

**PERCEPTIONS OF SECONDARY SCHOOL TEACHERS TOWARDS
UGANDAN SIGN LANGUAGE AS AN ELECTIVE SUBJECT UNDER
THE COMPETENCY BASED LOWER SECONDARY
CURRICULUM**

BY

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20/U/GMSN/13092/WKD

**A DISSERTATION SUBMITTED TO THE DIRECTORATE OF
RESEARCH AND GRADUATE TRAINING IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF THE DEGREE OF MASTER
IN SPECIAL NEEDS EDUCATION
OF KYAMBOGO UNIVERSITY**

OCTOBER, 2024

DECLARATION

I, ISOTO BETTY, affirm that this is my original work and has not been presented for consideration by any university or higher institution of learning for any award and that I have only acknowledged all works that are not my own.

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APPROVAL

This dissertation entitled perceptions of secondary school teachers towards Ugandan sign language as an elective subject under the competency based lower secondary curriculum has been presented and is submitted with our approval supervision.

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DEDICATION

I dedicate this dissertation to my beloved parents Mr. Obanya Gerald, late Ms Galandi Norah and my aunt Ganda Ritah.

ACKNOWLEDGEMENT

I greatly acknowledge my supervisors Dr. Patrick Ojok and Dr. Ephraim Lemmy Nuwagaba for their tireless guidance. It was majorly because of them that this dissertation came to a successful completion. Sincere gratitude goes to all my respondents who willingly availed me with the information necessary as far as this research was concerned. I greatly acknowledge Kyambogo University staff and my classmates for encouraging and supporting me in the course of this study. May the God Almighty reward you all excessively.

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ABBREVIATIONS

ASL-	American Sign Language
CBC-	Competency Based Curriculum
CRC-	Convention on the Rights of Children
CRPD-	Convention on the Rights of People with Disability
KYU-	Kyambogo University
MoE&S-	Ministry of Education and Sports
NCDC-	National Curriculum Development Centre
SL-	Sign Language
TC-	Total Communication
UN-	United Nations
UNAD-	Uganda National Association of the Deaf
UNCRC-	United Nations Convention on the Rights of Children
USA-	United States of America
USL-	Ugandan sign language

ABSTRACT

Ugandan sign language (USL) is a native body language that uses physical aspects by persons with hearing impairment in Uganda. A competency-based curriculum (CBC) is a curriculum that emphasizes what learners are expected to do rather than mainly focusing on what they are expected to know. The purpose of the study was to explore secondary school teachers' perceptions towards USL as an elective subject under the lower secondary curriculum. The participants comprised two categories (01 head teacher and 10 teachers). A qualitative research approach, guided by a case study design was used in this study. The study used semi-structured interviews and focused group discussion to collect data from the head teacher and the teachers. The findings of the study showed that teachers embraced USL as an elective subject and that some teachers have a training background in special needs education and had the knowledge and skills to teach USL. There were many teachers however, who lacked knowledge and competence in teaching Ugandan sign language. The study results also showed that the school lacked instructional materials like sign language dictionaries, alphabet charts, projectors, videos, textbooks among others. The study concludes that Ugandan sign language as an elective subject is a progressive policy reform but may not see light unless the quality of sign language instructors at secondary level is addressed. It was therefore recommended that the government ought to recruit more qualified sign language teachers and to provide the necessary instructional materials.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter described the study's background, the problem statement, the study's purpose, study objectives, research questions, scope of the study, significance of the study, theoretical framework.

1.1 Background to the Study

According to Okombo (2006), sign language is a language that uses hands to convey a message. It is an assistive technology where a deaf person utilizes an interpreter to transmit all human communication. On the other hand, a competency-based curriculum (CBC) is a curriculum that emphasizes what learners are expected to do rather than mainly focusing on what they are expected to know.

World over, the United Nations Convention on the Rights of the Child (1989), the Universal Declaration of Human Rights (UDHR 1948), and the Convention on the Rights of Persons with Disabilities (CRPD) (2006) list education as one of the fundamental human rights. The 1989 Convention on the Rights of the Child (CRC), states that the rights of children with disabilities ought to be recognized and promoted and specifically Article 24 stresses that children with hearing impairments require access to particular services to learning such as Sign Language.

The fourth Sustainable Development Goal (SDG) emphasizes inclusive education for everyone. Accommodating all children in school, despite their academic and social abilities, is what inclusive education refers to (World Bank, 2020). Inclusive

education means real learning opportunities for groups who have traditionally been excluded – not only children with disabilities, but speakers of minority languages too. Education that is inclusive means that students with or without disabilities, as well as those with "special educational needs," learn together in regular classrooms. This happens when students in the same courses, whether they have disabilities or not, participate and learn together (UNICEF, 2019).

Children with special needs are still not supported in the classroom, nevertheless. For instance, there are currently a shortage of sign language instructors and interpreters in schools for children with hearing impairment (UNESCO, 2012)

Language is a way of reporting that employs common symbols and bodily parts to represent ideas and emotions. It includes vocalizations, gestures, and/or written symbols (Suzette, et al., 2014). Sign is interpreted by arrangement and standardization, and it was created by a collection of deaf people living together. It also uses a system of visual symbols (Okombo, 2006). A language with signs that serve as words is called sign language. The phonemes and morphemes that make up these words mix in a special way to give each word its own identity.

According to Okombo (2006), sign language is a language that uses handwritten symbols to convey a message. The phrase is typically applied to mean a kind of communication that combines finger spelling with manual signs. Signs are used, for instance, to indicate the direction of various movements, such as contact point, single movement, double movement, single round movement, double round movement, repeat to and from movement, vertical movement, horizontal movement, and single up and down movement (Botswana Sign Language Resource Project, 2008).

Ugandan sign language Research Project of 2006 states that deaf people use sign language to communicate with one another. Sign Language dictionaries give instructions on how to sign words that are reported in English and cannot be used to check the explanation of signs or their origins as one would do with English dictionaries. Additionally, sign language is defined as an assistive technology where a deaf person utilizes an interpreter to transmit all human communication. Members of a particular deaf group use manual-general signs as a form of communication known as sign language (Kenya Society for deaf children, 2006).

The recorded history of sign language was in Western societies which started in the 17th century, as a visual language or method of communication, although references to forms of communication using hand gestures date back as far as 5th century BC Greece. One of the earliest written records of a sign language is from the fifth century B.C., in Plato's *Cratylus*, where Socrates says: "If we hadn't a voice or a tongue, and wanted to express things to one another, wouldn't we try to make signs by moving our hands, head, and the rest of our body, just as dumb people do (Bruce and Scott, 2007).

One of the first nations to formally acknowledge a signed language as a language was Sweden. A government proposal in 1980/81 acknowledged Swedish Sign Language (SSL) (Mesch, 2012). In 1987, Auslan was acknowledged by the Australian government as the chosen sign language of the Deaf population (Johnston & Schembri, 2007). French Belgian Sign Language (LSFB) was officially acknowledged by Belgium's Parliament of the French Community in October 2003. On May 13, 2014, Danish sign language was officially recognized in Denmark. In 2010, Kenya's Constitution officially recognized Kenyan Sign Language (Sarah, 2012).

Uganda was among the first countries in the world and in Africa to officially recognize sign language in the Constitution of 1995. Article 35(2) of the Constitution states that government should enact a national sign language policy, which will be used to promote development of sign language in all service sectors both public and private. Sign language has evolved into Ugandan sign language (USL) (Lule and Wallin, 2010). The first deaf schools in Uganda began operating in 1962, and when sign was permitted in the classroom in 1988, various sign languages are said to have merged.

A sign language dictionary was generated and produced at Kyambogo University Faculty of Special Needs and Rehabilitation, the first university in Uganda to offer sign language training programs (Lule and Wallin, 2010).

Researchers Rosenstein and Vernon (1961) found that deaf people who use sign language to interact or communicate may see clearly. The concept of language has raised to the top of the global priority list for many schools of students with hearing impairment. In Uganda, it is only at Kyambogo University where Ugandan sign language interpreters are trained. Among the schools that teach Ugandan sign language is Uganda school for the deaf, Wakiso Secondary School for the deaf among others.

The development of Ugandan sign language can be traced from the 1950s when Deaf children and their family members used home signs and gestures to communicate with the hearing people in the community. In the 1980s, up to now most hearing parents, family members, Deaf persons, teachers of Deaf children started learning Ugandan sign language. These programs were conducted by the Uganda National Association of the Deaf (UNAD). In 1988, the use of Ugandan

sign language was accepted in class than total communication (Lutalo-Kiingi, 2014; Wallin et al., 2006).

