MIDLANDS STATE UNIVERSITY

FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL FOUNDATIONS, MANAGEMENT & CURRICULUM STUDIES

HOW RESPONSIVE IS THE UPGRADED CURRICULUM ON THE EDUCATION OF DEAF CHILDREN IN MZILIKAZI DISTRICT PRIMARY SCHOOLS

BY

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(R169134E)

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DEDICATION

This work is dedicated to my Family as they have always been my pillar of strength for their moral, spiritual and financial support throughout my schooling and studying life, to my lovely daughters Henrietta and Hailey whom I adore the most and wish they can be inspired by this piece of work in their schooling and you the most valuable reader.

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ABSTRACT

This study sought to assess the responsiveness of the upgraded education curriculum which conceptualises the total integration of learners with disabilities in the mainstream school. Special attention was given to deaf learners who by virtue of their disability have a limited comprehension and communication interface with the surrounding world. The Mzilikazi District was selected as the basis of this study by targeting specific schools known to have deaf learners. Literature was review on the basis of understanding the challenges faced in the teaching of deaf learners to comprehend the same concept as with their normal counterpart. The Salamanca Statement and 2000 World Education Forum, Disability Act and Dakar, Senegal were the key benchmark guidelines in understanding the optimum provision needed for education of deaf learners. The descriptive survey research design was used in the study. The population consisted of school headmasters, district remedial tutors, provincial psychologist, specialist teachers and regular classroom teachers. To gather data the research instruments used were observations, interviews, questionnaires and documents analysis. Data was analysed and presented using tables, bar graphs, pie charts and line graph linked with detailed description and authoritative scholarly source supporting the given analysis. The findings of the study were on *Educational Needs of Deaf Learners*, *Education Environment for the Deaf Learners* and on *Challenges posed by the Upgraded Curriculum on Deaf Learners*. Recommendations were also made in light to these findings.

LIST OF ABBREVIATIONS

CHAT: Cultural Historical Activity Theory

MoPSE: Ministry of Primary and Secondary Education

SNE: Special Needs Education

UCE   United College of Education

UNESCO: United Nations Educational, Scientific and Cultural Organization

ZIM-ASSET: Zimbabwe Agenda for Sustainable Socio-economic Transformation

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<center>**CHAPTER ONE**</center>

1.0 Introduction

This introductory and implementation of the upgraded education curriculum by the Ministry of Primary and Secondary Education (MoPSE) have not fully accommodated some special cases with regards to the proper and effective learning conditioning of Special Needs pupils. The case of teaching deaf pupils has been a challenge in the previous curriculum and the study intends to focus on making a curriculum review on the inclusion of deaf learners in Mzilikazi District Primary Schools in Zimbabwe. In this context, the study would generate research objectives and questions necessary to add weight to the body of knowledge in regards to issues affecting deaf learners.

1.1 Background of the Study

In 2015 the Zimbabwean government upgraded the curriculum and produced a framework that stipulates how learners should be educated both in the Primary and Secondary school (Mutambara: 2017). According to the Ministry of Primary and Secondary Education (MoPSE) (2015), the upgraded curriculum which began implementation in 2015 provides a comprehensive plan for a rapid and sustainable transformation of the education system. It further seeks to make fundamental changes that will see all learners gaining vocational skills. The curriculum framework also has a mandate to improve the learners' exposure to science, technology, engineering, mathematics and heritage studies.

The Zimbabwe Agenda for Sustainable Socio-economic Transformation (ZIM-ASSET 2013) called for the development of a curriculum which is relevant to national needs while equipping learners with life- long skills for work and leisure. However with regards to secondary schools education for learners who are deaf, these noble ideas might fail to be realized if resources are not upgraded in-line with the new curriculum demands. Furthermore the upgrade becomes questionable as its implementation requirements did not match with the

teaching staff capacities and resources. It became a challenge to educate a deaf in a situation where there is a lag in resource provision for the deaf learners. Noting that in the previous curriculum one would have suspected that a low readiness in the curriculum implementation for the deaf learners (Henning, 2004) was attributed to be a challenge in teaching such disabled learners.

It has been noted that the education of learners with special needs worldwide has largely been influenced by the perceptions that communities hold about them (Johnson: 2014). In the primitive societies, disabilities have been stereotyped and heavily discriminated against. In some instances, they were hidden or killed (Davis, 2014). Ladd (2003), further adds that disabled people were perceived as different and used as slaves, physical abuse and abandonment. This maltreatment continued until the period of renaissance which brought about paradigm shift through scientific break-through in medicine and technology (Eloff, 2007). This also influenced provision of inclusivity like education, sports and health facilities to persons with disabilities even those with hearing impairment (Mafa, 2012).

Like in many countries, in Zimbabwe the education of learners with hearing impairment has evolved through several phases and it is conducted differently in various settings. Easterbrook and Trezek (2007) notes that learners who are deaf have a condition that prevents the child from hearing all things they should be able to hear. Without the adequate knowledge and teachers might be faced with challenges of fully including those with deafness in the upgraded curriculum. After independence in 1980, the government began to coordinate and regulate the learning of deaf learners (Mpofu et. al: 2007) by providing for their education in special schools and inclusive settings. Chimedza and Petersen (2003) observe that, generally most learners who are deaf expected to access educational services in special schools that are mainly located in urban centres. These schools mostly offer boarding

facilities making it possible for many of the deaf children to be resident learners and also provide institutionalized education to deaf learners.

On the other hand, inclusive settings in ordinary schools cater for the education of learners who are deaf in resource rooms. The deaf learners have most of their lessons in an ordinary classroom but come to the resource room for extra coaching and remedial work (Kiyaga, 2009) .In Zimbabwe, there are resource units at both primary and secondary level manned by specialist teachers in deaf education meaning that, students in the resource units receive their instruction from specialist teachers. However experience has shown that subject specialist teachers in secondary schools are not trained to teach learners who are deaf although the current education system in Zimbabwe demands that all learners with or without disabilities be accommodated in the regular school curriculum (Mutambara, 2017). As such the holistic implementation of the upgraded curriculum raises more questions.

In order to effectively cater for the needs of learners with special needs inclusive of those who are deaf, teachers are periodically provided in-service training mainly by the department of Schools Psychological Services and Special Needs Education located in educational offices of every district in the country (MoPSE, 2015). Educators who are mainly provided with this in-service are specialist teachers. This questions the ability of other regular teachers in providing adequate and relevant assessment of deaf learners

The upgraded curriculum takes a holistic approach to assessment and uses both formative and summative assessment. Assessment is vital in the education of learners who are deaf. This approach entails assessing learner competences on a continuum that includes knowledge, skills, abilities, values and traits (MoPSE, 2015). Formative assessment involves tracking learner behaviour and performance on an on-going basis. This mode of assessment informs the teaching and learning processes and contributes to learner profile. The learner profile

entails detailing learner traits, discipline, values, attitudes, skills, knowledge and abilities as acquired from entry into the education system (Mutambara: 2017).

Learner profiles may be important in the education of learners who are deaf. Most of the regular educators at secondary schools may not be adequately trained to perform the formative assessment to learners who are deaf as required by the upgraded curriculum (Green, 2007). The last stage of assessment is a demonstration of acquired skills, abilities and knowledge in an integrated manner. On the other hand, summative assessment measures learner performance at the end of a learning program. Summative assessment focuses on assessing knowledge and regurgitation of facts (De Vans, 2001).

The purpose of this type of assessment has largely been grading, placement, selection and informing system performance (Zimbabwe Curriculum Framework for Primary and Secondary Education 2015-2022). The upgraded curriculum will employ the use of both formative and summative assessment in the education of learners who are deaf at secondary schools however some teachers may not able be to carry out the formative and summative assessment procedures to learners who are deaf at primary school and this may pose challenges to the education of learners who are deaf in secondary schools (Mutambara, 2017). The research seeks to investigate the response of the upgraded curriculum on the education of learners who are deaf in Mzilikazi District Primary Schools.

1.2 Statement of the Problem

How accommodative is the Zimbabwe's upgraded curriculum in the teaching and learning of deaf learners with regards to the state of readiness, resources and capacity building of the teaching staff in the primary schools.

1.3 Purpose of the Study

The purpose of the study is to assess the response of the upgraded curriculum on the education of deaf learners in Mzilikazi District Primary Schools.

1.4 Objectives of the Study

1.4.1   To identify the educational needs of learners who are deaf in the upgraded curriculum at Mzilikazi District Primary Schools.

1.4.2   To examine factors that are crucial and suitable in the education of learners who are deaf using the upgraded curriculum in Primary Schools.

1.4.3   To establish the challenges encountered by Primary Schools in the upgraded curriculum for the education of deaf learners.

1.4.4   To establish the extent to which the upgraded curriculum has been effected in the education of learners who are deaf at Mzilikazi District Schools.

1.5   Research Question

The research unveiled answers to the following main question:

1.5.1   To what extent are the Mzilikazi District Primary Schools ready for the implementation of the upgraded curriculum in the education of learners who are deaf?

1.6   Sub-Research Questions

The sub-research questions were as follows;

1.6.1   What expertise does Mzilikazi District Primary School human capacity have in the implementation of the upgraded curriculum to the education of deaf learners?

1.6.2   Is the available infrastructure accommodative to the educational needs of learners who are deaf at Primary schools using the upgraded curriculum?

1.6.3 How relevant is the content of the upgraded curriculum in addressing

the educational   needs of deaf learners in Primary schools?

1.7 Significance of the Study

The study is significant in that it would provide a unique body of knowledge based on the implications of the curriculum upgrade for the education of deaf learners in primary schools. It will be critical to the following key stakeholders:

1.7.1 Learners who are deaf

Strategies to identify their learning deficiencies in the upgraded curriculum would be implemented in order for them to be provided with services that match their academic needs. This would further enhance their learning for better achievement.

1.7.2 Teachers

Teachers would gain knowledge of effective methods of identifying and meeting the diverse needs of learners who are deaf in Primary Schools. They would also realise the value and benefits of providing a least restrictive environment for all learners particularly those with hearing impairment.

1.7.3 Heads of Schools

These would gain an in-depth insight of the measures that can be adopted in order to provide schools that accommodate all learners with their various needs. This would also help in influencing curriculum planners to design materials and resources that precisely address the needs of learners who are deaf found in schools.

1.7.4 Curriculum Designers and Planners

Curriculum designers and planners will gain knowledge on the specific educational needs of learners who are deaf at secondary schools.

1.8 Assumptions of the Study

It was assumed that:

- The chosen sample of participants would provide information that is reliable and therefore generalizable across different educational settings that cater for learners who are deaf at primary schools.

- Information gathered in the study would assist the researcher to make recommendations that will improve the education of learners who are deaf in primary schools using the upgraded curriculum.

