not sure. On the basis of the researcher's ratings, it can be concluded that the majority of the learners had problems with understanding the English language as it was used for instructional purposes.

On the level of learners' expressive language, the results on Table 6 shows that the researcher rated 20% of the learners in the Z group as very weak, another 20% as weak, 40% as satisfactory and 20% as outstanding. On average the researcher's ratings on the level of learner's expressive language showed that 60% of the learners in the Z group satisfactorily expressed themselves in English while 40% of them did that weakly. Thus, on this variable, the researcher observed that 60% of the learners satisfactorily expressed themselves in English.

On participation in class, when English was used for teaching and learning, the researcher observed that 40% of the learners were weak and another 40% satisfactory. 20% were rated outstanding and thus, on average 60% of the learners in the Z group participated positively. However, the researcher observed that seemingly some of the teachers had informed the learners that since there was a visitor, they should try to participate. This was evidenced by the fact that the majority of learners gave wrong answers to the questions asked and also showed lack of understanding to some of the questions asked.

On the sub-variable: appropriateness of terms used in sentence construction, the researcher rated 20% of learners as very weak, another 20% as weak and 60% as satisfactory. Similarly, on the sub-variables: appropriateness of terms used in concept formation, the researcher observed that 40% of the learners were very weak, 20% were weak and 40% satisfactory. On average, 60% of the learners had problems with terms in concept development. Thus, these observations could have meant that learners have problems with the English language in concept formation and development. To validate this, the researcher also observed lessons when the learners were taught in their home languages; Tsonga (Shangani) and Shona for those who speak Shona as their home language. The results of which are shown in Table 7 below. The next Table summarised the results on how the lack of competence in the language of instruction affected participation in class.

## 24.1.3 The effect of the language of instruction on participation in class

**Table 7** Results on the lessons observed when the home languages; both Shona and Tsonga (Shangani) were used for instructional purposes

	The researcher's observations					
Variable (Observed behaviour)	1	2	3	4	5	
	Very weak	Weak	Not sure	Satisfactory	Outstanding	
Level of learners' receptive language when the home languages						
(Tsonga and Shona) were used		-	-	-	100%	
Level of learners' expressive language in their home languages						
	-	-	-	-	100%	
Classroom participation when the children's home languages						
(Tsonga and Shona) were used	-	-	_	40%	60%	
Appropriateness of terms used in sentence construction when						
the children's home languages (Tsonga and Shona) were used	-	-	_	40%	60%	
Appropriateness of terms use in concept formation and						
development when the children's home languages (Tsonga and						
Shona) were used	_	_	_	_	100%	
Level of performance on the assignments given when the						
children's home languages (Tsonga and Shona) were used				20%	80%	

As stated in Table 7 above, the lesson that was taught to the Tsonga (Shangani) "X" group was the same in content and depth as that which was taught to the Shona 'Y' group and both were taught with the aid of a computer recorded voice in order to standardise them. Both were taught in the learners' home languages. As shown in Table 7, the researcher rated the learners' receptive and expressive language as 100% outstanding when their home languages were used. The researcher observed that the learners understood the language of instruction used and expressed themselves easily in their home languages. The researcher also noted that participation was enhanced when the participants' home languages were used. Thus, the researcher observed

that the home language acted as a bridging gap into an unfamiliar language of school (English) in the Chiredzi district of Zimbabwe.

The results in Table 7 show that on the variable; classroom participation, the researcher rated 40% of the learners as having participated satisfactorily and 60% of them as having participated in an outstanding manner. The overall picture is that participation was significantly enhanced when the home-language was used. Where English language only was used in the Z group, the researcher rated the learners' participation at 60% against a 100% rating when the home languages were used. Thus, the ratings show that when the home languages were used, participation was enhanced. On the sub-variable; appropriateness of terms used in sentence construction, the researcher observed that 40% of the learners satisfactorily used appropriate terms and 60% of them were rated outstanding in how they used appropriate terms in sentence construction.

Thus, on this sub-variable, the researcher observed that 100% of the learners used appropriate terms in sentence construction when their home languages were used for teaching and learning. Similarly, on the subvariable, appropriateness of terms used in concept formation, the researcher rated 100% of the learners in the X and Y groups as outstanding in how they used terms. Thus, on the basis of performance of the X and Y groups on the two sub-variables mentioned above, it may be concluded that use of the learners' home languages or introducing bilingual programmes at primary school level, may benefit the learners in a significant way. When the performance of the Z group which was taught in English only as compared to the performance of the X and Y groups which were taught in their home languages, it was noted that these groups performed much better during the lessons and also in the knowledge test given.