Five regional varieties of Ugandan sign language can be distinguished, used around Gulu and Lira towns (northern) region; Ngora and Mbale towns (eastern) region; Mbarara town (western) region, and the city of Kampala. These varieties are known to have some cultural/lexical as well as phonological differences (Wallin et al. 2006).

Given that Ugandan sign language is not global, its uses and meanings are interpreted differently and provide difficulties when used by persons from diverse language backgrounds in different locations and nations. It is a tongue that is acknowledged as an entirely formed language separate from spoken languages (Meir, et al., 2010). The Constitution of the Republic of Uganda (1995) states in Principle XXIV(c) that "The State shall promote the development of a sign language for the deaf." As a result, this legal provision enables people with hearing impairment to have equal access to education in all ways possible with the help of support personnel like sign language interpreters.

Majority of secondary school teachers however, are not trained signers with deaf students. According to discussions concerning the means of communication and education suited for students with hearing impairments in various schools for the deaf, sign language as a medium of communication has not been officially acknowledged as a form of communication to be utilized in all secondary schools (UNAD, 2004).

Teachers are crucial in the effective use of sign language in schools for the deaf and academic success of students may be significantly hindered by teachers' lack

of skills and negative perceptions. Teachers with low expectations and poor signing abilities do not encourage the use of sign language (Lieberman & Houston, 2009). A competency-based curriculum (CBC) is a curriculum that enhances what learners are expected to do rather than mainly minding on what they are expected to know. In principle, such a curriculum is learner-centred and adaptive to the changing needs of students, teachers, and society. A CBC attempts to certify student progress on the bases of demonstrated performance in some or all of the aspects of that role. It requires learners to demonstrate that they have learned the required knowledge (know), skills (do) and attitudes (behave) (Nakabugo, et al. 2011).

According to the education system in Uganda, lower secondary (S.1- S.4) consists of 4 years of schooling at the end of which students undertake Ordinary-level exams (O-level) in at least 8 subjects with a maximum of 10 subjects. It is from senior one to senior four (MoE&S, 2020).

The new lower secondary curriculum was released in February 2020 by the government of Uganda with the aim of enhancing learners' aspirations especially regarding to skills training and improvement (MoE&S, 2020). The main goal was to replace the old secondary education paradigm with a more inclusive curriculum that could satisfy the needs of learners, fosters on the development of crucial soft skills and to prepare students for the challenges of the future; empowering them with knowledge and skills in various fields of study in a flexible educational program tailored to each student. The LSC introduces far-reaching changes to make secondary education more compatible with economic growth and labour market demands (National Curriculum Development Centre, 2020).

According to NCDC, the new competence-based curriculum permits students to take only 12 subjects in S.1 and S.2, with 11 of these being compulsory (core) and one elective. The core subjects that every student must take are English Language, Mathematics, History, Geography, Physics, Biology, Chemistry, Physical Education, Religious Education and Kiswahili. A core subject is compulsory and must be completed for one to meet the requirements of the course. A core subject cannot be substituted with an alternative subject (Mubangizi, 2020). Subjects that are elective however, are non-mandatory and students choose which one to study. Agriculture, ICT, English-language literature, visual and performing arts, local languages, including Ugandan sign language, technology and design, nutrition and food technology, and foreign languages (French, Latin, Arabic, Chinese) are among these subjects (NCDC, 2020).

The purpose of core subjects is to offer all students with subjects that provide them with the foundations for life. Equipping young people with the skills in core subjects will make them confident, up for a challenge, be able to confront problems and eventually make possible course of action about their time ahead. Students who receive a strong education in core subjects are at an advantage when it comes to furthering their education and career. They find it easy to understand more complicated concepts and are more successful in school and beyond. A strong foundation in core subjects help students advance critical thinking and problem-solving skills and improve their communication skills. On the other hand, elective subjects offer the opportunity for students to discover a passion, or learn that a prior passion is not right for them in the long run.

Teachers play an important part in curriculum transformation as they have expertise, experience, and knowledge of their students to shape the curriculum.

They give vital input in determining learning objectives, selecting content, and scheming suitable instructional strategies for their students. They implement the curriculum in the classroom, utilizing their instructional skills to deliver lessons, facilitate discussions, and evaluate student progress (Hitanshu, 2023).

The researcher focused on teachers in this study because they connect the curriculum with the students, translating it into meaningful learning experiences and promoting a positive and supportive learning environment. The teachers' role is necessary in effective implementation to meet the desires of the students and supports the general learning and development.

1.2 Statement of the Problem

The competency based lower secondary curriculum was introduced by the Ministry of Education and sports (MoE&S) in 2020 and sign language was included as one of the elective subjects (National Curriculum Development Center (NCDC), 2020). The introduction of sign language as an elective subject at secondary level is a significant policy reform although there are only a few teachers who have received training in sign language (Wallin and Busingye, 2006). Majority of the schools employ signed English who are not articulate in Ugandan sign language to teaching deaf students (the signing employed by hearing teachers, since they normally employ English for instruction) (Wallin and Busingye, 2006).

The present special needs education (SNE) teacher education programs in Uganda only train inclusive education teachers for the primary level of education. This implies that there are very few or no qualified teachers who are knowledgeable and competent in Ugandan sign language at the secondary level of education. This may result in a situation whereby the majority students in secondary schools who

use/need sign language are taught by ordinary teachers who are unfamiliar with both deafness and/or sign language (NCDC), 2020). Given that teachers are in charge of curriculum implementation at the school level, their attitudes and views are essential to the actualization of sign language as an elective subject under the lower secondary competency based curriculum. Knowing teachers' perceptions towards an education reform can aid in determining their support needs and in developing the best professional and support strategies.

Since the launch of the CBC in lower secondary, no known research has specifically investigated the teaching of Ugandan sign language in secondary schools, let alone what teachers think about the new reform. Therefore, there is a need to explore how lower secondary school teachers perceive Ugandan sign language as an elective subject under the CBC in lower secondary, identify their support needs and recommend actionable strategies for implementing the curriculum reform. It is for this reason that carrying out of this study was found inevitable.

1.3 Purpose of the Study

The purpose of this study was to explore secondary school teachers' perceptions towards Ugandan sign language as an elective subject under the new lower secondary curriculum.

1.4 Research Objectives

The objectives of the study were to:

1. Establish the perceptions of teachers towards Ugandan sign language as an elective subject under the competency-based lower secondary curriculum.

2. Explore the factors that secondary school teachers anticipate to facilitate the teaching of Ugandan sign language as an elective subject under the competency-based lower secondary curriculum.
3. Identify the professional support needs that secondary school teachers require to effectively teach Ugandan sign language as an elective subject under the competency based lower secondary curriculum.

1.5 Research Questions

The study was led by the following research questions;

1. What are the perceptions of teachers towards Ugandan sign language as an elective subject under the competency based lower secondary curriculum?
2. What factors do secondary school teachers anticipate to facilitate the teaching of Ugandan sign language as an elective subject under the competency based lower secondary curriculum?
3. What professional support needs do teachers require to effectively teach Ugandan sign language as an elective under the competency based lower secondary curriculum?

1.6 Study Scope

This study focused on one selected secondary school in Wakiso District. The name of this school was not mentioned for privacy reasons. This school was chosen because it is a special needs school for the deaf students and it teaches using Uganda Sign Language.

The focus of this study was on teachers' perceptions towards Ugandan sign language. It discussed teachers' perceptions to teaching Ugandan sign language as an elective subject in the lower secondary competency based curriculum, the

factors teachers anticipate to facilitate the teaching of Ugandan sign language as an elective subject and the and professional support needs that lower secondary teachers need to teach Ugandan sign language as an elective subject. From December 2022 to December 2024, the researcher chose a topic, developed a research proposal, gathered and analysed data, and wrote the final report.

1.7 Significance of the Study

This study set out potentially as one of the first empirical investigations specifically focused on the Ugandan sign language component of the lower secondary competency-based curriculum. The study generated strategies for improving the teaching of Ugandan sign language in all schools

The study will help teachers and school administrators to have an insight about the value of using Ugandan sign language in the classroom such that students who have hearing impairment are helped to learn effectively. The study will help to identify the and professional support needs of teachers and identifying strategies for addressing them such that teachers who do not have SNE background can acquire knowledge and skills in sign language.

Lastly, the findings lay a foundation for future researchers on sign language and inclusive education at secondary level.

1.8 Theoretical Framework

This study was guided by the Concerns-Based Adoption Model (CBAM) to evaluate the perceptions of secondary teachers towards the introduction of Ugandan sign language as an elective subject under the competency based lower secondary curriculum. The Concerns-Based Adoption Model (CBAM) is a theoretical model for promoting change that facilitates leaders and researchers to

understand, lead, and monitor the sophisticated process of change in education (Hall, et al, 1974).