1.9   Limitations of the Study

The study will involve only four primary schools in Mzilikazi District Schools that cater for learners who are deaf. This may pose a challenge as the sample size is small. The results might not be generalizable to schools with similar backgrounds. The researcher might face challenges in collecting data during working hours since the researcher is fully employed. The highlighted limitations however do not take anything away from the study. It remains valid as an insight into limitations of the upgraded curriculum for the education of learners who are deaf in Mzilikazi District Schools.

1.10   Delimitation of the Study

The research will be confined to four Primary Schools in Mzilikazi District that enrol learners who are deaf. The participants of the study in those schools will include school heads, deputy heads and teachers, district remedial tutors, provincial psychologist, specialist teachers and regular classroom teachers.

1.11   Definition of Key Terms
1.11.1 Deaf learners

According to the Individuals with Disabilities Education Act (2004) deaf children have a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing with or without amplification. In relation to this, deaf students are visual learners rather than auditory ones (Marschark & Spencer 2003). In this study, learners who are deaf are considered as those with total loss of hearing and basically use sign

language as their first language. Other alternative and augmentative communication modes can be adopted to enhance effective learning,

1.11.2 Curriculum

Is the total sum of all learning experiences and opportunities that are provided to learners in the context of formal and non- formal education (Curriculum framework for Primary and Secondary Education, 2015-2022).The 1999 Presidential Commission of Inquiry into Education and Training (1999) also defines curriculum as the aggregate of all what we (want to) impact to our learners through the total experiences of the school system in a deliberate design to achieve educational goals. Curriculum includes structures practices and organisation within schools and the social relationship which students foster and sustain as well as what is taught, the way teaching takes place and the way in which pupils are organised for learning (Adoyo 2008). In this study, curriculum is viewed as the summation of all teaching and learning methodologies offered by schools.

1.11.3 Upgraded Curriculum

According to the Ministry of Primary and Secondary Education Curriculum Framework (2015-2022), upgraded curriculum is a renewal process which is regularly carried out to continuously adjust and improve the existing education practices in the light of emerging national and global socio-economic trends. In this study, upgraded curriculum is a process which involves re-aligning, adjusting and improving the curriculum for the better so as to meet the new socio-economic imperatives in society and the learning environment.

1.12   Summary

This chapter sets the background of the study on how the implementation requirements of the Zimbabwe's upgraded education curriculum pledges to deal with the deaf leaners. Some key issues were outlined that pointed to the need to conduct an in-depth study on the current curriculum review to its inclusivity of learners who are deaf in Mzilikazi District Primary

Schools. The study mainly intended to assess the accommodativeness and possible loopholes if they may be to significantly recommend later if there are possible adjustments needed. The study was limited to hearing disability even though other pupils may have more than one form of disability. The study relied on the knowledge and experience of the school heads, deputy heads and teachers, district remedial tutors, provincial psychologist, specialist teachers and regular classroom teachers. Definitions of key terms are also given to contextualize key terms and phrases as used in the study. The next chapter will review that which is considered relevant for this study in bringing out the consideration needed in the teaching of deaf pupils.

2.0 Introduction

This chapter was a review of literature related to the response of the upgraded curriculum in the education of learners who are deaf in primary schools. Previous researches on the similar scope and topic coverage have been consulted in order to confirm the gap that this study attempts to bridge. The literature is reviewed under the following sub-headings; theoretical framework, nature of the upgraded curriculum in Zimbabwe, rationale of the upgraded curriculum for learners who are deaf at primary schools, educational needs of learners who are deaf in the upgraded curriculum at primary schools, factors that affect the education of learners who are deaf, challenges encountered by primary schools in the upgraded curriculum for the education of deaf learners and the extent to which the upgraded curriculum has been effected in the education of learners who are deaf.

2.1 Theoretical Framework
2.1.1 Cultural Historical Activity Theory

The Cultural Historical Activity Theory (CHAT) was chosen as the theoretical framework of the study. CHAT is a commonly accepted name of the theoretical and research approach taking roots from the cultural-historical traditions associating with the name of Soviet scholar Lev Vygotsky (1978) (Engeström, 1999). CHAT further was elaborated by the contemporary scholars internationally and its Scandinavian version taken as the framework of the study is connected with the study to reflect on the tendencies attached to responsiveness of teachiners and education authorities in the deaf learner education.

The perspectives and the main constructs of the model seem relevant to examine the topic of the study. Flexibility of CHAT as the research framework makes it possible to apply it to

different settings. Consisting elements of the model and the dialectical relations among them help to understand educational practice in its wholeness and dynamicity. CHAT as the research approach is suitable to investigate educational practices attached to the demands of the modern education that requires among other necessities the innovations to transform an old educational patterns into the more inclusive ones. Wells & Claxton (2002) add that:

> *"CHAT not only helps to clarify the core questions that confront education at the start of the twenty-first century, but also provides a powerful and coherent basis for developing fresh answers to them"*

Before introducing the CHAT as the research model, it is important to discuss the fundamental principles of the cultural-historical traditions the CHAT is based on.

2.2.2 The Main Principles of the Cultural-Historical Theory

The fundamental principle of the cultural-historical theory is that all learning situations are indelibly social and cultural (Wells & Claxton: 2002). Cognitive development is embedded in its socio- cultural context and formed in the course of subject's interactions with its environment (Dart, 2011; Vygotsky, 1978) way before they are assessed in an institutionalised schooling setup. According to Vygotsky (1978), the cognitive development is a result of any higher mental function becoming a truly internal –'intra subjective'- function of an individual by going through an external social – inter subjective - stage and is constructed between people. As argued by Engeström (1999) that:

> *"All meanings are created in the public domain, in context of collective situations and activities"*.

Teaching and learning is joint process and its outcomes is the product of collective effort. While teacher and other capable ones provoke important transformational changes in a learner, the latter, via individual characteristics and responses on provided support, often stimulates generation of new interactional patterns and mediating means (Well, 2002). This type of development goes beyond the individual level and touches the changes in collective practices. As stated by De Vaus (2001), that human development is a process in which people

transform through their ongoing participation in cultural activities, which in turn contribute to changes in their cultural communities across generations. CHAT as the model consists of six key elements: subject, object, mediating cultural tools, community, rules, and division of labour. The main principles of the framework are multi-voiced, historicity, contradictions and expensive transformations characterized to the activity system. In the CHAT, the object-oriented, collective and culturally mediated activity system in which knowledge is shared as it is generated (Engeström, 1999). CHAT makes possible to investigate the interaction among the elements of the one or more activity in this education and curriculum upgraded system by focusing on challenges and possibilities raised during interaction with the deaf learners.

2.2 REVIEW OF RELATED LITERATURE

2.2.1 Special Needs Education Framework

Education is delivered along a systematic way that is designed to offer more than cognitive development. An educational system refers to a structure of operation for the provision of education. On the other side, mainstream educations refers to the traditional schools with no attention given to cater for instances that may fall out of the ordinary. Wang (2009) identifies a mainstream school as a school to which when any disabled child is placed at, can be segregated or have to undergo an integration process unlike other pupils. Deaf pupils have a special hearing need which if ignored the mainstream school will be less effective in developing their skills and knowledge base. This gives light that mainstream schools are the ordinary schools which at most make a child with special needs struggle to adapt to the learning environment as well as the education process offered. In order to fully understand the education system for the pupils with special needs, the representation of the following diagram will be useful.

Figure 2.1The Special Needs Education System Framework.
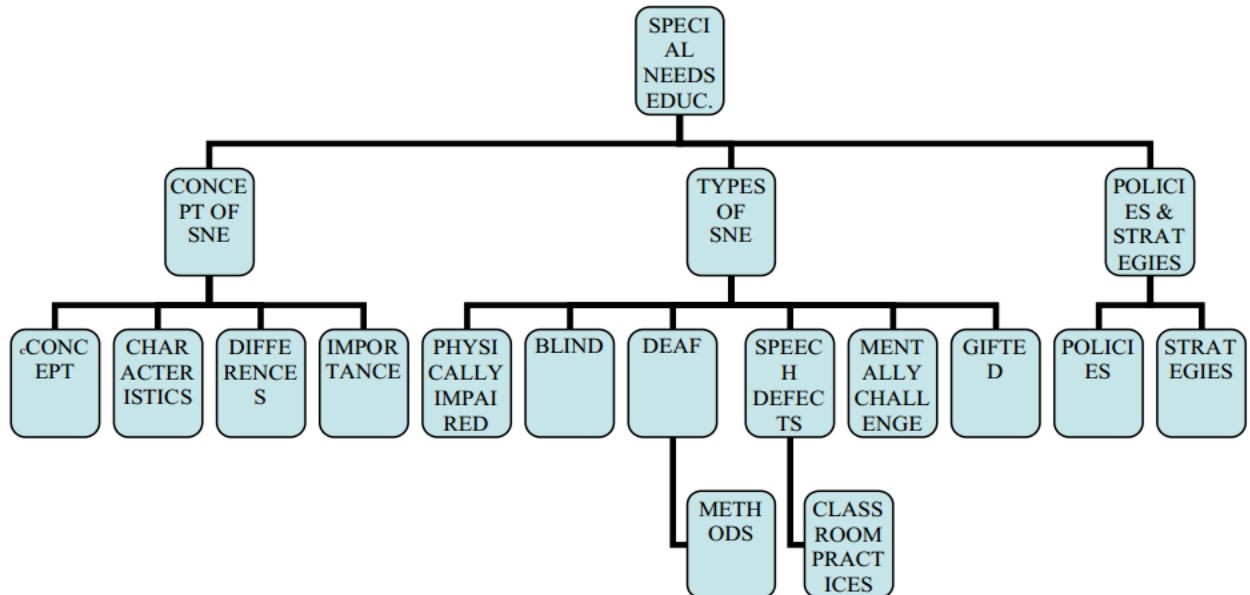
Source: Rutondoki (n.d)

To start with, the Special Needs Education (SNE) system is based on the main three functions of appreciation the need to pay a special attention to some conceptualized understanding of education needs. These are the concept of the SNE, Types of SNE and the policies and strategies developed in line with offering education to pupils identified as with special needs. In understanding the concept of SNE gives a light into the possible elements that may somehow hinder the normal education abilities of the pupil. This also help to figure out the best possible education measures that can be taken to serve each pupil under the different form of learning disability. This can be further aided with policies and legislations developed to compliment the design of the SNE set out in any nation

In the work of Deluca et.al (2014), Zimbabwe education system has been despised, critical analyse as exclusive by having turned away an estimated 600,000 children with disabilities of school going age. This statistic cannot be confirmed with other sources but it can be used as a

benchmark in understanding the inclusivity of the education system in the context that the upgraded curriculum seeks to offer inclusiveness this time around. By noting that there were incidents by which some disabled children were not absorbed into the schooling system, there can be a quick conclusion drawn that the system is not inclusive. Deluca et.al further explain that this 600 000 figure has been contributed to by the teachers who perceived themselves as untrained and ill-equipped to help the pupils. Such observations make a solid justification the Zimbabwean education system needs great and reliable measures to address the concept of SNE, types of SNE or the development of the key policies in line with SNE. Upon such revelation made by Deluca et.al (2014) a conclusion can be drawn that the Zimbabwean mainstream education system cannot be turned into an inclusive system overnight but special attention has to be paid to all pupils of special learning needs.