#### 25 Results on data collected through the use of a Knowledge Test

As said in methodology section, after the lessons were taught in each of the three language conditions; Tsonga (Shangani), Shona and English and also, in each of the selected five schools, a knowledge test was given to each group. The groups who were taught using their home languages were allowed to answer questions using their home languages. Below is a table showing the schools which participated in this study and in the knowledge test given and the number of participants per language condition.

 Table 8: The schools and number of learners who participated in the knowledge test given per language condition

	Langua	ge of Instruction	Value Label	Total N0. Per Group
Group	1.	Tsonga (Shangani)	X	76
	2.	Shona only	Y	76
	3.	English and Restricted use of	Z	79
	Shona			
School	1.	Chikombedzi Pr. School	A	45
	2.	Muhlanguleni Pr. School	В	44
	3.	Chingele Pr. School	C	46
	4.	Gurungweni Pr. School	D	45
	5.	Machindu. Pr. School	E	51

Table 8 above shows a summary of the learners who participated in the knowledge test given. These learners were chosen from five selected schools and the study took place in the learners' schools. The learners from each school were divided into three groups and two of them based on their home languages, while the third group was the one taught in English. These groups were the X, Y and Z. X comprised of 15 learners per school who spoke Tsonga (Shangani) as their home language. These were taught and answered questions using their home language. The Y group comprised of those who spoke Shona as their home language. Again, these were taught a similar lesson taught to the X group, but these were taught using Shona and they wrote a test using their home language as well. Later, a group of 15 learners, sampled from both language conditions, but who did not participate in the previous lessons, were taught a lesson which was assumed to be of the same level of difficulty with the ones taught using the learners' home languages. Both lessons were drawn from the learners' Grade Seven Environmental Science syllabus. Thus, the level of difficulty for both lesson topics; was assumed to be the same. Table 8 shows a summary of the learners who participated in the study per language condition and also per school.

The following Table, (Table 9) is a summary of the means of the learners' performance per school per language condition.

**Table 9** Summary of the means of the learners' performances per school per language condition

Dependent Vari	able: Marks				
•				Total.	N0/
Group	School	Mean	Std. Deviation	School/ (	Group

X - Shangani	A	8.40	1.844	15	
(Tsonga)	B	8.33	1.175	15	
	C	7.73	1.981	15	
	D	7.40	1.957	15	
	E	8.13	1.708	16	
	Total	8.00	1.751	76	
Y- Shona	A	8.00	1.890	15	
1 Shonu	B	6.40	1.352	15	
	C	6.81	1.515	16	
	$\stackrel{\circ}{D}$	6.80	1.612	15	
	E	6.60	1.502	15	
	Total	6.92	1.639	<b>76</b>	
Z - English	A	5.07	1.907	15	
	B	4.57	2.102	14	
	C	4.07	1.580	15	
	D	5.13	2.100	15	
	E	4.55	2.395	20	
	Total	4.67	2.043	79	
Total	A	7.16	2.374	45	
	В	6.48	2.183	44	
	$\overline{C}$	6.22	2.280	46	
	$\stackrel{\circ}{D}$	6.44	2.095	45	
	$\stackrel{-}{E}$	6.27	2.450	51	
	Total	6.51	2.290	231	

Table 9 above shows a summary of the means of the learners' performances per school per language condition. Also, it shows the number of participants per school per language condition. In total, 231 learners participated in the observed lessons and knowledge test. Those taught in Tsonga/Shangani performed better than the other two groups. The highest mean is 8.40 scored at school A and the lowest being 7.40 coming from school D.

Those taught in Shona (Y) language followed with their highest mean being 8.00 and these, again came from school A. the lowest mean for this group is 6.40 and it came from school B. Those taught in English (Z) language condition, performed poorly with the highest mean being 5.07 and the lowest being 4.07. Both of these means came from school C.

When the 95% confidence interval was calculated, it was observed that the 95% confidence interval means was going to lie from 6.477-9.324 for those taught in Tsonga (Shangani). Those taught in Shona, it was between 5.477 to 8.932 whereas those taught in English; the lowest interval mean stood at 3.143 while the highest upper bound was 5.990. The following Table shows the estimated marginal means per language condition per school.

 Table 10 Estimated marginal means per language condition per school

1. Group * School					
Dependent Variabl	e: Marks				
Group	School	Mean	Std. Error	95% Confidence	Interval
				Lower Bound	Upper Bound
X - Shangani	A	8.400	.469	7.477	9.324
(Tsonga)	В	8.333	.469	7.410	9.257
	C	7.733	.469	6.810	8.657
	D	7.400	.469	6.477	8.323
	Е	8.125	.454	7.231	9.019
Y - Shona	A	8.000	.469	7.077	8.923
	В	6.400	.469	5.477	7.323
	C	6.813	.454	5.918	7.707
	D	6.800	.469	5.877	7.723
	E	6.600	.469	5.677	7.523
Z - English	A	5.067	.469	4.143	5.990
•	В	4.571	.485	3.616	5.527
	C	4.067	.469	3.143	4.990
	D	5.133	.469	4.210	6.057
	Е	4.550	.406	3.750	5.350

The researcher was also concerned with ascertaining whether language had a significant bearing on the performance of learners. Thus, Table 11 below summarises the findings to that effect.