CBAM as a model evolved from a group of researchers in the Research and Development Centre for Teacher Education in University of Texas, Austin, around the 70s and it intended to collect data, evaluate, explain and monitor the implementation of changes that occur in education (George, et al., 2013). CBAM has been applied in the educational settings beyond 40 years to acknowledge educator's perceptions, behaviours, and variations of use throughout the implementation of an educational innovation (Hall & Hord, 2020). The model offers a view about people's perceptions towards an innovation that occurs when transformation transpires.

The CBAM emphasizes how people, such as teachers, parents, students and policy makers, respond to change (Hall and Hord, 1987). CBAM model asserted that for change to be successful, it rests upon individuals within an institution. Hence, the CBAM model can provide a clear sight about perceptions of secondary teachers towards the introduction of Ugandan sign language as an elective subject under the competency based lower secondary curriculum. The focus is on the teachers' perceptions, and the new change is the introduction of Ugandan sign language as an elective.

The researcher chose CBAM as her fact checking because it gives a wider view of educator's assumptions and perspectives that can be examined extensively in qualitative interviews aimed at behavioural changes. This theory relates to this study because people's perceptions, attitudes and beliefs tend to be ignored when the government is initiating a new programme, yet, they are the ones who actually

do the work for successful implementation of the new programme. Therefore, this model provided policy makers with techniques to measure perceptions of secondary teachers towards the introduction of Ugandan sign language as an elective subject under the competency based lower secondary curriculum such that necessary support is given to them for successful implementation.

Although CBAM has been used in many educational settings, it is however, criticized that it was developed and researched majorly in lower education settings. Its applicability to secondary education may be limited.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter reviews related literature to the study. The purpose is to identify findings generated by different authors that have related literature to this study.

The review was done basing on objectives of the study as follows:

1. Teachers' perceptions towards Ugandan sign language as an elective subject under the competency based lower secondary curriculum.
2. Factors that teachers anticipate to facilitate Ugandan sign language as an elective subject under the competency based lower secondary curriculum.
3. Professional and support needs that lower school secondary teachers require to teach Ugandan sign language as an elective subject

2.1 Overview of the History of Sign Language

People with hearing impairment use Sign Language as their native language for communication. The origins of sign language originated from the philosophers of Greece. Socrates believed it to be absolutely reasonable by the fifth century B.C. for individuals with hearing impairment to interact utilizing their hands, heads, and other bodily parts (Dominguez, 2009). Individuals with hearing impairment were taught to interpret written combinations of symbols in the sixteenth century by connecting them to the objects they stood for (Butterworth & Flodin, 1995). The same is true for sign language, which has its roots in France thanks to a man named Abbe Charles de LEppe, who is believed to have created the French sign language in the 16th century. He observed sign language being used by deaf people in France, improved the signs, and incorporated them to create sign language. There

was a significant trend of oralism in other parts of Europe at the time de L'Épée was championing the use of sign language in France, especially in Britain and Germany.

Between 1500 and 1700, it seems that members of the Turkish Ottoman court were using a form of signed communication. In the 18th century, Paris was home to a small deaf community that signed among themselves in Old French sign language. This was referenced by l'Abbé Charles Michel de l'Épée who created the first school for the deaf in Paris in the 18th century (Judéaux and Alice, 2015).

By around 1620, the first Manual Alphabet was published by Pablo de Bonet. The earliest school for the deaf in Paris would subsequently come after this. The manual methods were preferred and supported by the hearing community in the 1800s, but deaf educators continued to argue against them (Butterworth & Flodin, 1995).

Beyond 300 diverse sign languages are used throughout the world and they differ from each country. According to Dominguez (2009), sign language has several diverse regional accents that bring sign language discrepancies in how people use and embrace signs, even in countries where the same language is spoken. Similar to how spoken language evolved naturally through interactions between various groups of people, there are numerous sign language types in use today. American Sign Language (ASL), British sign language (BSL), and Australian sign language are three variants of English. Other sign languages include Arabic sign language, Chinese sign language (CSL), French sign language (LSF), Japanese sign language (JSL), Mexican sign language (LSM), Spanish sign language (LSE), and Ukrainian sign language (USL) (Dominguez, 2009).

Accepting sign language at least in theory allowed deaf students globally to communicate in their own natural language in schools. The first kind of communication is what is known as American Sign Language in the United States and Canada and this is the most frequently used sign language worldwide. There are signers from the USA, Canada, Mexico, Africa, and Asia (Stokoe, 1992).

2.2 Overview of Ugandan Sign Language

The sign language of Uganda is called Ugandan sign language. Ugandan sign language is a native body language that uses physical aspects by persons with hearing impairment in Uganda (Wallin, Lule and Busingye, 2006). Ugandan sign language is perceived through sight and is produced by the hands, face, and head. While other body parts, like the head, body, face, eyes, and mouth, produce non-manual features, the hands alone produce manual indications (UNAD, 2004).

In 1995, Uganda became the second nation globally to officially acknowledge Sign Language in its constitution after Austria. A dictionary of Ugandan sign language was released and Uganda officially recognized Ugandan sign language as a language. The initial linguistic study gave "USL" as the abbreviation for Ugandan sign language. In order to avoid any perturbation in research with descriptions of other sign language, Lutalo-Kiingi (2014) advocated a change to the term "Ugandan sign language." Olulimi Iwobubonelo e Uganda and Lugha ya Alamaya Uganda are the names for Ugandan sign language in Luganda and Swahili, respectively.

Uganda's linguistic minority speaks Ugandan sign language as their primary language. Additionally, it serves as a means of communication for students with

hearing impairment in schools and within the Deaf community in Uganda (Lutalo, 2016).

Ugandan sign language began to advance and develop when Deaf children were brought together in Deaf schools in 1961. Ugandan sign language was influenced by British Sign Language (BSL) due to English tutors working in one of the schools. For example, in 1987 a hearing volunteer from England was sent to work at the Uganda School for the Deaf (USD) in Ntinda, Kampala City. Although she learned some Ugandan sign language, her teaching was strongly BSL based (Wallin et al., 2006). There was also influence from American sign language (ASL) on Ugandan sign language in the 1980s when an influential Deaf man returned to Uganda after working in Nigeria for a bible college; he had learned ASL, the predominant language within the college, which was seen by some in Uganda to have a higher status than Ugandan sign language (Nyst, 1999) consequently, there came to be a clear influence of ASL in the Ugandan sign language of some Deaf Ugandan adults, in addition to the strong influence of BSL already present (Nyst & Baker, 2003 in Lutalo-Kiingi, 2008).

2.3 Overview of the Competency-Based Curriculum

Curriculum is a systematic, planned explanation of what, why, and how much students ought to learn. A competency-based curriculum (CBC) is a curriculum that emphasizes what learners are expected to do rather than mainly focusing on what they are expected to know. In principle, such a curriculum is learner-centred and adaptive to the changing needs of students, teachers, and society. A CBC attempts to certify student progress on the bases of demonstrated performance in some or all of the aspects of that role. Requires learners to demonstrate that they

have learned the required knowledge (know), skills (do) and attitudes (behave). A competency-based curriculum focuses less on what learners need to know and more on how learners apply their knowledge, skills and attitudes to the real-world environment. As a result, a competency-based curriculum helps learners to develop specific and generic competencies required to either progress in their education or progress into employment (Nakabugo, et al. 2011).

In Uganda, the thematic curriculum was put into place in 2007 for primary one and included the Competency Based Curriculum. The new lower secondary curriculum in Uganda, which is competency-based, began to be implemented in 2020 and Ugandan sign language was included as an elective subject (NCDC, 2020).

In order to implement CBC for lower secondary schools or O Level in 2020, the Ugandan government, through the MoE&S and the National Curriculum Development Centre (NCDC), conducted an education reform. A thematic curriculum is well placed to come up with such processes by raising educational standards, according to several education experts and scholars in particular through raising students' achievement levels in literacy, numeracy, and life skills. The CBC places a strong emphasis on learning outcomes and seeks to develop a well-rounded student with the information, skills, values, and attitudes necessary for the twenty-first century. Critical thinking and problem-solving, cooperation and self-directed learning, creativity and innovation, mathematical computations, ICT proficiency, and communication are among the generic skills that are prioritized (NCDC, 2020).

2.4 Perceptions of Teachers towards the Introduction of Sign Language

Teachers are vital in the successful implementation of sign language in schools for the children with hearing impairment. Teachers' abilities and perceptions can be a hindrance to learners' academic performance. Teachers' perceptions that do not foster the use of sign language are fear, minimal expectations and insufficient signing skills (Lieberman and Houston, 2009).