Therefore it can be stated that special needs education is the type of education designed to cater for the following type of disabilities: blindness, deafness, and hard of hearing, physical disabilities, mental retardation, speech defects and giftedness Wang (2009). This enlisting of learning disabilities outplays the rationale of free education in the sense that paid education can be exclusive to those with disability. The aspect of free and compulsory education cannot be hailed as an address to SNE. This is so because, these disabilities require specific types of education. A blind person would require a Braille machine to read and write, a deaf or hard of hearing person individual would, depending on the magnitude of the disability, need hearing aids or in extreme cases be taught to lip reading (Ncube and Hlatshwayo: 2014).

2.2.2 Global Situation for Deaf Learners

Recently, inclusive education has risen to be important and is becoming dominant in issues of education across a range of the world. Many developed and developing countries have taken a step towards inclusive education and accepted educational approaches that facilitate the movements towards more inclusive forms of education and intensives. This has been mainly

made to identify the barriers to learning and development (Mpofu, 2007; Ndurumo, 2016). One of the greatest challenges that face deaf learners in most societies throughout the world is exclusion from participation in the economic, social, political and cultural life in their communities (UNESCO, 2004).

In Africa, many countries such as Nigeria, Zambia, Swaziland, Lesotho, Kenya, South Africa and Zimbabwe have been emphasizing on the use of participatory teaching methods to fully accommodate all learners with special learning needs (Prinsloo, 2000). For this case, Musengi (2012) suggests that teachers need to develop pedagogies for the diversity, effective use of learning support, teachers and other human and material resources for full participation of deaf learners. However, this is possible only in a flexible education system that assimilates the needs of a diverse range of learners and adapts itself to meet these needs. Peter, (2004) indicates that most of sub-Saharan African countries view students with special needs as a problem rather than a challenge.

2.2.3 The Nature of the Upgraded Curriculum in Zimbabwe

The Zimbabwean schools follow international trends on approaches to teaching as determined by the various foreign-trained teachers. The upgraded curriculum presents inclusive education as the way to accommodate deaf learners but it fails to address challenges faced by the learners. Mafa and Makupa (2013) acknowledge that more than 20% of teachers who teach in mainstream classes reported not having had any previous experience teaching children with disabilities even though they have managed to strike a balance in teaching a mixed learners in their respective schools.

Barcham (1998) argued that conflict and struggle in the policy development for a deaf learner centred education is rife while the updated curriculum which is silent on deaf education (Mutambara, 2017) and there is no justification if it could fully cover their learning needs in its present state. While the conflict and struggle continue, in the meantime there is no

specific, coherent policy on teaching methods available for the already enrolled learners. Each school interprets in varied ways government's ordinary schools' policy that a first language be used to learn another in the first three years (Education Act, 1996) and that until the end of primary school (grade seven) schools could choose to continue using this first language as the language of teaching and learning (Education Act, 1996). The dilemma Chiswanda (1997) and Mayer (2009) noted, relates to the schools' determination of deaf children's first or preferred language, and thus the language of learning and teaching.

Zimbabwe is a signatory to the Salamanca statement and framework for action on special needs education and several other inclusive education related international charters and conversions (Ncube and Hlatwayo: 2014). Although Zimbabwe does not have an inclusive education specific policy, it has inclusive education related policies like the Education Act of 1996 and the Zimbabwe Disabled Persons Act of 1996 which advocates for non-discrimination in the provision of education and non-discrimination of people with disabilities in Zimbabwe. This should not be limited to enrolment of learners with any learning disabilities but fully development of such learners through special schooling services offered in schools like Sir Humphrey, Sibantubanye or King George VI. Inclusive education has also been successful on selected schools where all stakeholders who are the parents, teachers, people with disabilities and significant others impress the vision and value of inclusive change on government and school leadership.

2.2.4 Issues Affecting Deaf Education Curriculum

Communication interface with the school environment on deaf pupil is the major contributor to other learning difficulties. Impaired or total lack of language has serious implications for the learner's development. It is worth noting that the characteristics of a learner hearing impairment leads to a number of other serious problems that include inability to receive or express messages and thoughts, (Adoyo, 2008) even though they may have suck knowledge.

As noted by Zimba (2012), because of its insidious and hidden nature, hearing loss can have far reaching effects which cannot be noticed from the outside world. It can be particularly traumatic, psychomotorial and behavioural as usually it is associated to mindedness or senility. For most deaf learners, having a hearing loss threatens their self-identity, esteem, confidence and it can lead may manifestation of feelings of inadequacy, isolation, being abnormal or handicapped and being constraining to other people. Most of the literature is in agreement about the feelings people experience when they lose their hearing.

Henning (2003) adds that deaf children are less socially mature than hearing children and this child development gap is a result of hearing abilities in the two children groups. This goes beyond the schooling year and to adulthood to incidence of emotional and behavioural problems in hearing impaired children of all ages (Meadow, 1980, Marschark, 1993). In some cases, deafness is often mistakenly associated with helplessness and the need for protection. The greatest obstacle facing the hearing impaired child is not the hearing disability, but the failure of parents, professionals and the general public to understand and accept the person with this disability (Adoyo, 2008) and looking for the relevant means to develop them. Andrews and Lupart, (2000) found that deaf students may be more fatigued than classmates due to listening effort needed. They battle against barriers build on self-esteem against accusations of *day dreaming* or *not paying attention* during school learning activities.

Communication is significantly affecting the learning and social integration of deaf pupils with peers (Chihara, 2010). With full time use of hearing aids/ FM System the child may be judged as a less competent learner, resulting in poorer self-concept, social immaturity and sense of rejection. The child may appear inattentive and frustrated (Davis, 2014) when the device seize to operatae normal as they may struggle to express themselves fully. In these circumstances, learners lose ability develop due to the difficulty suppressing background which surrounds their learning environment.

Challenges of teaching and learning of deaf students and insufficient academic supports is highly likely to leave the majority of deaf learners behind of their hearing counterparts at every educational level (Marschark & Spencer, 2010). According to Rydberg (2010), low academic achievements of deaf students can be lead to creation of a segregator-economic class since deaf individuals are mostly employed in jobs requiring relatively low education level. As stated by Stewart and Kluwin (2001), deaf students arguably present the most complex challenge for teachers of any group of students in both the general and special education populations.

Every corner of their education is multidimensional and each dimension has a potential to significantly impact their academic achievement (Luckner: 2010) and hence it needs to be fully developed through the use of all the basic resources needed to match their normal counterparts. As noted by Marschark, Convertino and LaRock (2006), deaf students often receive teaching, which is not always fit their preceding knowledge, learning style, and language comprehension abilities (Knoors & Hermans: 2010) but as what the mainstream school is designed to offer to the normal child. There are no special resources in place to counter balance the two sets of learners.

Anita, Stinson and Gaustad (2002) further added that full inclusion of learners is impossible without deaf student's access to communication resources and other unique needs for their learning. Powers (2002), suggested several progressive indicators towards inclusion of deaf students as the acceptance of differences by the learning community, an effective communication environment and regular opportunities to interact with hearing peers, access to formal curriculum via flexible approach and effective teaching strategies, knowledgeable teachers and learning assistance, proper attitudes towards deaf learners. These measures can lead to a child-centred schooling development which will benefit the target learner at the end of their learning cycle.

2.2.5 Educational Needs of Deaf Learners in Primary Schools

Rutondoki (n.d) gives a glimpse context of the education needs of leaner under any special education program is a type of education given to persons with different types of disabilities such as blindness, deafness and hard of hearing, physical impairments, mental retardation and speech deficits. Effective provision of educational needs for a deaf learners will entail, a thorough assessment of the learner's needs and strengths, a plan setting out how the school will meet those needs and overcome any barriers to the student making good progress, effective implementation of the plan, regular reviews of the pupil's progress and the success of the plan to establish whether changes need to be made and what these are (Ntsanwisi, 2013).

In England, the assessment of special needs education has been designed through an '*assess, plan, do, review*' cycle incorporated into statutory guidance set out in the Special Educational Needs and Disability Code of Practice (2015). In lights to this approach it can be recognized that deafness in itself is not a learning disability as it is noted in the Salamanca Statement that

> "*The importance of sign language as the medium of communication among the deaf, for example, should be recognized and provision made to ensure that all deaf persons have access to education in their national sign language. Owing to the particular communication needs of deaf and deaf/blind persons, their education may be more suitably provided in special schools or special classes and units in mainstream schools.*"

A good assessment on pupils' disability will enable the school to identify potential barriers to progress and the support that is needed to overcome these. An accurate and thorough understanding of a pupil's needs and strengths underpins good planning and progress (Zimba, 2012). A good assessment will include the pupil's self-evaluation of any support requirements, information from the school and information on levels of attainment, the views of parents about appropriate provision, the involvement of specialists such as a Teacher of the Deaf, the use of specialist assessments, the need for access to technology and communication

support and consideration of support needed to meet any specific subject requirements (Dart, 2011).

The effectiveness of the support and its impact on the pupil's progress and breaking down any barriers that they face should be regularly reviewed and evaluated, taking into account the views of the pupil and parents. The school will have developed systems and processes for doing this. Key areas that are related to the pupil's deafness that may require consideration include the following; levels of progress in areas of language and communication, levels of overall progress and whether any gaps with other students are widening or narrowing, the accessibility of the subject content (Henning, 2004). For example, checking if the pupil is able to understand the language and concepts used in lessons or establishing where and when the student may experience most difficulty in hearing what is said. The effectiveness of communication support. For example, is the communication support worker able to interpret accurately and fluently what the teacher is saying (Mafa, 2009).

2.2.6 Factors That Influence Deaf Learners in Primary Schools

Access to hearing classroom is very complex and factors effecting deaf learners' teaching and learning needs are diverse, but some of them seem the most influential and remarkably often addressed in research literature on deaf education.

2.2.6.1 Limited Content Knowledge of Sign Language Interpreters

Because of restricted auditory perception and specific linguistic needs, deaf learners in regular, oral-based classrooms mainly depend on mediated communication and learning through sign language interpretation. Despite the importance of the latter, interpreter-mediation could carry certain problems to the teaching and learning process. Insufficient knowledge of the particular subject by an interpreters may cause content contamination, miscue and cue and negatively influence the accuracy in reception and completeness of the information (Knoors & Hermans, 2010). Foster at al. (1999) adds that insufficient knowledge

by the interpreters of content and of the material remains one of the main problems faced by deaf learners who rely on the services of the interpreter than a signing teacher.