<b>Table 11</b> Tests of the between subject eff	fect
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Tests of Between-Subjects Effects								
Dependent Variable: Marks								
Source	Type III Sum of Squares	df	Mean Square	F	Sig.or P-Value			
Corrected Model	494.516 <sup>a</sup>	14	35.323	10.727	.000			
Intercept	9800.863	1	9800.863	2976.474	.000			
Group	442.301	2	221.151	67.162	.000			
School	23.772	4	5.943	1.805	.129			
Group * School	22.126	8	2.766	.840	.568			
Error	711.240	216	3.293					
Total	10985.044	231						
Corrected Total	1205.756	230						

a. R Squared = .410 (Adjusted R Squared = .372)

Table 11 above shows the results of a one way ANOVA that was performed to ascertain whether the language of instruction had a bearing on the performance of learners at Grade 7 level. As said above, the languages used to teach the three groups of learners were Tsonga (Shangani) "home language to 76,1" of the learners who participated in the study", Shona (home language to 23,9" of the learners who participated in the study and these were taught in Shona and a control group (Z) was taught in English; the official medium of instruction. The result shows that there is a significant difference in the mean marks obtained from the knowledge test between the three groups. That is, those taught in Shangani, Shona and English. The result shows that there is a significant influence on the performance of learners since the P-value is 0.000. This implies that the performance of the learners between the three groups is significantly different.

From the observations above, if the means of any two of the language conditions are statistically different (not equal) then we do not accept the Null hypothesis  $(H_0)$ . In this study the null hypothesis read; "Use of a second language as a medium of instruction and learning does not affect performance at primary school level". However, in this study, the results showed that the language, (group) has a significant effect on the performance of learners because the P-value from the result of the One Way ANOVA performed is zero (0.000). The P-value is the probability of observing a difference by chance. Therefore, if the P-value is less than 0.05, then there is a statistical difference. Thus, on the basis of this observation, the researcher failed to accept the Null hypothesis  $(H_0)$ . Table 5.7 below is on pair wise comparisons. It compares the three groups.

**Table 12** Pair wise comparisons

Pair wise C	Pair wise Comparisons								
Dependent Variable: Marks									
						•			
				Sig.aor	95% Confidence Interval for Difference <sup>a</sup>				
Group	Group	Mean Difference	Std. Error	P- Value	Lower Bound	Upper Bound			
X	Y	1.076*	.294	.001	.365	1.786			
	Z	3.321*	.293	.000	2.614	4.027			
Y	X	-1.076*	.294	.001	-1.786	365			
	Z	2.245*	.293	.000	1.539	2.951			
Z	X	-3.321*	.293	.000	-4.027	-2.614			
	Y	-2.245*	.293	.000	-2.951	-1.539			

Based on estimated marginal means

As shown in Table 12, a post Hoc multiple comparisons (pair wise comparison) was also performed. Again the P-value was less than 0.05 which is conventionally the cut off point for the P-value. The P-value of the Tsonga group and the Shona group is at 0.001 and the same applies for the Shona and English groups. For the rest, the P-value is 0.000. This post Hoc multiple comparisons were performed to ascertain where the actual differences lie. However, this is only done where the Null hypothesis has been rejected. Thus, in this study, the null hypothesis was rejected and therefore, the post Hoc comparison was necessary. The researcher was also interested in ascertaining whether the schools had a significant effect on the performance of learners. Table 12 below compares the schools studied to find out if they had any significant effect on the performance of learners.

Table 12 P-value between the schools

				Sum of Squares	df	Mean Square		Sig. Or P. Value
Marks	obtained	in	Between Groups	448.777	2	224.389	67.585	.000

<sup>\*</sup>The mean difference is significant at the .05 level.

the Environmental Science test	Within Groups	756.978	228	3.320		
	Total	1205.756	230			
School	Between Groups	.853	2	.426	.206	.814
	Within Groups	471.416	228	2.068		
	Total	472.268	230			

The researcher was also interested in ascertaining whether the school as a factor significantly affected the performance. The result of the one way ANOVA showed that the school has statistically insignificant effect since the P-value obtained when testing the statistical differences in the marks obtained from the 5 different schools is 0.814. This figure is greater than 0.05 (the alpha level that was set). Thus, the results show that the school is not a factor. Hence, there is no sufficient support that the schools differed. Any observed differences may be due to chance. Hence, any school can show the same result.