According to Chrappan (2015), teachers perceive teaching sign language under competency based curriculum as tiresome in terms of preparation and instructional materials and this attitude greatly interferes with their efforts towards implementing the designed curriculum. What they have not known yet is that the Competency Based Curriculum is much easier than Knowledge Based Curriculum.

Giar (2013) noted that positive perceptions shown by teachers and learners of sign language promote teaching and learning processes. According to the Behaviourist theory based on Skinner, language is a form of behavior gained through interacting with other users and if teachers cannot imitate the language for the deaf learner then a negative perception develops between the teacher and the learner because the more the teacher teaches verbally the more the deaf learner fails to perform well in class work. Therefore, awareness campaign on the part of the teacher in school is necessary towards the advancement of sign language use (Oracha, 2007).

Teachers generally perceive sign language under competency based curriculum as a time-consuming and a highly demanding subject. Although the content of teaching in the competency based curriculum may not differ from the knowledge based curriculum, the applied methods and forms of classroom work differ. The

competency based teaching encourages group work and cooperative techniques which necessitate a lot of input in terms of time (Chrappan, 2015).

Lutalo-Kiingi (2014) notes that Ugandan sign language teachers who had more positive attitudes towards teaching Ugandan sign language influenced the development of the language in Uganda. He also noted that, negative attitudes based on considering Ugandan sign language as an art discipline made the Uganda government's funding for Ugandan sign language training courses reduce which hinders its full implementation in the competency-based curriculum.

Giar's (2013) study on strategies for teaching American sign language reported that positive attitudes portrayed by teachers and learners of ASL in California enhanced teaching and learning processes. This created safe learning climate where students felt comfortable and motivated to learn important aspects of ASL. Therefore, the way lower secondary teachers perceive teaching of Uganda sign language as an elective subject under the competency-based curriculum will determine its proper implementation.

Nyakahuma (1997) stressed that in Uganda, in one of the common languages spoken majorly in central region and other urban centres i.e. Luganda, a person with hearing problem is called "Kasilu" (Stupid). Most of deaf children especially those who become deaf before developing spoken language do not speak. As such, the hearing finds it disturbing to socialize with them. Failure to understand their verbal communication the hearing perceives the deaf as stupid. Because of this perception, it becomes demotivating for teachers to teach such children in sign language.

Horn (1995) noted that teachers exhibit bad perceptions in the classroom. Perceptions of teachers are characterized by calling children with hearing impairment like “Stupid”, “dumb” and rejecting their handicapped students which is a sign of bad perceptions.

Moore (2010) states that bad perceptions of teachers towards teaching of Uganda sign language may rise from frustrations of not having the necessary skills. In this situation it becomes clear that ordinary teachers who have had relatively little or no formal preparation for working with children with special needs respond negatively to the idea of teaching sign language.

Additionally, Kola-Olusanya (2005) argues teachers’ perceptions are instrumental to the successful implementation of sign language in schools. Teacher’s perceptions that do not promote the use of Uganda sign language are fear, limited expectations, and lack of signing skills.

A study carried out by Chrappan (2015) on teachers’ judgment on competency-based curriculum revealed that teachers of secondary schools are the least supporting and inspired about competency-based lessons. Chrappan attributes the indifferent attitude portrayed by the teachers towards the competency-based curriculum to the teachers not really believing that the new approach would be beneficial. Teachers rather prefer to use chalk and talk method of teaching like they were trained. Besides, they consider the role of teaching as being based on knowledge transfer only. With this negative attitude from teachers, the process of shifting from knowledge based to competency-based curriculum may be hampered and sign language may not be taught effectively.

2.5 Factors that May Facilitate the Teaching of Sign Language

Kyobe and Rugumayo (2005) reveal that instructional materials like interactive whiteboards, creative centers, and ICT, videos among others are necessary for teaching Ugandan sign language under a competency-based curriculum. They further note that the unique environment and resources required for implementation of sign language under a competency-based curriculum should be available in all secondary schools in Uganda. The adequacy of material resources and infrastructure may facilitate the proper implementation of the shift.

Additionally, UNESCO (2007) stated that resources such as hearing aids that provide teachers of sign language with services to enhance their instruction should be made available to schools. Teachers should also receive training on how to use and maintain the equipment given the high cost of repairs. Similar to this, Kochung (2011) asserted that providing children with hearing impairments with adequate learning resources is essential for teaching them sign language in schools.

Lieberman & Houston (2009) noted that teachers are crucial in the effective teaching of sign language in schools for the deaf and academic success of students may be significantly hindered by teachers' lack of skills and negative perceptions. Teachers with low expectations and poor signing abilities do not encourage the use of sign language.

Shaw & Delaporte (2011) opined that if learners have a good foundation in terms of using sign language as a first language, it may be easy for teachers to teach them sign language since they already have the background in it.

2.5.1 Factors Anticipated to Hinder Teaching and Learning Sign Language

Despite that sign language has significant, positive, and long-lasting impacts on a child's academic performance, it is unexpectedly obvious that a number of potentially difficult problems impede the development of Ugandan sign language in the teaching-learning environment (Moore, 2010).

In a study conducted by Benny (2018) to investigate the factors affecting teachers' perceptions towards the use of Sign Language in learning and teaching in Meru Primary schools. The study utilized a qualitative research approach and collected data using semi-structured interview and observation guides. The target population was thirty-two teachers of primary schools for the deaf from which the sample was drawn. The study participants involved six primary school teachers. The findings of the study revealed that insufficient learning and teaching resources influence the use of sign language in primary schools.

In relation to the above, Kyobe and Rugumayo (2005) noted that insufficient teaching tools are a major obstacle to teaching Ugandan sign language, claim Kyobe and Rugumayo (2005). Chalk is the sole teaching resource that most teachers are regularly given, and most of them work in cramped conditions with few teaching aids. This is a significant barrier to the new curriculum's successful design, implementation, tracking, and assessment of students learning sign language. Additionally, 50% of teachers in the United States of America (USA) indicated having insufficient instructional resources (Good, 1999). Differences in sign language achievement appear to be caused by variations in school amenities. Facilities like books, visual aids, electricity, hearing aids, and play areas help sign language learners learn the language more effectively (Postlethwaite, 1998)

Furthermore, Wanjau (2005) stated that teachers are not adequately creative and fail to utilize and devise out of the materials around the school surrounding to revamp their instructing. He also says that it is neither simply the accessibility of instruction tools that promote teaching of sign language instead the way teachers appropriately manage the few teaching resources offered. Mulonda (2013) emphasized that infants naturally pick up their first language from their parents. 95% of the children with hearing impairment born to hearing families are not in this position. These children don't have access to preliminary language acquisition. They have little language and social preparation before they enter school. The impact of this on the organization of the school, according to Adoyo (2002), is that it must prepare students for learning a primary language, an additional language, socializing, and the development of global knowledge.

This may suggest that schools lack extra time and facilities needed to start teaching the hearing impaired in their mother tongue simultaneously with sign language. In agreement with the foregoing, Shaw and Delaporte (2011) stated that it may be difficult for teachers to redirect learners to academic classrooms where the Curriculum Assessment and Policy Statement (CAPS) is observed if they do not have a strong basis in using sign language as a first language.

Related findings by Kyobe and Rugumayo (2005) reveal that most Ugandan secondary schools have no resources needed to integrate sign language as part of a competency-based curriculum. Latest classrooms, interactive whiteboards, creative centers, and technology at all aspects are necessary for the transition to a competency-based curriculum. Infrastructure and material resources that are insufficient could make it difficult to accomplish the change correctly.

Additionally, Osakwe (2010) highlighted that a major obstacle to teaching sign language, particularly to students with hearing impairments, is inadequate resources. Due to insufficient resources like interactive whiteboards, chat rooms, blinking lights, digital pens, infrared systems that are appropriate with hearing aids, computer-assisted note-taking, AS videos for test preparation and alarms, schools are not capable of providing deaf students with the necessary technology that might greatly foster the teaching- learning process (Brentari and Coppola, 2013).

Inadequate frequent communication between parents and Deaf children is one of the challenges related with teaching Ugandan sign language in the education of children, according to Luft (2017). He added that some parents lack the time, interest, resources, or motivation to encourage academic learning of students with hearing impairment. Similar to this, Miles, et al. (2011) claim that some parents of deaf children do not care about their well-being and do not give them the care they need. Deaf children may lack motivation if their parents lack interest. Overprotective parents frequently undermine their children' self-esteem and make learning more difficult for them (Senghas & Coppola, 2001).