Similarly, Powell, Hyde and Punch (2013) confirms that sign language user students are frustrated by interpreters who lack of experience or qualification to transfer lectures' content effectively. In such way, they cannot fully explain the concepts as it may be in the case with normal learners who get detailed emphasis when answered in vocabulary language (Schick, Williams and Kupermintz: 2005), such scenarios give learners fragmented information, omissions and simplifications of teachers' messages than a details and rich accounting of the subject topic.

2.2.6.2 Limited Communication between Deaf Student and Hearing Teacher

Based on evidence, direct communication between a hearing teacher and a deaf student in regular classes is often limited. Foster, at el. (1999) reported that differently from hearing peers, deaf students' communication was mostly connected with the interpreters, not with teachers. They became the secondary learners as the use of intermediaries plays out as a communication barrier with the knowledgeable teacher. Restricted direct communication, the physical set-up of classroom may limit the deaf students need to watch an interpreter reduce the degree of direct contact between teacher and deaf student. Cawthon (2001), points that when the sign language interpreter presented in the classroom, the interpreter seemed at times the only fluent communication partner for deaf students.

In addition, the author noted that deaf students received limited language input from their teachers to compared with hearing students, the rate of questions posted to deaf students was lower than to hearing peers. Similar issue were stated by Knoors and Hermans (2010) based on review of the studies conducted in United Kingdom. The open-ended questions posted to deaf students were much rare than to their hearing peers as a result of limited content, vocabulary and diagrammatic presentation for the deaf learners. Deaf students had less

opportunity to initiate interaction and their teachers tended to dominate during the classroom interaction. Richardson, et al. (2010), reported deaf learners' reluctance to ask questions during the lesson since there might be message loss during the communication process.

2.2.6.3 Difficulty to Multi-Tasks

Deaf learners' restriction to attend multiple task at one time during the lessons such as interpreter, demonstration of procedures by the teacher and taking own notes is another challenge on deaf education (Richardson, et al., 2010). As teachers have to manipulate some procedures and explain in parallel, deaf students who have to watch interpreter to reach the teacher's explanations, often have to choose whether to watch an interpreter or a teacher, the deaf learners lose some part of information due to the interpreter decoding and encoding of the same message for the deaf learner. Unstructured information delivering style makes significant troubles for deaf learners (Powell, et al. 2013) as it is so limited in expressive vocabulary that no detailed sign may be given to match the actual wording given to hearing counterparts.

2.2.6.4 Difficulties in Content Comprehension

Both for hearing and deaf students understanding of the content/material is one of the main factors making them feel as a class participant; however, the comprehension of content by deaf learners seems to be a great challenge (Foster et al., 1999). Besides communication barrier, other factors may limit content comprehension. Deaf students mostly come to college with less prior content and vocabulary knowledge than their hearing peers (Richardson, et al. 2010, p. 358). Luckner (2010) reveals that many deaf students demonstrate experiential deficit that negatively influence understanding of a new information, concepts and procedures because sign language is so limited and does not easily accommodate new developing forms of information available in the modern day literature.

Deaf students may lack the language skills necessary to follow more abstract conversations, comprehend text, and understand the events. Understanding of written content by deaf learners may be restricted because of limited reading materials and skill development as observed in by Knoors and Hermans (2010). Borgna, Convertino, Marschark, Morrison and Rizzolo (2010) concluded by noting in their study that difficulties of vocabulary, grammar, inferencing and information processing during the reading of sign language by deaf students is the main contributor to the entire knowledge assimilation and conditioning which affect sign language users in general.

2.2.6.5 Teacher Training Qualifications to Teach Deaf learners in Primary Schools

There are a number of colleges and universities that train primary teachers. Some of them include United College of Education (UCE) in Bulawayo, Great Zimbabwe University and Chinhoyi University. Teacher education colleges produce teachers for primary, secondary and vocational training institutes (Henning, 2004). Primary school teachers are trained to teach different subjects like Mathematics, English, Ndebele, PE, Art and Content subjects. The United College of Education (UCE) in Bulawayo is training teachers in special education since 1983, in hearing impairment, visual impairment and mental retardation. Speech correction was only offered for a few years for lack of resource material (VVOB: 2009).

Ncube and Hlatwayo (2014) note that the nature and scope of curricula for students with disabilities in Zimbabwe is given out through the five types of curricula options available for them. Four of these were provided through the enation of the Education Secretary's Policy Circular Number 36 of 1990 which has a list of possible strategic learning factors. These are the *Locational inclusion*, *Inclusion with partial withdrawal*, *Inclusion with clinical remedial instruction* and *Unplanned or de facto inclusion*. The fifth type of curriculum which seems practiced mainly in special schools is the school-based curriculum. According to Mkandla and Mataruse (2002) and Mpofu (2001) in Ncube and Hlatwayo points out that the unplanned

or de facto inclusion is the most common type followed in Zimbabwean schools. With this type of curriculum students with disabilities are exposed to the main curriculum of the regular school, in regular school settings. They are placed in these schools by their parents and guardians who seem to have very limited options.

In Zimbabwe most teachers for the deaf mainly come from the primary school background and had initial training and experience in primary schools. These specialist teachers have a background in normal classroom experience then take up specialist training as teachers of the deaf. Regrettably there seem to be only three universities in Zimbabwe with Disability Resource Centres (Chataika: 2007) which have the potential of increasing access and participation of learners with disabilities in higher education. This then means that there are few teachers who are trained as deaf teachers considering the few numbers of universities that offer disability studies in Zimbabwe.

The majority of teachers in Zimbabwe are trained with a traditional homogenizer educational scheme which supports a vocabulary based teaching approach (Peresuh; 2000). It is further discussed that Zimbabwe's separation and differences in perspective between training of regular and special needs educational teachers contributes to these challenges since the enrolment of deaf pupil is not done in accordance to the availability of a sign language teacher but on the proximity of the school to the learner. The Salamanca statement made a declaration that appropriate preparation of all educational personnel stands out as a key factor in promoting progress towards inclusive schools. Furthermore, the importance of recruiting teachers with disabilities who can serve as role models for children with disabilities.

2.2.7 Challenges in Implementing the Upgraded Educational Curriculum for the Deaf

2.2.7.1 Teaching and Learning Resources

The Zimbabwean mainstream education system is either inclusive in the sense of fully absorbing learners with Special Needs or exclusive enough not to accommodate them at all. It can be safe to understand that there are a number of initiatives that have been taken by the Zimbabwean government in addressing the inclusivity of the mainstream school even though not every child with special needs may have been fully reached accommodated in the process. According to the researcher's observation in the district, the curriculum is rigid and therefore difficult for the deaf learners to go through hence teachers are not able to complete the syllabus and yet the same children are expected to sit for the same national examinations.

The lack of resources is the key contributor in any factors affecting an education model under any area of concern. In some scary statistics, there is a high teacher pupil ratio of 1: 40 especially in primary schools (Mafa & Chaminuka, 2012:37). Such condition limits the effective executision of any meaningful teaching method. Generally, overcrowded classes create negative attitudes by teachers towards children with disabilities as they may recquire more attention in an unremitting situation of dealing with each pupil's needs (Mandina, 2012:230). In the study of Mutambara (2017), both the resource materials such as trained teachers and educational facilities were pointed as contributors affecting effective inclusive schools in Zimbabwe. This hinders the effective implementation of a coherent basic education program in the country. In a similar analysis, the Namibian and South African rural and urban schools lack the resources to engage in inclusive education practices (Zimba et al., 2007:43; Tshifura, 2012:101).

The learners with learning disabilities under these learning conditions cannot receive quality support from their teachers. There is hardly time for teachers to carry out a child study, design strategies or assess and evaluate deaf pupils (Eloff & Kgwete, 2007). Mkhuma (2012) found out that support services such as professional, parental and administrative support were critical in the implementation of inclusive education in Botswana. His findings affirms the

findings by Chhabra, Srivastava and Srivastava (2010) who argue that learners with learning disabilities need professional support which should be given on special referral schools if possible.

2.2.7.2 Classroom Management

Luckner (2010) and Knoors and Hermans (2010) found that there are certain several of classroom management support initiatives for deaf students. These can be in form of regulation of classroom noises, provision of good acoustics, deaf student's appropriate placement and effective use of the technology in delivering lessons and information. As noticed by Anita et al. (2002), teacher must put effort to ensure that instructional interaction occur in a classroom and set purposeful and cooperative activities with realistic and productive roles for both hearing and deaf students. A well-structured cooperative activities stimulate communication and positive social interaction among deaf and hearing students as this can enable to push back the disabilities barriers that exist among learners.

Noting from Winter and O'Raw (2010), techniques of custom-designed cooperative learning are among the best approaches promoting inclusive classroom practices. They may offer a wide range of studies to prove the academic and social benefit of peer tutoring in inclusive contexts for tutor, receiver of support and for teacher. In cases of *which does not only* free teacher, gives the nearby student offer individual support to the deaf fellow pupils. There is need to offset physical difficulties for hearing impaired students in primary schools (Reed, 2004).

In case of noise regulation and management, the classrooms may be acoustically treated with carpets, double glazing windows and sound proof doors so as to minimize reverberations (Tate, 1994). Both teachers and parents should have an attitude of acceptance, respect and valuation of the individual differences of students with hearing impairment in regular secondary schools, (Chimedza and Peterson, 2003) in order to balance the learning conditions

and needs that exist between these learners. Inclusion of students with hearing impairment should be about enabling education structures, systems and the learning methodologies to meet their needs (Chakuchichi et al, 2003) as they naturally do with the normal learners.

Chimedza and Peterson (2001) adds on avoiding harm and other minor accidents, students with hearing impairment in regular primary schools full monitored. In addition there is need for professional skill development in the area of cooperative learning, peer tutoring and adaptive curriculum, collaboration between parents, teachers and administrators. Where possible, there is need to provide sufficient funding so that schools would be able to offer adequaaate resources to suit the varying hearing impairment and learning disabilities of a number of learners as they may be. It is a challenge to focus on inclusion without support as it ends in "*child dumping*" situations and as segregated services, (Chakuchichi et al, 2003).

2.3 Summary

This chapter has looked at the theoretical framework guiding the study as well as the conceptual analysis of the main terms with specific relation to the study. This chapter reviewed literature related to the implications of the upgraded curriculum on the education of learners who are deaf in primary schools. The literature was reviewed under the following sub-headings; theoretical framework, nature of the upgraded curriculum in Zimbabwe, rationale of the upgraded curriculum for learners who are deaf at primary schools, educational needs of learners who are deaf in the upgraded curriculum at primary schools, factors that affect the education of learners who are deaf, challenges encountered by primary schools in the upgraded curriculum for the education of deaf learners and the extent to which the upgraded curriculum has been effected in the education of learners who are deaf. The following chapter will look at the research methodology used for the study.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This chapter reflects on research methodology which includes research design, population, sampling technique and sample, research instruments, data collection and analysis as well as the summary. A pilot study was also outlined in which a draft questionnaire was administered to the target group to standardize and validate the instrument. Research instruments selected for this study were the questionnaire and in-depth interview.