## 27 Summary, Discussions, Conclusions And Recommendations

In this section, the researcher concluded the entire research by giving a summary of the whole research, drew some conclusions from his study and made some recommendations on the basis of his findings. In the summary, the researcher briefly looked at the research problem, the method, designs used, the limitations of the study and the implications of the findings. The conclusion section summed up answers to the research objectives stated in the background section. These conclusions were made on the basis of the findings of this study. From the conclusions drawn, recommendations for further research, language policy review and recommendations on the appropriate medium of instruction for Tsonga (Shangani) primary school learners in the Chiredzi district of Zimbabwe were made.

#### 28. Summary

This study set off to investigate the effects of using an unfamiliar/foreign language to teach Tsonga (Shangani) Grade Seven learners in Chiredzi district of Zimbabwe. Since the Chiredzi district is quite a big area, the researcher sampled five schools, which he used for his study. As implied in the delimitation of the study, the researcher's target population were all Tsonga (Shangani) and Shona speaking Grade Seven learners. 222 learners participated in the study. Three lessons per school were observed and Tsonga (Shangani) language was used as a medium of instruction to 15 Tsonga (Shangani) speaking learners (code named, the X group), the other group 15 were taught in the Shonaand these were learners who spoke Shona as their home language (code named the Y group) and the last group was the Z group, which was taught using English and some restricted use of the Shona language. Using English and some code switching to Shona is what most teachers do in Zimbabwean primary schools. Language competency and problems in all the three language conditions were observed, noted and recorded in a lesson observation guide. Data presentation and analysis took a quantitative approach since the study was quantitative.

### XVII. Conclusions

This study set out to investigate four research objectives and these were:

The major objectives of this study are to:

- a. Examine the effects of the use of an unfamiliar language (L2) as a medium of instruction in teaching primary school children.
- b. Discuss the relationship between language and classroom performance.
- c. Explore how the indigenous Tsonga (Shangani) epistemologies could be studied using the home language.
- d. Suggest some intervention strategies to address the situation.

## 29.1 How the use of an unfamiliar/foreign language as a medium of instruction in the teaching of Environmental Science at primary school level, affected classroom performance at Grade Seven level?

To investigate the above problem, the researcher used two data collection instruments. These were lesson observation and the knowledge test. As shown on table 5 in this study, the researcher rated 60% of the learners as weak or satisfactory on how they interacted with the English language. The study established that 60% of the learners have serious problems in understanding the English language although it was also established that 60% of them satisfactorily expressed themselves. Their major problem was that they used inappropriate terms in the taught concepts and hence this compromised the quality of their work since most of the terms they used in answering questions and describing environmental phenomena were a direct translation from their home languages. From these observation, the researcher concluded that learners in Chiredzi district under perform at Grade Seven level because they use two unfamiliar/foreign languages to do school work and for examination purposes.

When the results of the Z group which was taught in English only were compared with those from the X and Y groups which were taught in their home languages it was observed that the learners' expressive and receptive language in the X and Y groups were rated 100% satisfactory or outstanding. The researcher concluded that the home language acted as a facilitative tool for learning and a bridging gap into an unfamiliar language of school (English and Shona) where coding switching was used and hence it enhanced performance. Similar observations were made by UNICEF (1999), in their survey on the state of children in African schools. Their study showed that the school can be an alien and daunting place for millions of young children who begin class in a language different from their home language.

Owu-Ewie (2006), in his studies in Ghana where there is an early exit transitional model where the home language is used from P1-3, which is equivalent to Grade One and Three in the Zimbabwean situation, also made similar observations. Similarly, in Botswana Nyati-Ramahobo (1996) observed that minority language speaking children are taught in Setswana at lower level and their performance was comparatively low up until Standard Six, but at Standard Seven and above, she observed that their receptive and expressive language improved. Morrow, et al (2005) made similar observation in South Africa where Zulu language speaking children performed better in an isiZulu test and badly in an English test. This study showed that in Zimbabwe's Tsonga (Shangani) speaking Grade Seven children in Chiredzi district could not perform up to their expected level when they did assignments in an unfamiliar/foreign language than when they did when they used their home language (Tsonga/Shangani).

The researcher thus, observes that use of an unfamiliar/foreign language for instructional purposes implies, in a way, excluding the Tsonga (Shangani) learners in the school system. The researcher observed that Tsonga (Shangani) learners struggle to master and understand two unfamiliar/foreign languages before they could begin the actual learning process. Similar observations were made by Olsen (2000) where his studies in the USA on the challenges faced by USA immigrant minority language speaking children at school showed that there is a struggle to learn English language and be accepted in a society that is not always accepting and not always willing to embrace diversity.

During the post observation conference, the teachers confirmed that some Tsonga (Shangani) learners did not understand them well when they used English and/or Shona only during the lessons. Similarly, during lesson observation, the results of the study showed that the more complex the problem, the more important the home language becomes. Consequently the researcher concluded that the issue of language of instruction, communication and conceptual development is critical for learning.