In the competency-based curriculum, teaching and learning sign language as an elective topic may be hampered by the lack of special needs education teachers. Ikwen, et al. (2017) stated that this occurs frequently when the appropriate staff is not hired into special education centers. Most times, conventional teachers are hired to handle special education duties, and this can lead to a number of mistakes such an inability to appropriately teach students Sign Language.

According to Osakwe (2010), the teaching of sign language is difficult due negative attitudes that learners with hearing challenges receive from their peers due

to their disability. These attitudes can include mockery, bullying, avoidance, and many other unfriendly behaviours. Additionally, the deficiency of educated human, financial, material, inadequate trainers among others, are the challenges/barriers to learning and teaching sign language. Many teachers, students, and other stakeholders may be reluctant to use Sign Language in the competency-based curriculum due to the manifestation of these difficulties. Therefore, strategies must be proposed and put into practice to prevent them.

In a study carried out by Zainab, Asma and Ghazala in Lahore, Punjab, Pakistan on factors affecting the uniformity of sign language: perceptions of teachers of students with hearing impairment in 2023, the nature of study was quantitative. The population of the study was teachers of students with hearing impairment (SWHI), Sample of the study was 100 teachers (M=52, F=48) selected through convenient sampling techniques from different special education institutions. Survey method was used to collect data through self-developed questionnaire with reliability coefficient ($\alpha=0.72$). Statistical measures were used to analyze the data. The study showed that teachers of students with hearing impairment faced many issues due to the variation of the sign language where students use different signs in the classroom and teachers also learned different signs.

In connection to the above, Meir, et al., (2010) stress that given that Ugandan sign language is not global, its uses and meanings are interpreted differently and provide difficulties when used by persons from diverse language backgrounds in different locations and nations. It is a tongue that is acknowledged as an entirely formed language separate from spoken languages. Additionally, Dominguez (2009) provides that beyond 300 diverse sign language are used throughout the world and they differ from each country. Sign language has several diverse

regional accents that bring sign language discrepancies in how people use and embrace signs, even in countries where the same language is spoken.

2.6 Professional Support Needs to Teach Sign Language

In order to develop, expand, and broaden the knowledge that teachers have gained since receiving their initial training and to give them continuous professional development (CPD) in sign language, secondary school teachers need training that takes the form of refresher courses like workshops. Teachers need to be equipped on how to counteract all the challenges they will encounter during the implementation of the CBC, particularly in teaching sign language as an elective subject (Nakabugo et al., 2011).

In a study carried out by Zainab, Asma and Ghazala (2023) in Lahore, Punjab, Pakistan on factors affecting the uniformity of sign language: perceptions of teachers of students with hearing impairment, the nature of study was quantitative. The population of the study was teachers of students with hearing impairment (SWHI), Sample of the study was 100 teachers (M=52, F=48) selected through convenient sampling techniques from different special education institutions. Survey method was used to collect data through self-developed questionnaire with reliability coefficient ($\alpha= 0.72$). Statistical measures were used to analyze the data. The study showed that there is no professional development for teachers' per-service and in service. The school did not pay attention to the professional development of the teachers and that schools and government needed to pay attention to the development of per-service and in-service teachers in accordance with Pakistan sign language.

A language must be taught in advance in order for students to learn it (Suzette et al., 2014). These arrangements cover teaching methods, tactics, and strategies. According to Jerine (2013), a pedagogy means a comprehensive designing of a course of study which involves the structure, instructional goals, and intended methods. According to Westland (2014), effective methods for teaching and learning American Sign Language (ASL) involved students in ASL based dialogues.

Furthermore, Safder et al. (2002) stress that teachers are not skilled in utilizing sign language but should be encouraged to do so with the aid of deaf students, their peers, and most importantly, by attending training workshops and refresher courses on sign language. When it comes to their responsibilities for students with hearing impairment, teachers should be devoted and committed, therefore they should make an effort to provide these students more time with in and outside of the classroom equally.

It is crucial emphasizing that teachers who teach students with hearing impairment in sign language make an effort to diversify their teaching strategies in order to improve student engagement and understanding. A competent teacher should encourage student engagement instead of just using the talk and chalk technique of instruction. Several activities, including role playing, songs, field trips, and games, can help to encourage and arouse the interest of students during the lesson. Children with hearing impairment rely solely on their eyes and may get next to nothing from spoken language; as a result, the greatest form of communication for them is comprehensive communication (Power & Leigh, 2011).

Additionally, Akach (2010) notes that teachers should have a theoretical understanding of how people learn, exhibit superior teaching techniques, and support their students' linguistic and academic growth. Along with having a disposition that encourages learning and real personal connections, teachers must also be familiar with the Ugandan sign language. Teachers that lack Ugandan sign language proficiency may find it difficult to communicate with Deaf students, which will ultimately hinder Ugandan sign language development. The Ugandan sign language curriculum must significantly impact learning and academic accomplishment. There should be plans put in place to improve and encourage curriculum adaptation in all spheres of society (Leigh & Crowe, 2020).

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The approach the researcher utilized in the study was covered in this chapter. This chapter describes the research approach, research design, research setting, participants, sampling techniques, data collection methods, data collection methods, ethical consideration, trustworthiness and rigor, dependability, piloting, procedure for data collection, data analysis and limitations and delimitation.

3.1 Research Approach

This study utilized a qualitative research approach. The systematic probe of social processes in natural setting is known as qualitative research (Creswell, 2013). A qualitative research study entails evaluating attitudes, views, and behaviour on a subjective level (Kothari, 2013). Because the qualitative technique is descriptive in nature, it allowed the researcher to gather verbal data in its natural setting (Leedey and Ormrod, 2013). The qualitative approach also offers descriptive justifications for the study's findings (Patton, 2014). By examining participants' concrete descriptions, a qualitative technique was used to uncover concepts that are currently unknown and to develop patterns, categories, and themes from the bottom up in order to draw generalizations (Creswell, 2013). Qualitative research approach was used because it examines issues extensively. Interviews rarely confine to particular questions and the researcher controls them. The research structure and trend can be improved fast as more information comes (Kelvin, 2020).

3.2 Research Design

A research design is a layout for studies which the researcher will do. It informs on where, how, and why the research will be conducted (Kothari, 2013). In this study, the researcher employed a case study design which demonstrates procedures employed and their interactions. A case study is a thorough examination of the particular unit under inquiry (Kothari, 2013). The emphasis of the case study design is finding the elements that collectively explain behaviour patterns of the given unit. A case study assists in reducing a wide field of study into a single, manageable subject (Kothari, 2013). The researcher employed a case study design because it allowed her to carefully evaluate the data in a concrete context.

3.3 Research Setting

This study was executed in one secondary school selected from Wakiso District. The district has 580 secondary schools of which 57 are Universal Secondary education (USE) schools and 523 are private schools. This district was chosen because in spite of the government's decision to make Ugandan sign language an elective subject under the lower secondary competency-based curriculum, some secondary schools don't appear to have teachers who are trained to handle this language, nor do they appear to have sign language interpreters. This helped to ascertain how Ugandan sign language as an elective subject is being implemented.

3.4 Study Population

The population of the study comprised of one headteacher and 21 teachers in the school. The total population therefore was 22. Some of these teachers were teaching using sign language while others were not. The three categories of participants were necessary to explain the teachers' perceptions.

3.5 Sample

The subset of the study's population is known as participants. They represent the total participants the researcher plans to use in the study in order to extrapolate their findings to the total population (Funkeye & Nafiu, 2016). The participants were drawn from a selected secondary school and these comprised of a head teacher (N= 1) and teachers (N= 10). Out of these, the study sample was selected whereby the sole head teacher (N= 1) was selected using purposive sampling. As for teachers (N= 10) they were picked using convenience sampling method.

3.6 Sampling Techniques

The researcher used purposive and convenience sampling techniques to choose study participants. Leedy and Ormrod (2013) point out that purposive sampling technique selects participants or other units for a specific goal. The researcher chose the head teacher for this study using purposive sampling because they have knowledge, experience, and skill in the subject under study. Kothari (2013) defines convenience sampling as a qualitative research sampling strategy that involves selecting participants based on their accessibility and availability to the researcher. The researcher picked teachers that were easily accessible during data collection.

3.7 Data Collection Methods

This section covered the methods that the researcher employed for data collection which included the interview and a focused group discussion as described in sections 3.6.1 and 3.6.2

3.7.1 Interview

Interview guidelines, according to Wilson (2017), are lists of the questions an interviewer intends to ask an interviewee.