3.1 Research Methodology

The study pursued a mixed method approach. It was underpinned by the constructivist framework that views reality as existing within the human mind and reliant on human experiences and interpretation (Bryman, 2012; Chilisa, 2012). Denzin (2009) defines mixed method research as primarily an inductive process of organizing data into categories and identifying patterns (relationships) among categories (De Vos, 2005). This definition as was used in this study implied that data and meaning emerge "organically" from the research context (Schram, 2006).

A key strength of mixed method research methodology lies in that it is a system of inquiry that seeks to build a holistic, largely narrative, description to inform the researcher's understanding of a social or cultural phenomenon and this system of inquiry forms the basis of this study (Revees et. al, 2011). Justification of adopting mixed method research methodology lay in that it suited a liberal approach to research that allowed for flexibility in the process of conducting the research utilizing a plethora of data collection methods.

3.2 Research Design

A research design is a basic tool that the researcher uses in order to conduct a research (Racocsy, 2010). It is a tool that involves developing a plan or structure for investigation and a way of conducting or executing the study that reduces bias and distortion. Research being a scientific process, errors of measurement or bias is reduced by using the research design, as being a set of plans and procedures. Burns & Groove (2015), further describes a research design as the format and theoretical structure under which the study was carried out. It includes the discussion of steps to be taken in order to safeguard the validity or authenticity of the findings. Burns & Groove (2015) describe the procedure as follows, after formulating the specific problem and thoroughly reviewing relevant literature, the researcher plans the study.

The study employed a cross-sectional descriptive design by means of both quantitative and qualitative approaches. Cross-sectional studies, also known as cross-sectional analyses form a class of research methods that involve data collection at one specific point in time (Hanson, 2008). According to Hanson (2012) cross sectional studies permit easy and quick data gathering for a large target population. An assessment of outcomes and risk factors for the entire population is often done with little trouble because the sample is a near-perfect snapshot of the whole. The snapshot nature of cross sectional studies, while convenient, however does have its disadvantage in the sense that it does not provide a good basis for establishing causality (Creswell, 2012).

3.3 Population

Population is described by Yin (2011), as the entire number of subjects under study which is whole numeric size of the participants. Fafunwa (2013) go on to say that; population in a study can be found in two types that is target population and accessible population. Target population includes all the members of a real or hypothetical set of people, events or objects

to which researchers wish to generalize the results of their research (Burns & Groove, 2005). Fraenkel and Wallen (2000) further defines population as an arrangement of people or things that a researcher has in mind from which one can obtain information and draw conclusion .In this study, the population includes teachers, Deputy Heads ,TICs, and School Heads .

3.4 Sample Size and Sampling Techniques

De Vos (2011) notes that a sample is a subset of the population that is selected for a particular study. Gall et al (2014) notes that a sample is a part of a whole. Data is generally collected from a sample rather than the entire population because using a sample is more practical and less costly than collecting data from the entire population (Polit & Hungler, 2013*).* However, as Patton (2012) pointed out that the sample can be a disadvantage if it does not reflect the characteristics, behaviours or beliefs of the population. The sample should then resemble the population.

Kothari (2010) and Fraenkel and Wallen (2010) defines sample as a smaller group of subjects drawn from the population in which a researcher is interested in gaining information and drawing conclusion. Sampling techniques refers to the process of selecting the participant of the study as a sample from the population. The study employed simple random sampling technique for the purposively four sampled schools. A total of 35 questionnaires were given out in the four schools with each school being given questionnaires tallying will its members of staff where random sampling will be used. The study will also be carried out by personally interviewing the School Heads and Deputy Heads who will be purposively chosen to take part in the study. There were four administrators chosen from the four schools to take part in the study.

Table 3.1 - Sample Size for Questionnaires

School	Number of Teachers	Sample Population
Sibantubanye School	10	5
Insukamini Primary School	46	10
Helemu Primary School	39	10
Ntshamathe Primary School	36	10
Total	**131**	**35**

3.5 Research Instruments

3.5.1 The Questionnaire.

Questionnaires are "documents that ask the same questions of all individuals in the sample" (Maree, 2010: 89).When designing a questionnaire, Keller (2008), notes that whether a questionnaire is self-administered or completed by an interview, it must be well designed. The following points were considered regarding the design of the questionnaires as outlined in Keller (2008). The questionnaire should be kept as short as possible to encourage respondents to complete it. Most people are not willing to spend much time filling out a questionnaire. The questions themselves should also be short, as well as simply and clearly worded, to enable respondents to answer quickly, correctly and without ambiguity. A pilot study was carried out to address these issues.

Questionnaires often begin with simple demographic questions to help respondents get started and become comfortable quickly. Open ended questions provide an opportunity to express opinions more fully, but they are time consuming (Creswell, 2011). In consideration of the age of the learners open ended questions were not included in the questionnaire. The researcher felt that some learners may have difficulty understanding the questions or even

expressing themselves (Svodziwa and Kurete, 2016). The researcher avoided using leading questions such as "wouldn't you agree…" as these types of questions tend to lead the respondents to a particular answer. Only multiple choice questions were used in the questionnaire. Time permitting it is useful to pre-test a questionnaire to uncover potential problems, such as ambiguous wording.

The questionnaire was chosen as the data collection instrument in consideration of the following advantages outlined by Maree (2010); It is easy and quick to fill in, respondents can answer at their own convenient time, respondents can give honest answers in detail, it is a practical and quick way of collecting data, complex questions can be adequately answered, the respondent's thinking process is revealed, coding and statistical analysis are easy. Leary (2010) also states the following advantages of a questionnaire as a data collection instrument; sensitive questions are more easily answered. If the topic is a sensitive one, subjects can be assured that their responses to a questionnaire will be kept anonymous and questionnaires require less extensive training of researchers.

Questionnaires, however, do have their disadvantages. Firstly, the nature of some questions does not allow probing, hence the researcher included multiple choice and rating scale response formats, for the respondents to choose from. Some questions may be left unanswered, to prevent this, the researcher will carry out a pilot study which will help in the selection of appropriate questions that respondents could answer. Also, some questionnaires may not be returned by the respondents. Respondents will be requested to hand over the questionnaires to the researcher on their way out of the hall/ classroom. As a result it is anticipated that all questionnaires will be returned.

3.5.2 Semi- Structured Interviews

Semi-structured interviews will be used to gather qualitative data from school authorities targeting the school heads and their deputies. The semi structured interviews use open-ended questions which is elusive concerning getting opinions on the response of the upgraded curriculum on the education of deaf children in Mzilikazi District Primary Schools. These interviews allowed the probing and clarity in answering as Yin (2010) states that, skilled interviewing can follow up a respondent's answer to obtain more information and clarify vague statements. Furthermore, non- verbal as well as verbal cues will be noted in the semi structured interviews.

Non- verbal cues will help in identifying the key points in the process. Kumar (2012) notes that observation is purposeful, systematic and a selective way of watching interactions or phenomenon as it takes place. In the case of interviews, issues focus on how to capture behaviour in real time and take into account the sequential and reciprocal nature. This is in line with Patton (2012), who stated that interviewing is repeated face to face encounters between the researcher and the informants directed towards understanding informants' perspectives on their experiences or situations as expressed in own words. The researcher as the interviewer will have the opportunity to motivate the participants leading to higher response rate as noted by Berg (2011).

Interviews of school authorities will be conducted in secure rooms in order to maintain privacy and participants will be interviewed individually. After asserting the participant, the participant will be asked by the researcher to clarify answers when need arise. The researcher will compile notes which will be of importance in having quotes. The compiled notes will be given to the participants to correct and confirm the information, which will be further segmented, coded and categorized. The interviews will ended when there is saturation of data as highlighted by Yin (2010). Interviewing school authorities will make it possible to

triangulate information for validity purposes. Interviewing authorities will result in obtaining information that the teachers may not reveal by any other data-collection method, like in questionnaires.

3.6 Research Protocol and Itinerary

The validation of the instruments will be done by conducting pilot testing and by seeking the expert opinion from the researcher's supervisor who will go through the questionnaire and interview guide items and make recommendation for improving the clarity of wording. The pilot testing of the instruments will allow researchers to test the validity of the questionnaires and research process as a whole. Pilot testing is important for the researcher to understand whether the questions have the same understanding among the respondents.

The quality of data gathering instruments is dependent on whether the instruments can measure what they are supposed to measure and if items carry the same meaning of all respondents (Kerlinger, 2012; Best & Kahn, 2016; Svodziwa and Kurete, 2016). Piloting is important because researcher could identify and correct any grammatical, structural errors, content errors in the question hence corrected errors improve validity of the questionnaire. Pilot testing help the researcher identify ambiguities and unclear questions to answer for necessary corrections.

3.7 Data Analysis Plan

Data analysis involves categorization of information into smaller parts or areas of relevance. It is a step very important when a study has been implemented and results are needed for conclusion. According to Silverman (2011) data analysis is a systematic procedure designed to examine and analyze the recorded information. Data analysis is a process that entails editing, coding, classification and tabulation of the collected data (Kothari, 2011). It involves organizing what the researcher has seen, heard and read so that the sense can be made of what

a researcher has learnt (Svodziwa, 2016). Qualitative data especially those concerning the behaviour and the opinion of the people will be recorded in interview guides and systematic analysis will be utilized to analyze the data. Quantitative data will be categorized and presented in a tabular form and graphs.

3.8 Ethical Considerations

Ethics imply norms for conduct that distinguish between acceptable and unacceptable behaviour and helps researchers grapple with ethical dilemmas by providing important insights, concepts, tools, principles and methods that can be useful in resolving these dilemmas (Revees: 2011). Ethical issues will be addressed before going into the field to gather data for addressing the problem at hand. As the thesis involved human participants it therefore will bring about ethical issues like right to privacy, confidentiality, personal autonomy, respect and dignity.

Participants will initially be briefed about the purpose of the research and will be assured that the information that will be collected will be used for educational purposes only and that no names will be mentioned in the writing up of the thesis. Participants were given the right to opt out of the study when they feel that the issues being discussed are against their conscience. The researcher will obtain an access letter from the Midlands States University. The researcher will have invaluable respect on the rights, dignity and worth of all respondents. Anonymity among the participants will be assured. The researcher will share the study's findings with the schools in order to ensure the community benefits from the findings that would have been gathered. The study will also ensure that fears and concerns of participants are positively considered and respected. A balance on ethics will be established between the concern for integrity of data on one hand and risk to privacy or confidentiality and anonymity on the other. In terms of gender sensitivity, the need for a gender balance in

the survey will be taken seriously particularly based on the argument that girls and boys face different vulnerabilities.