# 29.2 The use of the home language (L1) as a medium of instruction at primary school level and how it enhances classroom performance or learning.

The results of this study showed that use of the home language as a medium of instruction at primary school level enhances performance or learning in the classroom. The researcher observed that during lesson observation, the X and Y groups which were taught the same lesson topics using a computer recorded voice in the same classrooms per school but using their home languages performed much better in a knowledge test than they did when an unfamiliar/foreign language (English) was used. Table 9 shows the summary of the means of the learners' performances in a knowledge test per school per language condition. The results of the study show that the X group (those who were taught in Tsonga/Shangani) scored the highest mean; which was 8.400. These were followed by the Y group (those who were taught in Shona) and their highest mean was 8.000. The highest mean for the Z group (those taught in English), was 5,133 and this was the lowest for all the three language conditions.

During lesson observation, the researcher also observed that when learners were taught using English only, they were hesitant to answer some of the questions orally and those who tried, often used inappropriate terms and poor Englishwhich delayed or compromised their efficiency to quickly respond to questions. This distorted meaning and hence, negatively affected the quality of the answers they gave. On the other hand, when the home language was used to teach the X and Y groups, performance was significantly high in both competence to answer questions accurately, precisely and correctly and also in their ability to conceptualise the taught material using appropriate and precise scientific terms.

The observations from this study also agree with those made by Morrow, et al's (2005), in their study in Kwa Zulu Natal, Soweto and Johannesburg schools of South Africa which showed that language proficiency is central to academic success. In addition to that, it also confirmed Cummins' (1988) claim that the development of cognitive academic language proficiency (CALP), enables learners to understand and use the decontextualized, formal language register of classroom discourse and text books.

Thus, from the study, the researcher concluded that the home language has a significant role in learning and performance. The study showed that children, early in life, use their home language (mother-tongue) to organise their environments and relate themselves to it. Apart from organising the environment, the researcher

also observed that the home language is crucial in sustaining attention and memorising new information. During a post observation conference, one Grade Seven teacher concluded by saying:

human beings work, eat, drink, rest, sleep and dream in their mother-tongues, and as such their developments should be built on the languages that best express their needs, dreams, interests and aspirations.

## 29.3 How lack of competence in the language of instruction affected learners' participation in class.

The results emerging from this study suggest that lack of competence in the language of instruction affect learners' participation in class. Although the ratings in Table 7 in this study showed that during lesson observation 40% of the learners in the X and Y groups participated satisfactorily; results from the average participation rating is 100%. Thus, from this study, the overall picture is that participation is significantly enhanced when the home language is used for instructional purposes. Consequently from the results of this study, the researcher concluded that use of the home language is essential in class to enhance learners' participation in class. The researcher also observed that, in a classroom situation, communication is best when involving a language understood by the learners, and consequently, teaching is best when it uses a language, which is understood by the recipients (the learners).

In this study, the researcher observed that the participants lacked both the receptive and expressive language in an unfamiliar/foreign language while they displayed excellent competence in their home languages. Thus, from the observations made in this study, then, it was quite reasonable to assume that receptive language skills must precede expressive language skills. Therefore, children must understand what words and sentences mean before they use them in speech and writing. In her study on language preferences in Zimbabwe, Ndamba (2008) observed that learners should have good receptive and expressive language competencies in order to understand instructions and to express themselves accordingly and meaningfully. Hence the argument that use of an unfamiliar/foreign language as medium of instruction in teaching minority language speaking children, impedes performance at Grade Seven level.

On the basis of the evidence obtained from this research and the results coming from the reviewed literature, it can be concluded that use of an unfamiliar/foreign language as a medium of instruction in the teaching of Environmental Science affect classroom performance of Tsonga (Shangani) Grade Seven learners. The results of the study showed that use of an unfamiliar/foreign language as a medium of instruction at Grade Seven level may be a barrier to learning. Learners remembered less, and they participated less during class when using an unfamiliar/foreign language. Therefore, this significantly impacted on their performance and participation in class.

#### 30. Recommendations

In the light of the above conclusions drawn from the observations made, the following recommendations are made:

## 30.1 Enforcing the new language policy

The researcher recommends that the existing language policy should be enforced to accommodate all the sixteen (16) languages spoken in Zimbabwe. The researcher observed, in his study that use of an unfamiliar/foreign language to teach primary school learners, is a barrier to learning.