An interview is a technique of acquiring information that entails delivering oral stimuli and eliciting responses in the form of speech responses (Kothari, 2013). Interviewing is a qualitative research method that involves the researcher and participant engaging in a conversation about subjects related to the research endeavor. The interview addressed all three objectives and all the two categories of participants underwent an interview. The researcher used the interview because it directed her to the questions believed to be crucial to the study. Additionally, it assisted the researcher in organizing and focusing her path of inquiry and subsequent questions.

According to Yin (2014), a semi-structured interview is where interviewees are asked a couple of open-ended questions by the researcher, followed by follow-up inquiries that delve deeper into their answers. Semi structured interview was used because it helped the researcher to explore participant thoughts, feelings and beliefs about the topic under study and it helped the interviewees to express their views openly. This type of interview was used by the researcher to attain a greater mastery of the topic, sources, and participant experiences (Lodico *et al.*, 2010). Semi structured interviews were used because they encourage a two-way communication between the researcher and the participants, they provide an opportunity to freely adjust the questions accordingly, they are flexible to ask follow up questions and allow participants to expand their responses during data collection process (Merriam & Tisdells, 2015). The researcher used a semi

structured interview by holding a meeting with each participant where open-ended questions were asked and encourage a two-way communication as the participant responded. The researcher asked questions to further the conversation. The researcher interviewed all the participants and questions covered all the objectives of the study.

3.7.2 Focus Group Discussion

A focus group discussion is a way of collecting descriptive data that gathers participants together to discuss a specific topic. It is a conversation that typically has five to ten participants, with a moderator facilitating the discussion about a certain topic, issue, or product (Kothari, 2013). The researcher used open-ended questions to investigate participants' views in more details and grasp of the topic under study. It was also used because it created an environment that put participants at ease allowing them to confidently answer questions in their own words and where necessary add meaning to their answers. The researcher chose one focused group discussion comprising of ten members which covered all the research objectives and she was the moderator. It lasted approximately one hour and only teachers participated. The researcher recorded the responses using an audio recorder.

3.7 Ethical Considerations

The researcher got informed consent from participants to be part of the study willingly. To ensure confidentiality, the information given and the details obtained were only used for research purposes. To preserve privacy, the name of the school and participants were not included anywhere in the dissertation but rather pseudo names were used to represent participants' identities. Reasonable accommodations

for the two participants with hearing impairment were done by using a Sign Language interpreter which enabled such individuals to have an equal opportunity to participate in the study.

3.8 Trustworthiness and Rigor

A research study's findings can be trusted or believed in if they are presented with rigor. It helps the researcher to keep uniformity all over the procedures used. Similarly, it offers a clear picture of the population under study (Guthrie, 2010). The researcher made sure to summarize findings from the head teacher and the teachers at the end of each interview and ensured she understood what respondents said. The researcher also took an objective recording of what she had heard during the research, putting aside all prior expectations, prejudices, and stereotypes that could warp her interpretation.

Dependability is the extent to which research techniques are recorded so that someone not involved in the research can trace, probe and assess the research proceeding. Dependability also refers to the uniformity of the research findings (Moser and Korstjens (2017). To ensure dependability of the study findings, the researcher used overlapping techniques including interviews and focused group discussions and an inquiry audit by an outside reviewer.

Credibility is the trust that can be put in the research findings. It measures whether the study findings are correct and accurate. It looks at the integrity of the research findings and the steps followed throughout the whole process of collecting and analysing data (Irene & Albine, 2018). To increase credibility the researcher discussed the findings with the supervisors to evaluate whether they were justifiable.

Transferability is the degree to which the results of qualitative research can be transferred to other contexts or settings with other respondents. It is the extent to which the findings and interpretations derived from a study can be applicable and relevant to other contexts or settings beyond the specific research context (Guba and Lincoln, 2005). To enhance transferability of the study, the researcher employed different data collection methods such as interviews and focus group discussion.

Conformability is the potential for congruence between two or more independent people about the data's accuracy, relevance and meaning. Conformability is assured when data are checked and rechecked throughout data collection and analysis to ensure results would likely be repeatable by others (Schreier, 2012). To ensure Conformability in the study, the researcher practiced reflexivity to confront potential personal bias.

3.10 Piloting

A pilot study is a limited preparatory survey conducted to gauge achievability, duration, value, and adverse events in order to improve upon the study design before applying it on a large-scale research (Lowe, 2019). It is intended to check features of the procedures prepared for a larger, more precise investigation. This was done to pre-test the data collection tools to detect possible imperfections in the questions. A pilot study was conducted on teachers in one of the schools that had a similar learning environment of students with hearing impairment after approval of the proposal. Interview questions that were found not to be credible were revised before going to the field to collect data.

3.11 Procedure for Data Collection

Following the research proposal successful completion, the researcher first received an introductory letter from the directorate of research and graduate training. This letter assisted the researcher in asking the appropriate authorities for authorization to undertake research in the study field. In order to guarantee that data gathering tools were worthwhile, the researcher constructed them and discussed them with the supervisors. In an attempt to establish validity of data collection tools, a pilot study was initially conducted in one school that was outside of the targeted school. The researcher then asked the head teacher of the chosen school for permission to gather data. By not requesting participants to put their names anywhere, anonymity and confidentiality were protected. The researcher also let them know that they were free to leave the session at any time if they got uncomfortable. After that, the interviews were conducted. The researcher jotted down the key aspects while conducting the interview and also used an audio recorder. After interviews with the head teacher and teachers, a focus group discussion with teachers was also conducted.

3.12 Data Analysis

The processes in the data analysis process that help uncover relevant information for business decision-making include cleaning, transforming, and modelling data (Daniel, 2022). Extraction of appropriate information from data and decision-making using that information are the goals of data analysis.

Findings from the interviews and focused group discussion were examined by use of thematic data analysis to create patterns, categories, and topics. Thematic analysis is an approach for analysing qualitative data that calls for recognizing,

analysing, and reporting recurring patterns during data collection process (Braun and Clarke, 2017). Thematic data analysis was applied in this research since it was a powerful technique for analysing data that enables researchers to draw attention to important themes, compile data, and analyse different data sets. Thematic analysis also offers academics a great degree of flexibility in terms of the kind of study topics it can address. The data was coded individually against themes and common themes were identified by searching for key words, arranging them into categories and subcategories. Pseudonyms were applied for the protection of participants' identities. Comments were on response and where necessary, direct quotations were made accordingly (Cohen & Manion, 2007).

A theme is a significant thread that permeates the data. A theme recaps an essential part of the data that correlates to the objectives of the study. It is produced when a researcher groups together participants' concerns and thoughts from qualitative data into one group (Cohen & Manion, 2007).

A category is a group of related data that has been grouped together, and this arrangement allows the researcher to recognize and explain the qualities of the category. This thus makes it possible to define the category itself and then contrast it with other categories (National Research Council, 1995).

When a group of data exhibits an identifiable pattern, researchers might look for that pattern in the present data. To analyse something that occurs regularly and repeatedly, a repetitive design or shape is employed (Merriam- Webster, 2016).

As for content analysis, it is a research analysis method employed to establish the presence of certain words, themes, or concepts within some given qualitative data (Fraenkel & Wallen, 2006). Content analysis is an approach used by researchers to

investigate human behavior indirectly, through analysis of their communications. Its benefit, according to the authors is that it enables the researcher to use the communications texts and the probability of alteration in data becomes less. It is for the above reasons that the types of analyses were used. The responses captured were presented in forms of short words, as well as verbatim narrations. Each of the responses were given following the two (2) categories of the participants, namely: the single selected head teacher of the secondary school (code named as *HT*) and teachers (*T₁, T₂, T₃, T₄..... and T₁₀*). The presentations are provided in chapter four.

3.13 Limitations and Delimitation

The study used only one secondary school and yet there are so many secondary schools in Uganda and the information obtained may not be applicable in other schools which may limit the implications of the findings. This was counteracted by carrying out a pilot study in another secondary school to ensure that the tools were credible.

The number of participants were very small and in one way or another limited the implications of findings. This was mitigated by triangulation of participants where two categories of participants were used to bring credibility of the results. There was also triangulation of data collection instruments where two instruments were used to bring credibility of the results.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

In this chapter, the data collected is presented interpreted and discussed. The study objectives that guided this study were: to explore the teachers' perceptions about the teaching of Ugandan sign language as an elective subject under the lower secondary competency based curriculum, to explore the factors that teachers anticipate to facilitate or hinder the teaching of Ugandan sign language as an elective subject under the lower secondary competency based curriculum and to explore the professional and pedagogical support needs that lower secondary teachers require to teach Ugandan sign language as an elective subject under the competency based lower secondary curriculum.