3.9 Summary

This chapter focused on the research instruments used in the research basing on their advantages with regard to the research problem. Observations, interviews and questionnaires were used to collect data leading to the better understanding of the research problem as it affects areas of curriculum upgrade and implementation. The following chapter focused on data analysis and its interpretation in relation to how it has been generated and also make conclusions for a possible relevant recommendations to be made.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter presents analysis of the findings and discusses the major findings of the study, according to the research objectives. Analysis of results is presented based on the data generated by the research instruments used in the sample population in the Mzilikazi District Schools.

4.1 Response Rate

4.1.1 Demographic Representation Respondents

Table 4.1 - Response Rate

School	Target Population	Actual Respondents	Response Rate%
Sibantubanye School	5	5	100
Insukamini Primary School	10	7	70
Helemu Primary School	10	7	70
Ntshamathe Primary School	10	8	80
Total	**35**	**27**	**77 %**

Table 4.1 is a summary of the respondents who participated in the study which was carried out. At Sibantubanye School, a total of 5 questionnaires were fully administered and returned hence giving a 100% response rate. Teachers and school head at Insukamini Primary School contributed in the administration of 7 from the total of 10 questionnaires, were returned hence resulting in a 70% response rate. Helemu Primary School also obtained a 70% response rate on the same 7 out of 10 respondents. Ntshamathe Primary had an 80% response rate by administering 8 out of 10 questionnaires. This gave an average 77% of the total questionnaires.

4.2 Respondent Representation by Sex

Figure 4.1: Respondent Representation by Sex
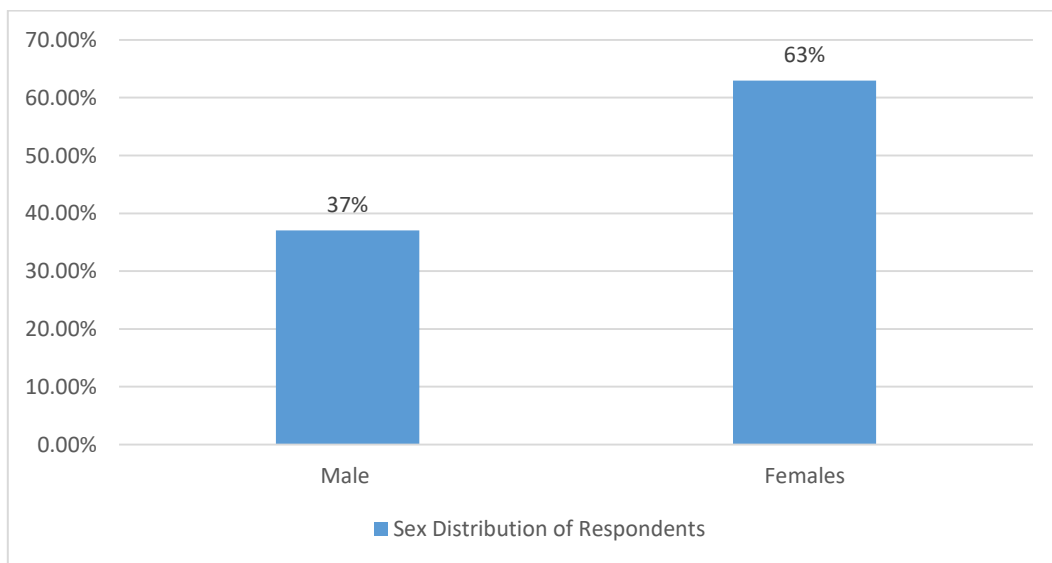
The majority of the study participants were female with 63% [17] while on the other hand 37% [10] of participants were male. The almost symmetrical distribution of male and female participants in this study was due to the enthusiasm of female's patience and willingness to want to work with deaf learners as compared to male. Santos (2002) contends that gender plays an important role in influencing teachers for teach deaf students. Females are caring in nature and are patient hence it can be noted that more participants have to be female.

4.3 Respondents Representation by Age Group

Figure 4.2: Age Group Distribution of Respondents
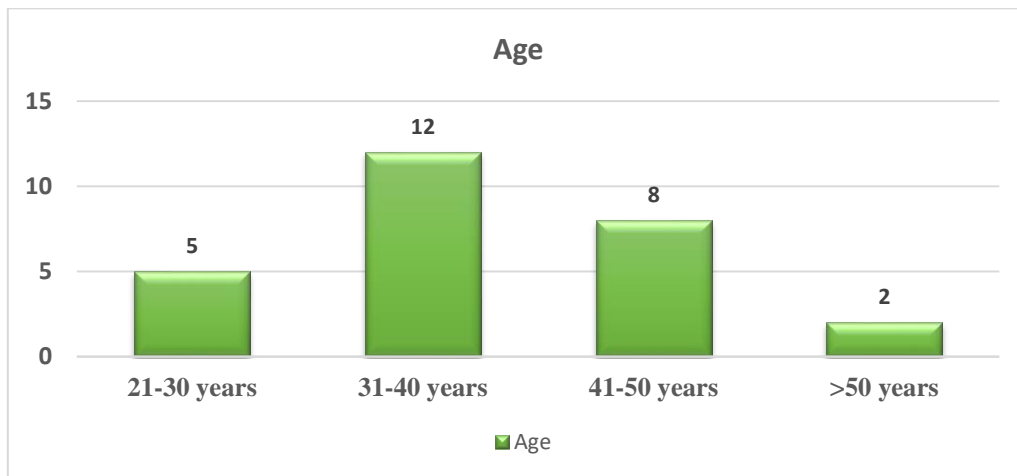
Figure 4.2 shows that the majority of the study respondents 44% (12) were in the 31-40 years age group. This was followed by 29% (8) which had respondents in the 41-50 years age group. The age group of 21-30 years has an 18% [5] while the least percentage was in the category of 50+ years which had 7% (2). Mbibeh (2013) notes that usually age play an important role in having teachers moving to teach deaf students. Usually deaf pupils are taught by mature people who have vast experience hence having many respondents in the age range of 41-50 years.

4.4 Educational Qualifications

Table 4.2 Educational Qualifications of Respondents

Current Qualifications	Frequency	Percentage %
Diploma in general Education	4	14%
Diploma in Special Needs	7	26%
Degree in Education	8	32%
Degree in Special Needs	4	14%
Masters Degree in Education	2	7%
Masters Degree in Special Needs	2	7%
Total	**27**	**100**

Table 4.2 is a summary of professional qualifications of the teachers in the schools with capacity to teach deaf pupils. The majority of the respondents 32% (8) have Degree in education, while those with a Diploma in Special Needs were 26% [7]. This was followed by 14% (4) who have Degrees in Special Needs while &% (2) had Masters Degrees in Special Needs while the other 7% [2] held a Masters in Education. It can be acknowledged that through these qualifications, teachers are in a position to effectively impart the needed knowledge to a number of disabled learners. This is further concurred by Chimhenga (2013) by noting that Zimbabwe Education policy stipulates that teachers who should teach in Special Needs need to have the requisite qualifications hence a major milestone has been made in realizing that.

4.5 Experience of Teaching Deaf Learners

Age group	Frequency	Percentage
1-10	9	33%
11-15	12	44%
16-20	6	23%
Total	**27**	**100**

Table 4.3 shows the varying teaching experience the teaching had on teaching deaf learners among other disabilities. It was further clarified that some teachers have experience in teaching learners in some form of disability as most of these school were not special referral schools to have a special enrolment of deaf pupils each and every year. The majority of teachers 44% (12) have 11-15 years of teaching experience with deaf learners. This was followed by 33% (9) teachers who have between 1-10 years of experience in special needs education. The least class of teacher were those with experience ranging between 16-20 years.

Unless there is a change of policy and full implementation of special education blueprints like the Salamanca and 2000 World Education Forum, Dakar, Senegal such experience would be worthless since the same challenges will be left to resurface in the near future and affect the new generation of teachers. It is however of vital consideration such experience in teaching deaf learners as it leads to the teacher in developing a lived experience and an understanding of the deaf learners (Caronsky: 2013).

4.6 Knowledge of the Update Curriculum

Figure 4.3 Knowledge of Updated Curriculum
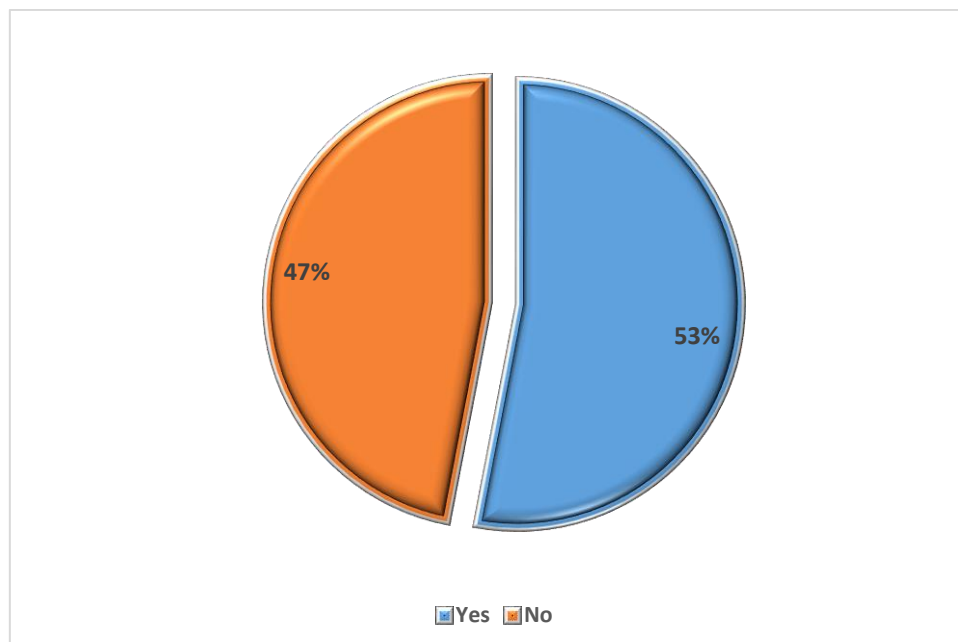
In assessing the significance of changes in the curriculum especial towards the total learning and development of deaf learners, the study sought to understand the teaching roles and

demands cherished in the new curriculum. Figure 4.3 shows the knowledge of the teachers on the updated curriculum. The majority 53% (14) noted that they knew that there was a new updated curriculum while 47% (13) were of the view that they did not know about the updated curriculum. In an interview session, it was pointed out that;

> "*We hear about curriculum updates but on its changes on deaf learners i have not heard anything...*"

In the context of effective teaching modelling, Maria (2011) is of the view that the school curriculum is a tool, which determines the didactic choices of a teacher. Teachers should know the curriculum, textbooks, the rules and laws of the education system and, as a whole, the state's role in education. It could not be substantiated if all the clauses dealing with Special needs education were not known by the respondent. It was however appreciated that the respondent objects the concept that the new curriculum is very inclusive and in a way open to the learning needs of disabled learners.