## 30.2 Provision of an all-inclusive enabling legislation

To realise the above recommendations, the researcher recommends that an all-inclusive and enabling legislation should be put in place. This kind of legislation should enforce the teaching of all the sixteen (16) official languages of Zimbabwe and all the official languages should be state funded so that no learner will be left behind. On the basis of this, the researcher agrees with Peresuh and Masuku (2002) who observed that in promoting the use of the home language in all primary schools, Zimbabwe has a distinct advantage in that its indigenous languages are already rooted in the physical environment of the local community. However, the problem is that the core school curriculum is, presently, highly centralised, elite culture oriented, and insensitive to the cultural and linguistic concerns of the sub-cultures of the various linguistic groups that exist in Zimbabwe. It would, therefore be necessary to rewrite and re-orientate the content and materials presently used in schools, which are geared to English, Shona and Ndebele language mediated culture.

According to Peresuh and Masuku (2002) the school-wide approach would be easy in Zimbabwe, as schools could use the same common language, which is the home language in the area where the school is

located. Already, for the first three years of elementary school, children from Mashonaland (including its urban centres) use Shona, while children in Matebeleland and Plumtree use Ndebele and Kalanga, respectively. Similarly, those in Kariba and the surrounding areas have Tonga, while the Southern Lowveld has Venda. Tsonga (Shangani) could be used in the South Eastern district of Chiredzi. Thus, in the same way, teacher deployment should take cognisance of the linguistic abilities of the teacher *visa-vis* the school he/she wants to work in.

### 30.3 Training and support for teachers

If a bilingual or multilingual programme is to be achieved in Zimbabwe, a new strategy to train and support teachers should be adopted. In-service and pre-service teachers' training programmes should be introduced to take care of the bilingual programmes. This should initially target those teachers who teach in the former minority language speaking areas. Later, it should cascade to include all primary school teachers. This also implies that a new curriculum, which significantly departs from the current monolingual programme, should be put in place to cater for all the learners. In addition to that, primary school teachers' training colleges should introduce the teaching of these former minority languages so that they train relevant educators who have the capacity to handle learners who have language challenges. Thus, this study recommends that teachers should teach from the learners' experiences, provide a strong context for the understanding of the issues learners face, emphasise critical thinking, validate the learners' own cultural experiences, and explore both cultural differences and human universals.

#### References

- [1]. Adler, J. (2001). Teaching Mathematics in Multilingual Classrooms. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- [2]. Arkhurst, J. (1997). Challenges to teachers as schools in South Africa become more integrated: An anti-racist perspective on current practices. Journal of Education, 22:5-18.
- [3]. Ary, D. Jacobs, L.C. &Razavieh, A. (1996).Introduction to research in education (5<sup>nd</sup>. ed). New York: Harcourt Brace College Publishers.
- [4]. Baker, C. & Hornberger, N.H. (2001). An introductory reader to the writings of Jim Cummins. UK: Multilingual Matters Ltd.
- [5]. Baker, C. (2001). Foundations of bilingual education (3rd edition). Clevedon, England: Multilingual Matters Ltd.