4.2 Description of Participants

The study involved the head teacher and teachers. The total of was 11 comprising of one head teacher and 10 teachers.

Head teacher (HT)

He is a male aged 57 years of age with a bachelor's degree in education and he has a teaching experience of over 30 years. And he has spent thirteen years at this school as a head teacher. He does not have any training background in special needs education.

Teachers

T₁: He is a male aged above 50years and he has been in the teaching profession for 33years. He holds a bachelor's degree in education and a post graduate diploma in education. He has no training background in special needs education but he

participated in a training workshop organized by Ministry of Education and Sports for 5years at Wakiso and Mbale schools for the deaf on Ugandan Sign Language.

T2: He is a male aged 40years and he has spent 17years in the teaching profession. He holds a bachelor's degree in education. He has a training background in special needs education with a bias in sign language.

T3: She is female above 50years of age and she has been in the teaching profession for 35years. She holds a bachelor's degree in education. She has no training background in special needs education but attained Ugandan sign language proficiency through an on-job training offered by MoE&S for five years.

T4: She is a female aged 28years and she has been in the teaching profession for 4years. She holds a bachelor's degree in education. She has no training background in special needs education. She however, went through an on-job training in Ugandan sign language.

T5: He is a male aged 42 years and he has been in the teaching profession for 20years. He holds a master's degree in biological science. He has no training background in special needs education.

T6: She is a female aged 44years and she has been in the teaching profession for 12years. She holds a bachelor's degree in education. She underwent a training for 3years organized by the MoE&S about Ugandan sign language.

T7: He is a male aged 45years and he has been in the teaching profession for 18years. He holds a bachelor's degree in education. He has a certificate in Ugandan sign language and he can teach without an interpreter.

T8: He is a male aged 63 years and he has been in the teaching profession for 33 years. He holds a diploma in education- secondary. He underwent Ugandan sign language training though not very extensive.

T9: She is a female aged 30 years and she has been in the teaching profession for 3 years. She holds a bachelor's degree in education. She holds a diploma in sign language interpretation.

T10: He is a male aged 49 years and he has been in the teaching profession for 18 years. He holds a bachelor's degree in education specializing in special needs education. The most common characteristics of teachers were that most of them hold a bachelor's degree in education and have a training background in special needs education and some of them have undergone a training in sign language.

4.3 Teachers' Perceptions Towards Ugandan Sign Language

The study sought to explore the teachers' perceptions towards Ugandan sign language as an elective subject under the lower secondary competency-based curriculum. This aspect was important because teachers' perceptions determine the fulfilment of the lower secondary competency-based curriculum. Overall, when teachers were asked about their perception on the introduction of Ugandan sign language as one of the elective subjects to be taught in secondary schools in Uganda, the emerging issues were: some teachers have the necessary competence, knowledge, or skill to teach Ugandan sign language successfully though others without SNE background have negative perceptions and that it was hurriedly introduced without consulting all the stakeholders and without proper preparations like providing enough instructional materials.

One of the participants said:

It is such a bright idea because it promotes inclusive education and promotes synergy between students with hearing impairment and their other peers they study with since they all sit in the same classes and even study the same subjects. You know, when normal students learn sign language, they will be able to comfortably relate with their colleagues who have hearing impairment (T₂).

Another participant had this to say:

It is a good idea because we need more people to communicate in Ugandan sign language and we hope that our students will achieve something in academics which will help them when they join the world of work. Yah, I wish sign language is even made compulsory to everyone such that people with hearing impairment are not segregated (T₈).

Additionally, another participant noted:

It is a welcome move. The more the signing community in the country, the more the open world to the deaf persons and this will bridge the gap of communication. In fact, if more people learn sign language, then the deaf community will be able to communicate with other people with ease (T₁₀).

A similar response was that:

It is good that sign language was introduced in lower secondary although it should be introduced at all levels of education right away from primary school. Yah, it can be taught starting from primary level such that students can master it so well (T₃).

From the above findings, there is an indication that teachers have a positive perception about the introduction of Ugandan sign language as one of the elective subjects in lower secondary and it is a good idea that needs to be supported since it promotes inclusive education, promotes social interaction between students with

hearing impairment and their other peers and that the more the signing community in the country, the more the open world to the deaf persons and this will bridge the gap of communication. The above findings are in line with that of Mesch (2012) who notes that sign language empower deaf people to interact with others and disclose their own views and values and develop a bond they need to lead independent lives.

The above findings also concur with Giar's (2013) study on strategies for teaching American sign language who reported that positive attitudes portrayed by teachers and learners of ASL in California enhanced teaching and learning processes. This created safe learning climate where students felt comfortable and motivated to learn important aspects of ASL. Therefore, the way lower secondary teachers perceive teaching of Uganda sign language as an elective subject under the competency based curriculum determines its proper implementation.

On the other hand, however, some participants had negative perceptions. It emerged that the introduction of Ugandan sign language as an elective subject in lower secondary is not welcome in main stream secondary schools. This is evidenced in the response that stated that:

Sign language should be taught as a separate elective subject only in special schools for the deaf right from S.1 and only becomes an elective from S.3. It can also be taught in inclusive schools as an elective subject depending on the availability of trained Ugandan sign language teachers and interests of the hearing students. You know, most students especially those without hearing impairment have no interest in sign language and they even say there is no need of them studying it (HT).

These findings contract with that of Emmorey, Giezen & Gollan (2016) who note that shifting away from segregation toward inclusive education of all students in

general education classrooms and schools means providing all students with the unique supports and services that they need such as access to assistive devices to participate effectively in the classroom.

In a similar response, another participant stated: *Ugandan sign language should be taught in special schools as an elective subject (T₅).*

In addition, another participant stated that:

It was hurriedly implemented without recruiting enough sign language teachers and without equipping schools with enough necessary instructional materials (T₁).

Additionally, a participant had this to say: *“There was no need to introduce Ugandan sign language but it could have been incorporated into other languages developed in the curriculum” (T₅)*

In support of the above, in a focus group discussion with teachers on their perceptions about the introduction of Ugandan sign language as an elective subject under lower secondary curriculum and whether it was necessary to introduce it, it was pointed out that it was a good idea though the government introduced it without full preparations and that it should be made compulsory in all levels of education since every person at one time needs to interact with people who have a hearing impairment. The above findings imply that some teachers have a negative perception towards the introduction of Ugandan sign language and feel that it should only be taught in special needs schools right from S.1 to prepare students who will offer it at S.3 as an elective subject.

The above findings contradict with Kola-Olusanya (2005) who argues that teachers’ perceptions are instrumental to the successful implementation of sign

language in schools. Teacher's perceptions that do not promote the use of Uganda sign language are fear, limited expectations, and lack of signing skills.

Similarly, Moores (2010) states that negative perceptions of teachers towards teaching of Uganda sign language may rise from frustrations of not having the necessary skills. In this situation it becomes clear that ordinary teachers who have had relatively little or no formal preparation for working with children with special needs respond negatively to the idea of teaching sign language.

4.3.1 Teachers' Perceptions towards their Competence to the Teaching of Ugandan Sign Language

When participants were asked about their perceptions about how competent they are to support the teaching of Ugandan sign language, the major response from those who trained in SNE was that they are competent and have sign language knowledge. These are shown below:

One of the participants said:

I am competent enough because I have a bachelor's degree in special needs education. Actually, my specialisation was in teaching students who have hearing impairment. I therefore have positive perceptions about the introduction of sign language as an elective subject (T₂).

In a similar response, another participant stated:

I'm competent since I use sign language to teach history in O and A levels. In fact, I did not specialize in sign language but I learnt it on job through a training which was conducted by MoE&S. Yah, my perceptions on the introduction of sign language as an elective subject are positive since I am competent enough in this language (T₃).

Additionally, it was stated that:

We have 10 male teachers and 11 female teachers totalling to 21 teachers who are trained in sign language and can competently teach Ugandan sign language without interpreters. For sure when it comes to sign language teachers, we have enough of them to implement its teaching under the lower secondary competence based curriculum (HT).

Furthermore, it was pointed out that:

I have positive perceptions about sign language and I'm fairly competent to teach Ugandan sign language though I'm not an expert in sign language but I learnt some signs and I get more of them from class (T₇)

In a similar response, another participant stated: *"I'm trained to teach the subject and I'm a sign language user. I hold a degree in special needs education and I therefore have positive perceptions about its introduction as an elective subject"* (T₁₀).