30% (8) respondents further alluded to not knowing the changes made from the old curriculum to the new one. They indicated that that they did not know about the changes which affected specifically the deaf learners as they have been no such training directed towards the implementation of the new curriculum. From interviews it was noted that so much has been said about the new curriculum in newspapers but however the changes in syllabus has a direct impact on deaf learners as resources are not there. One participant aired that;

> "no *workshops have been conducted and all is being haphazardly done hence we don't know the changes taking place....*"

The Salamanca Statement guides that the major challenge lies in providing in-service training to all teachers is a challenge if taking into account the varied and often difficult conditions under which they serve. Therefore, in-service training should, wherever possible, be developed at school level by means of interaction with trainers and supported by distance

education and other self-instruction techniques. These condition were never met since the 2015 implementation year of the upgraded curriculum. Mkhuma (2012) notes that knowledge is power and if changes are not rallied to the respective teachers then we are creating injustice to the deaf learners.

4.7 Use of Sign language by Teachers

It has been postulated by Howard Gardner theory of multi-intelligence to associate body kinaesthetic to the education programs. In order to ascertain the inclusiveness of the upgrade system, the study sought to gather such information from the teachers if they are in any position able to communicate effectively with their deaf pupils. The score range has been set as *moderate* for those with basic sign language skill, *good* was set as a score for sign language communication that could be used during lessons or in place of an interpreter while excellent was the superb signalling which deaf pupils can rely on to ask, investigate and contribute in the lesson delivery exercise. The findings was presented in the Table below.

Table 4.3 - Effectiveness of Sign Language by Teachers

Sign language Proficiency	Frequency	Percentage %
Excellent	7	26%
Good	5	19%
Moderate	15	55%
Total	**27**	**100**

From the table, the effectiveness of sign language by the respondents was at 26 % (7). They indicated that they effectively use sign language to engage with their pupils. 19 % of the teachers [9] regarded themselves as good users of the sign language giving a room for failing to fully communicate in an error-free dialogue. 55% noted to be moderate users of sign language. This was acceptable based on the view that at primary schooling level, there are

few complex concepts that may need a top notch sign language use. The moderate score does not translate to weak or poor grasp of the language.

On the other extreme end, it could be argued that teachers who are not proficient in sign language pose hindrances to effective learning of pupils who are deaf and limit their full cognitive development.it can be resolved that those who are not proficient can be in-serviced to be more effective through the use of those in much better signalling expertise.

4.8 Teaching and Learning Resources for Deaf Learners

Deafness usually defined as a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification. This has some adverse effects on the entire educational performance. It is imperative that there are some special resource that are needed to recondition the learning environment to a state of inclusiveness of all learners.

4.8.1 Adequacy of Resources in Teaching Deaf Learners

Figure 4.4 – Teaching and Learning Resources for Deaf Learners
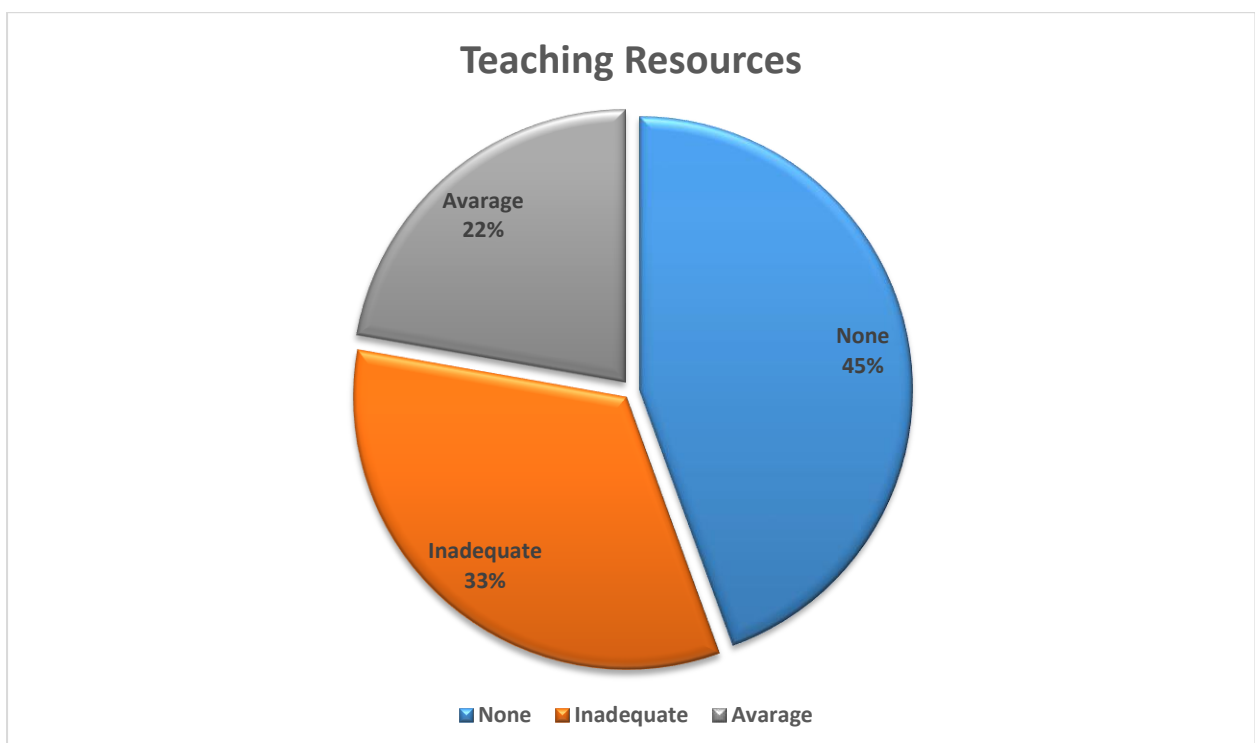
It was noted that in all the four schools, the issue of teaching and learning resources was a great challenge which has not been addressed for a while. 45% of the respondents indicated that there no resources with regards to the implementation of the upgraded curriculum. 33% indicated that concerning their learners educational demands they consider themselves as having inadequate resources while 22% hinted to be having average resources. The study concluded that more resources are needed which may include among other resources hearing indicators, Amplification Systems and other supporting resources where necessary.

Resources and infrastructure provision heavily rely on institutional disability policies. The study findings indicated that the available infrastructure was not accommodative of the deaf learners

> *"Due to the large number of students in some of my classes, sometimes my interpreter misses a seat and space to interpret from because we are so squeezed"*
>
> *"Laboratory and workshop work pose a challenge for deaf learners because they only follow what the technician does without hearing out the instructions because they do not have an interpreter"*

It is evident from the findings that lighting affected how deaf learners interacted in class. Dim lighting was reported to cause difficulty when following an interpreter during a lecture. These findings are consistent with the views of Kaderavek and Pakulski (2002) that appropriate lighting is also necessary for those students who supplement audition with speech reading.

4.8.2 Acoustic Presentation in Classrooms

The majority of the schools 75% (3) do not have acoustic treatment and only one school (25%) has acoustic treatment. Coombs (1995) asserts that teaching materials are used to promote learning, maintain interest and add variety to the lesson and relate one subject to other subjects. According to Eshiwani (1985) lack of school resources affect learning in both primary and secondary schools. This study found out that all the special units and the school lack adequate materials which hinders effective teaching and learning because teachers and

learners are not able to expose themselves to those resources in order to have effective teaching and learning.

All the respondents interviewed and administered with the questionnaires indicated that available materials and resources are inadequate in any form or field needed. For the deaf learners to benefit in a learning situation the classrooms should be treated acoustically and enriched with learning materials. These can be achieved through the use of *Visual Perception* and *Au*diological equipment. Some additional aural measures that may be used include among others the Pure-tone, Speech audiometry, Hearing aid evaluation to include electroacoustic and if possible the Impedance audiometry including tympanometry and stapedial reflex testing. It is also suggested that deaf pupils be allowed a front row sitting in the classroom so that they can maintain an eye-contact with the teacher.

4.8.3 Mode of Instruction

Mode of instruction refers to the way the lecturer packages and delivers course content during class lesson. Modes of instruction could be in different forms including lecturing, using classroom aids, computer instruction, web-enhanced learning or online instruction. At the schools, the mode that is most frequently used is the lecturing method. Examinations are also within the mode of instruction as they are the determining factor as to whether the content delivered has been understood and can be applied.

For users of hearing aids , it was important that the class environment had minimal noise to avoid interruptions with the transmitter , however from the findings, of the participants who use the haring device, 40 % had stopped using them due to too much external noise influence which were equally amplified by the aid making the situation worse. The Deaf Zimbabwe Trust (2013) pointed out that only in the constitution, sign language is an official language which in reality is not recognized. There has been a need to incorporate sign language in the

training of police, nurses and in all the learning institutions like universities as a way to accommodate its users. Such remarks makes it clear that the teaching processes least consider the deaf and hearing Impaired students as they mainly focus on aural delivery of lesson and teaching instructions.

It was revealed by the school headmaster in an interview that certain provisions have to be in place to facilitate the developmental and fruitful education of learners with hearing disabilities as he noted that:

> *"For deaf learners to be fully included in a mainstream classroom, the schools should strive to apply recommendations from the Persons with Disabilities as well as implement the recommendations in Disability Policy. This will require finances set aside to ensure good infrastructure like lighting in class rooms, provision of overhead projectors, and provision of hearing aids as well as increasing the human resource of sign language interpreters"*

Teachers have expressed many challenges during the course of teaching deaf learners mainly in how to deliver meaningful instruction to them through the use of sign language. The different challenges highlighted included; difficulty in explaining abstract concepts, complained of learners being at different levels academically hence difficulty to coordinate them in one class, lack of learning materials for these children, shortage of sign language books, regular absenteeism and lack of parental support.

The finding supported the views of Sundeen (2007) that noise interferes in the use of residual hearing, distorts the speech sounds and limits the understanding of deaf learners in classrooms. Generally, a noisy learning environment affects a student's ability to focus; the same is true for deaf learners, especially those using hearing aids, as evidenced from the findings. For learners with hearing loss, the level of back-ground noise in a classroom, the signal to - noise ratio, and reverberation time can be crucial factors in their ability to understand spoken language (Crandell & Smaldino, 2000).

The study assumes that deaf learners would have an easier time if the teacher used instructional tools such as overhead projectors and diagrams. This would enable them follow the lecture slides and the interpreter simultaneously, it would also makes it easier for the students who were not accompanied to class by an interpreter. In instances of laboratory use, the findings indicated that deaf learners heavily relied on looking at what the technician was doing without having the procedure explained or signals to indicate a significant sound or on/off status of equipment. Teachers have expressed many challenges during the course of teaching deaf learners. The different challenges highlighted included; difficulty in explaining abstract concepts, complained of learners being at different levels academically hence difficulty to coordinate them in one class, lack of learning materials for these children, shortage of sign language books, regular absenteeism and lack of parental support.