- [6]. Bamgbose, A. (1991). Issues for a model of language planning. Language Problems and Language Planning, 13 (1), 24-34. John Benjamins Publishing Company.
- [7]. Best, J.W. & Khan, J.W. (1993).Research In Education.Boston, Allyn and Bacon.
- [8]. Chaudron, C. (1988). Teacher talk in second language classrooms. In C. Chaudron. (Ed.). Second language classrooms, pp. 50-89. Cambridge: Cambridge University Press.
- [9]. Chisaka, B.C. & Vakalisa, N.C.G. (2003). Uses of Ability Grouping as an Instructional Strategy: A Qualitative Inquiry into Secondary Schools. The Zimbabwe Bulletin of Teacher Education. Volume 12. Number, 1 June 2003. Harare. University of Zimbabwe.
- [10]. Chomsky, N. (1977). Essays on Form and Interpretation. New York: North-Holland.
- [11]. Chomsky, N. (1968). Language and the mind. New York. Harcourt.
- [12]. Cleghorn, A. (1992). Primary level science in Kenya: constructing meaning through English and indigenous languages. International Journal of Qualitative Studies in Education, 3 (4), pp. 311-323.
- [13]. Crain, W. C. (2005). Theories of development: concepts and applications. University of Michigan. Pearson/Prentice Hall.
- [14]. Cummins, J. (1988). From Multicultural to Anti-Racist Education: An Analysis of Programmes and Policies in Ontario. In: Skutnabb-Kangas T & Cummins, J. (eds). Minority Education: From Shame to Struggle. Clevedon, UK: Multilingual Matters Ltd.
- [15]. Cummins, J. (2000). Language, power, and pedagogy: Bilingual children in the crossfire. Clevedon, England.
- [16]. Dyanda, C. (2000). Vygotsky's Socio-Historical Theory of Cognitive Development: A Search for an Alternative and Relevant Theory of Cognition for colleges of Education in Zimbabwe. Zimbabwe Journal of Educational Research, Volume 12, Number 2. 2000. Harare. U.Z.
- [17]. Dyanda, C. & Mclane, J. (2000). The Zimbabwe Journal of Educational Research. Education And Training, August 1999.
- [18]. Fraenkel, J.R. &Wallen, N.E. (1996). How to design and evaluate research in education. New York. McGraw-Hill.
- [19]. Gibson, J.T. (1980). Psychology For The Classroom. New Jersey, Prentice-Hall, Inc.
- [20]. Golele, N.P. (2005). Paper presented at Masvingo State University at the launch of XiTsonga (Shangani) and Venda as academic subjects at Masvigo State University. Unpublished.
- [21]. Government Printers.(1998). Zimbabwe Surveyor General. Harare. Grolier Electronic Publishers.
- [22]. Graham, C. K. (1971). The history of education in Ghana.London: Frank Cass and Co. Ltd.
- [23]. Greene, J. C., & Caracelli, V. J. (2003).Making paradigmatic sense of mixed methods practice. In A. Tashakkori & C. Teddlie (Eds.), Handbookof mixed methods in social and behavioral research (pp. 91–110). Thousand Oaks, CA: Sage.
- [24]. Gudhlanga, E. S. (2005). Promoting the Use and Teaching of African Languages in Zimbabwe.Zimbabwe Journal of Educational Research. Vol. 17(1) p 54-68.
- [25]. Hachipola, S.J. (1996). Survey Of The Minority Languages Of Zimbabwe: A Research Report. Harare: University of Zimbabwe.
- [26]. Hakuta, K. (1990). Bilingualism and bilingual education: A research perspective. Focus No. 1.
- [27]. Hakuta, K. (1990). Language and cognition in bilingual children. Santa Cruz. University of California.
- [28]. Hakuta, K. (1986). Mirrow of language: The debate on bilingualism. New York: Basic books.
- [29]. Hakuta, K, Ferdman, B. M. &Diaz, R. M. (1987). Bilingualism and cognitive development: Three perspectives. In S. Rosenberg (Ed.), Advances in applied psycholinauistics, Vol. 2 (Pp. 284 -319). Cambridge: Cambridge University Press.
- [30]. Hartmann, H, Mtetwa, D, Scheerer, H.G, and Shumba, O. (1998). Report on the project Progress Review for the Better Environmental Science Teaching Programme (B.E.S.T.) Harare: Technical Co-Operation of Germany (G.T.Z.) and Ministry of Education, sport and Culture, Zimbabwe.