The head teachers who are responsible for the schools reported that short attention span of the pupils were one of the reported problems facing the pupils. Other problems reported being lack of learning materials for these children, teacher's inadequate training, communication barrier and shortage of sign language books. The head teachers further expressed the problems which the teachers had reported to them as they teach the deaf learners in the school and units. They include lack of hearing devices especially hearing aids which are very important in the learning of deaf learners. They are used to amplify the sound in order for pupils who are deaf to benefit or to hear.

Teachers again raised a concern to the head teachers that the special education training given in colleges is not enough hence they experience problems when teaching children who are deaf. In fact, the deaf learners are supposed to follow the regular curriculum and if a teacher is not well equipped then it poses a problem to the teachers. The biggest problem or challenge to half of the teachers is that of communication. Noting from one teacher response was that:

"There are ddifferent signs at home and at school because a child is taught sign language at school and there are motherly signs at home which contradicts at some point. This can confuse the child and impede language development. On the other extreme children use sign language which is telegraphic hence they need special exams that suit them and not to be given the same examinations that are written by their counter parts. They need more time to write as well as special markers who can understand what they are trying to put across. Thus it is important for special accommodations to be made for them"

The realization of these trends will be in line with the Salamanca declaration which prioritized that certain changes in the following aspects of schooling, as well as many others, are necessary to contribute to the success of inclusive schools: curriculum, buildings, school organization, pedagogy, assessment, staffing, school ethos and extra-curricular activities. Most of the required changes do not relate exclusively to the inclusion of children with special educational needs but it's a form and part of a wider reform of education needed to improve its quality and relevance and to promote higher levels of learning achievement by all pupils. The adoption of more flexible, adaptive systems capable of taking fuller account of the different needs of children.

4.9 Summary

The chapter presented the data that was generated throughout the study by a means of research instrument in the form of interviews, observations and questionnaires. The was presented on a sequence of a gene-species relationship by addressing the *general aspect* leading to *specific ones* .Tables and chart were used to make a graphic presentation of the findings where necessary. Detailed and argumentative justification was given in the form of narrative supported by scholarly document review. The next chapter will be a presentation of a summary of the study, conclusion and recommendations as the researcher deems suiting to be the solution of the research questions underpinning this study.

CHAPTER 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

In this chapter, the results of the study were used to summarize the; "Response of the Upgraded Curriculum on the Education of the Deaf Children in Mzilikazi District Primary Schools. This chapter, therefore, recounts the summary of findings, conclusions, recommendations and suggestions for further research.

5.1 Summary

The study was developed on the desire to assess the applicability of the Zimbabwe' upgraded education curriculum that was rolled out in 2015. This was done with special attention given to schools and pupils with pupils of Special Needs. The study focused on selected school that were known to have deaf children in Mzilikazi District Primary schools and assess the teaching and learning delivery procedure with special attention paid to the inclusiveness of the teaching staff in accommodating learners with hearing impairment. To contextualize the

study, relevant theories and literature was consulted and review to substantiate the applicability, usefulness and successfulness of the new upgraded curriculum especially to the learners who require extra attention and needs. The Salamanca statement was used as the benchmark which to review and relate literature so that the study is in line with the desired inclusiveness in education. A survey design was preferred to be applied as each school was a special case, whose circumstances could not be used to replicate other schools in this regard. Interviews, questionnaire and observation were used as the main data gathering instruments as it suited the open ended but limited data inflow at the same time taking into consideration the rights of privacy and need to protect the identity all respondents. Data was presented in table and chart that were deemed to give enough clarity and scholarly views in specific reference key issues being addressed in each subtopic.

5.2 Findings

5.2.1 Educational Needs of Deaf Learners

The study noted that the effectiveness of the support and its impact on the pupil's progress and breaking down any barriers that they face should be regularly reviewed and evaluated, taking into account the views of the pupil and parents. Key areas that are related to the pupil's deafness that may require consideration in language and communication, numeracy, technology and psychomotorial skills development. The effectiveness of these measure depends of the available communication network structures that are placed by each respective teacher.

5.2.2 Education Environment for the Deaf Learners

The pace of teacher's instruction was noted as an influential factor related to sign-language mediated learning. It was noted that an interpreter-mediated learning often led to time lags between spoken and sign messages and pace of instruction is among other variables influencing deaf students' academic achievements. Deaf students may lack the language

skills necessary to follow more abstract conversations, comprehend text, and understand the events. Understanding of written content by deaf learners may be restricted because of limited reading skills observed in many deaf individuals.

5.2.3 Challenges posed by the Upgraded Curriculum on Deaf Learners

Deaf learners would have an easier time if the teacher used instructional tools such as overhead projectors and diagrams. This would enable them follow the lecture slides and the interpreter simultaneously, it would also makes it easier for the students who were not accompanied to class by an interpreter. Teachers have expressed many challenges during the course of teaching deaf learners. The different challenges highlighted included; difficulty in explaining abstract concepts, complained of learners being at different levels academically hence difficulty to coordinate them in one class, lack of learning materials for these children, shortage of sign language books, regular absenteeism and lack of parental support. Resources allocation at schools are too low to support learning and teaching. Other than textbook shortage, schools are characterized by inadequate instructional materials such as student workbooks, teaching aids and enrichment materials.

The study noted that the updated curriculum is being implemented with reservations. This due to the fact that resources are few and the deaf learners have been forgotten by the government. Schools budget are not enough to cater for the needs that are required by the updated curriculum. Systematic monitoring and evaluation of learning progress, formative assessment, should provide a teacher with necessary knowledge to permanently adapt teaching based on student's ongoing needs. Besides familiarity with individual deaf learner's needs, a teacher needs to understand deaf learners as the population.

5.3 Conclusion of the Study

There were factors investigated hindering the implementation of the curriculum of the deaf learners in Mzilikazi District Primary Schools and these include; inadequate teaching /

learning resources, teachers using classrooms with no acoustic treatment and half of them not proficient in sign language, and teachers rarely attending in service courses meaning they are not equipped with current trends of education for deaf learners. The researcher feels that there is need for further research to unearth other hindrances to effective learning which could be addressed by other researchers in order to have effective learning of deaf learners. The key issue noted was resources in the study. The study also confirmed that factors such the lecturing mode of instruction, incompetent interpreters, inadequate infrastructure and social isolation and loneliness have prevent deaf learners from attaining positive learning outcomes.

5.4 Recommendations

Based on the findings and in certain steps need to be taken. Some of the recommendations include;

- Fully implementation of the Salamanca Statement since it has been widely accepted as the best standard to achieve inclusive education in the United Nations member states.

- Develop disability policies that will suit each respective school and provide a way of implementing the new curriculum in the way suiting it.

- Competency in sign language by pupils, teaching and non-teaching staff in schools. This will ease communication as well as encourage teachers to become more sensitive to the deaf learners and modify teaching methods and examination setting so as to accommodate them.

- There is need to increase human resource particularly sign language interpreters who have appropriate educational skills; at least a minimum of a Bachelor's degree as well as provide incentives commensurate to work done.

- To deliver Video lessons to deaf pupils on instances where the interpreter is not available or the teacher is least competent to deliver lesson in sign language.

- The teachers teaching deaf learners should be given frequent workshops and seminars to keep abreast with the current trends of the education of deaf learners. They should also attend short courses in sign language in order for them to be more proficient.

- Parents should provide their children with all the basic needs required and allow them time to study at home in order to give the necessary support to enable them learn effectively. Successful education needs the three pillars that are actively involved that is parents, teachers and pupils. The researcher established from the respondents that both lack of private study at home and lack of basic needs interfere with these children's learning.

5.5 Suggestions for Further Research

The researcher recommends a study be conducted in the teaching of mathematics and numeracy concepts to deaf pupils. This viewpoint is inspired by significant role played by language in conceptualizing learning theme and explaining theories to deaf pupils. It is believed that such a study will reflect the extent to which deaf pupils are included in the current knowledge generated in mathematics and numeracy.

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INTERVIEW GUIDE

Interview Questions.

1. What are the educational needs of learners who are deaf in the upgraded curriculum in primary schools?

2. How relevant is the upgraded curriculum to the needs of deaf learners?

3. What sort of skills do classroom teachers have to enable effective learning by deaf learners in the upgraded curriculum?

4. What can be done to make the upgraded curriculum relevant to the needs of deaf learners?

5. Is there any budget for supporting teaching and learning of deaf learners in primary schools?

6. Do you have in-service programs to train teachers for deaf learners?

7. What are the planned modalities of the in-service training?

8. What sources do you have in getting teaching and learning equipment for deaf learners?

9. What are your suggestions on improving instructional system to the deaf learners?

Thank you for cooperation.

My name is Nontando Sibanda, a student at Midlands State University doing Bachelor of Education Degree in Primary .You are invited to participate in this research by providing your views on "How responsive is the upgraded Curriculum to the needs of deaf learners in Mzilikazi District Primary Schools in Bulawayo. Your contribution will help in completion of this study. The information you provide will be used strictly for academic purposes. Participation in this research is voluntary and your confidentiality will be preserved as the analysis will focus on the patterns in the data over a number of informants. No names or information about any individual will be published.

Section A - Demographic Data for Teachers

(a) Male   (b) Female

2. **Age Group**

(a) 21-30 years   (b) 31-40 years

(c) 41-50 years   (d) 51 + years

3. What is your highest educational qualification?

(a) Diploma in Education   (b) Diploma in Special Needs Education

(c) Degree   (d) Degree in Special Needs

(e) Masters Degree   (f) Masters degree in Special Needs

4. Do you have any training in Special Needs Education?

(a) Yes   (b) No

5. How many years of teaching deaf learners do you have?

(a) less than five years   (b) 6-10 years

(c) 11-15 years   (d) 16-20 years

(e) 21 + years

Section B - Knowledge of the Updated Curriculum

6. Are you aware of the updated curriculum in the education of the learners who are deaf?

(a) Yes   (b) No

7. Does it present any change from the old curriculum?

(a) Yes   (b) No

If you said "Yes" or "No" please provide an answer;

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8. Are all the deaf learners in your class acoustically treated?

(a) Yes   (b) No

If no, is there any effort being made to treat the learners acoustically? Please explain briefly

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C- Challenges Faced By Teachers With Regards To The Updated Curriculum On

Teaching Deaf Learners

9. How would you describe the state of facilities in your school for deaf learners with

regards to the new curriculum?

(a) Very Adequate   (b) Adequate   (c) Inadequate

10. Does your school budget adequately to cater for deaf learners?

(a) Yes   (b) No

11. Is there any in-house trainings conducted by school authorities for teachers of deaf

learners to meet the needs of the new curriculum?

(a) Yes   (b) No

If any how many in service courses have you attended over the last year?

(a) None   (b) 1-5   (c) 5-10s

12. What challenges do you face when teaching deaf learners in the new curriculum? Explain briefly?

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13. What are your suggestions on improving instructional system to the deaf learners in the new curriculum?

Thank you for your cooperation

*****The End****