- Kapp, R. (2000). 'With English You Can Go Everywhere' An Analysis of the Role and Status of English at a Former DET School. Journal of Education, 25:227-259.
- [32]. Kroll, B. (1990). Second Language Writing Research Insights for the Classroom. Cambridge. Cambridge University Press.
- [33]. Lemmer, E.M. (1993).Gender Issues in Education. In: Dekker E.I &Lemmer E.M (eds.). Critical Issues in Modern education. Johannesburg: Heinemann.
- Le Roux, J. (1993). The Black child in crisis: A socio-educational perspective. Peritoria. J.L. Van Shaik (Pty) Ltd.
- Lewelling, V. W. (1991). Academic achievement in foreign language. Eric Clearinghouse on Languages and Linguistics. [35]. Washington DC. (ERIC Document Reproduction Service No. ED 329130).
- Miller, P. H. (2000). Theories of development psychology (4<sup>th</sup>.ed.). USA. Worth Publishers. [36].
- Morrow, N; Jordaan,H; &Fridjhon,P. (2005).The effects of educational context on the understanding of linguistic concepts in [37]. English and isiZulu by Grade 7 learners. South African Journal of Education. Volume 25 (3) 164-169. EASA.RSA.
- Mwamwenda, T. S. (2004). Educational Psychology: An African Perspective Isando: Heinemann Publishers.
- [39]. Mwamwenda, T. S. (1996). Educational Psychology: An African Perspective. Isando: Heinemann Publishers.
- Nagel, T. (1992). Patterns of Communication and Cognition In Teacher Education In Zimbabwe. Oslo: University of Oslo. [40].
- [41]. Ndamba T.G. (2008). Mother Tongue Usage in Learning: An Examination of Language Preferences in Zimbabwe. The Journal of Pan African Studies, vol.2, no.4, June 2008. Masvingo. Great Zimbabwe University.
- [42]. Ngara, E.A. (1982). Bilingualism, Language Contact and Language Planning. Proposal for Language Use and Language Teaching in Zimbabwe. Gweru. Mambo Press.
- [43]. Nyati-Ramahobo, L. (1996). Minority Language Use and Early Educational Hurdles in Botswana.Pula: Botswana Journal of African Studies Volumes 1 – 10 (1980 - 1996). Gabrone. University of Botswana.
- Nziramasanga, C.T. (1999). Report Of The Presidential Commission Of Inquiry Into Education and Training, August 1999. Harare. [44].
- [45]. Olsen, L. (2000). Learning English and Learning America: Immigrants in the Center of A Storm. (http://www.teach-nology.com. downloaded on 20/09/2011).
- [46]. Owu-Ewie, C. (2006). The Language Policy of Education in Ghana: A Critical Look at the English-Only Language Policy of Education. Selected Proceedings of the 35th Annual Conference on African Linguistics. Ohio, Athens, University, Athens, Ohio.
- [47]. Peresuh, M. and Masuku, J. (2002). The Role Of The Primary Language In The Bilingual Bicultural Education In Zimbabwe. Zambezia (2002), XXIX (i). University of Zimbabwe.
- Piaget, J. (1939). The origins of intelligence in children. New York: W.W. Norton & Company,
- [49]. Roy-Campbell, Z.M. (1996) "A Neglected Pillar of African Education: The Language of Schooling." Paper presented at the First Annual Conference of the Zimbabwe Languages Association. 10-12 December. Harare.
- Sapir, E. (1929). "The Status of Linguistics as a Science." Language (http://www.teach-nology.com).downloaded on 09-02-2011.
- [51]. Shumba, O. (1995). Monitoring Findings of the Better Environmental Science Teaching Programme (B.E.S.T.) In Primary Schools and Teachers' Training College in Zimbabwe. Harare: Curriculum Development Unit and Technical Co- Operation of Germany.
- [52]. Shumba, O. (1995). Science Teachers' Assessment of the Interaction of Indigenous African Culture with Science Education in Zimbabwe.Zimbabwe Journal of Educational Research, Volume 7, Number 3. Harare: University of Zimbabwe.
- [53]. Shumba, O. & Munyati, M. (2000). Language and Communicative Actions in Zimbabwe Primary School Environmental Science lessons. Implementing Active Participatory Methodologies. Zimbabwe Journal of Educational Research. Volume 12. Harare: University of Zimbabwe.
- [54]. The Advisory Panel on Language Policy. (2000). Language policy and plan for South Africa. Presented to Minister of Arts, Culture, Science and Technology on 6 November 2000.
- [55]. Thondhana, J. (2002). Using Indigenous Languages for Teaching and Learning in Zimbabwe. Harare. University of Zimbabwe.
- Travers, J.F, Elliot, N.S. &Kratochwill, R.T. (1996). Educational Psychology: Effective Teaching, Effective Learning. London. [56]. Collins Educational Publishers.
- United Nations International Children's Emergence Fund. (1999). The state of the word's Children. New York. U.N.I.C.E.F.
- [58]. United Nations. (1948). Universal Declaration of Human Rights, 1948. In: United Nations 1980. Human Rights: A compilation of international instruments. New York: United Nations.
- [59]. United Nations. (1966). International Covenant on Civil and Political Rights. In: United Nations 1980. Human Rights: A compilation of international instruments. New York: United Nations.
- [60]. United Nations. (1992). Convention on the Rights of the Child. In: Detrick S. The United Nations Convention on the rights of the child. Dordrecht: MartinusNijhoff.
- [61]. United Nations. (1992). Declaration on the Rights of Persons belonging to National or Ethnic, Religious and Linguistic Minorities. In: United Nations, Human Rights: A compilation of international instruments. New York: United Nations.
- Vygotsky, L.S. (1997). Educational psychology. (R. Silverman, Trans.). Boca Raton, FL: St. Lucie. [62].
- Vygotsky, L.S. (1978). Mind in society: The development of higher mental process. Cambridge. MA: Harvard University Press. [63].
- Vygotsky, L.S. (1969). Thought and Language. Cambridge: MIT Press. [64].
- Vygotsky, L.S. (1964). The collected work of L.S. Vygotsky: Vol. 2 (J. Knox & C. Stevens, Trans.). New York: Plenum. [65].
- Vygotsky, L.S. (1939). "Thought and Speech", Psychiatry, 2, 29-54 Vygotsky, L.S. (1934). Thinking and Speech. Moscow. Blackwell. [66].
- [67].
- Vygotsky, L.S. (1931). Adolescent Pedagogy. Moscow. Blackwell. [68].
- [69]. Wallwork, J. F. (1985). Language and Linguistics: An Introduction to the Study of Language. Oxford. Heinemann.
- Western Cape Education Department 2004. Minute No.: DCD/0060/2004 Information for officials on recording, reporting and [70]. progression in the general education and training band.
- [71]. Whorf, B. (1956). Language, thought and reality. Cambridge, MA: MIT Press.
- [72]. Williams, J. D., & Snipper, G. C. (1990). Literacy and bilingualism. New York: Longman.
- Zimbabwe Schools Examination Council. (1995). Report On November 1994 Examination: Science, Harare: ZIMSEC. [73].

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