In a similar response, another participant stated:

We are ready and have positive perceptions as a school about the teaching of Ugandan sign language and we have actually been teaching it. We have some competent teachers and instructional materials like video tapes/clips, sign language manuals, projector and internet connection though more is needed (HT)

Other participants noted that: *"I'm very much ready and perceive the introduction of sign language as an elective subject as a good idea"* (T₁₀).

Additionally, in a focus group discussion with teachers, most of them especially those who have training background in special needs education said that they had positive perceptions about the teaching of sign language and had the competence to teach Ugandan sign language in secondary schools as an elective subject. They

also pointed out that schools should be prepared to teach Ugandan sign language by utilizing the few teachers and resources available. The findings given above provide an impression that there are some teachers who have positive perceptions and competence to effectively support the teaching of Ugandan sign language as an elective subject under the lower secondary school curriculum since they have undergone trainings and some have specialized in it.

The above findings are in line with that of Glaser & Van Pletzen (2012) who provides that competence in SL would entail being able to interpret and create relevant signs that are proper for the linguistic situation and that in order to teach Sign Language effectively, teachers should be fairly fluent themselves.

Similarly, Leigh & Crowe (2020) note that teacher's academic and professional is a prerequisite to the mastery of Sign Language that contributes to the nature of pupil's understanding of SL. Teachers must master USL Structure before they develop Signing Skills that will be used at all times for proper learning to take place in the classroom.

Other participants who were not trained in SNE however, pointed out that:

I'm not competent enough because Ugandan sign language is a new and growing subject which has not yet been supported fully to be made known by majority of the people. I therefore have a negative perception about its introduction as an elective subject (T₅).

Additionally, a participant said: *"I don't have the competence to teach Ugandan sign language because I'm not an expert in it"* (T₇).

It also emerged that there are other teachers who have negative perceptions about sign language and are not ready to teach it. This is evidenced in the response that

stated that “*I’m not ready*” (T₁ and T₆). The finding provided imply that teachers who are trained in Ugandan sign language have positive perceptions while those not trained have negative perceptions about the introduction of Ugandan sign language under the new lower secondary curriculum. This is an indication that teachers who are not formally trained in special needs education have negative perceptions about Ugandan sign language and this may be challenging to support its implementation under the new lower secondary school curriculum.

The above findings are in line with those of UNAD (2004) which states that majority of secondary school teachers are not trained signers and according to discussions concerning the means of communication and education suited for students with hearing impairments in various schools for the deaf, SL as a medium of communication has not been officially acknowledged as a form of communication to be utilized in all secondary schools.

Additionally, this is in agreement with Akach (2010) who stresses that a teacher who lacks USL proficiency may find it difficult to communicate with Deaf students, which will ultimately hinder USL development.

Similarly, Moores (2010) notes that most teachers find it difficult to teach sign because they lack the requisite abilities and competence. He further notes that it is evident that regular teachers who have received little to no formal training in working with students who have special needs have unfavourable reactions to the idea of teaching USL.

This is an implication that some teachers still lack the needed training and competence to teach USL as an elective subject in the lower secondary curriculum.

Teachers for that reason, ought to receive specialized training in USL to make them more resourceful in teaching the subject.

4.3.2 Knowledge of Ugandan Sign Language

When participants were asked about their knowledge and understanding of Ugandan sign language, teachers with SNE background had knowledge of Ugandan sign language. One of the participants said:

I consider myself very knowledgeable about Ugandan sign language. In fact I have a certificate in Ugandan sign language, degree in special needs education and I use Ugandan sign language to teach learners with hearing impairment (T₂).

Other participants stated:

I understand what I can use to deliver my lessons to learners without the service of an interpreter and teaching without an interpreter is an indication of good understanding of sign language (T₇)

Another participant stated that: *“I learnt Ugandan sign language on job by practicing. The government had a 5 years project in sign language but only trained it for 3 years”* (T₆).

The above findings give an impression that most teachers have knowledge and understanding of Ugandan sign language since they have SNE background and others have undergone trainings organized by the MoE&S and can teach Ugandan sign language without Sign language interpreters.

This is in agreement with Adoyo (2007) who provides that before developing Signing skills that will be needed constantly for effective teaching to take place in the classroom, teachers must know USL Structure.

A similar view by another participant was:

Most of our teachers were trained by NCDC in Ugandan sign language during the curriculum development process and some teachers already had qualifications in SNE with a bias in Ugandan sign language to train deaf learners and therefore have the knowledge to teach sign language without interpreters. HUUUU, it is only our support staff who are generally still low and poor in the level of sign language knowledge (HT).

This finding is in line with Lutalo-Kiingi & De Clerck (2017) who stress that though schools have models, some non-teaching staff communication skills in USL are limited. These include some matrons, cooks, and drivers. Therefore, instruction from these respective workers is not given in a clear format to bring out a meaningful sentence in USL. Therefore, this is a hindrance to Language development in Deaf children. It was observed that the matron uses more spoken language than USL which makes the Deaf learners face difficulties in trying to bring out a meaningful sentence in what the matron is trying to communicate

This shows that the non-teaching staff are disadvantaged in obtaining the relevant skills required to use in Ugandan sign language. Therefore, they require a training to be able to communicate in sign language especially with students with hearing impairment.

Another participant on the other hand pointed out that: *“My understanding of Ugandan sign language is not very extensive, hence, there is a desire for continuous professional development”* (T₈).

Similarly, another participant stated that:

Ugandan sign language is insufficient to curriculum needs. It has not been improved and most people do not know it. It was developed for communication gaps not academics and it is just

coming up now, so I don't have much knowledge about it. In fact it is even difficult to learn this subject that is why some of us who do not have a background about it cannot easily learn it (T₅).

The above findings are in line with those of Kiyaya and Moores (2009) who found that teachers of students with hearing impairment in Sub-Saharan Africa were unable to sign and did not consider SL to be a whole language and that the mastering of SL should be a precondition for teachers' academic and professional training.

The findings indicate that continuous professional development of teachers in Ugandan sign language is needed since some of them have especially those with no SNE background have no knowledge and understanding about it.

4.3.3 How Best Ugandan Sign Language can be Taught as an Elective Subject

When participants were asked about how best Ugandan sign language can be taught as an elective subject under lower secondary curriculum, participants responded that through providing necessary instructional materials. A response from some of the participants was:

The government through MoE&S should provide support materials to teachers like sign language dictionaries, alphabet charts, projectors, videos, textbooks and other relevant materials. Actually, is sign language is to be properly taught, the necessary materials should be provided to schools to facilitate its teaching (T₂).

From the above findings, there is an indication that the instructional materials used in the teaching of Ugandan sign language are not enough to facilitate effective teaching of Ugandan sign language under the new lower secondary school curriculum. This shows that for effective teaching of Ugandan sign language, there is need for government to provide the necessary instructional materials to all

secondary schools like projectors, live screens, textbooks, hearing aids, sign language dictionary, blinking lights, digital pens, sign language manuals and charts among others.

The above findings are in agreement with those of Postlethwaite (1998) who stresses that facilities like books, visual aids, electricity, hearing aids, and play areas help Sign Language learners learn the language more effectively.

Additionally, USL Research Project (2006) states that SL dictionaries give instructions on how to sign words that are reported in English and cannot be used to check the explanation of signs or their origins as one would do with English dictionaries.

Similarly, Brentari and Coppola (2013) provide that due to insufficient resources like interactive whiteboards, chat rooms, blinking lights, digital pens, infrared systems that are appropriate with hearing aids, computer-assisted note-taking, ASL videos for test preparation and alarms, schools are not capable of providing deaf students with the necessary technology that might greatly foster the teaching-learning process.

Other participants stated that: *“By training and recruiting more sign language teachers”* (T₄).

The other participant stated: *“There should be continuous inset training by NCDC in sign language pedagogy in training teachers in professional assessment of sign language”* (HT).

The finding provided imply that there should be recruitment of enough trained teachers of Ugandan sign language if it is to be effectively taught as an elective subject under the lower secondary school curriculum.

These findings are in line with that of Akach (2010) who indicates that a teacher who lacks USL proficiency may find it difficult to communicate with Deaf students, which will ultimately hinder USL development. Additionally, Koutrouba, Vamvakari & Steliou (2007) stress that teachers for the deaf must undergo re-training to acquire the appropriate SL skills because qualified teachers worldwide are key quality towards the education of children with hearing impairment.

Another participant noted that:

I think Ugandan sign language should be introduced right from lower levels of education like primary as any other subject. Yah, this will make learners to master it early enough and maybe it can become an elective in secondary school such that those ones still interested in it can go on studying it. This will help in having many people who can communicate in sign language since we have some learners that end at primary level and don't get the chance to join secondary schools (T₄).

The findings show that the government through MoE&S should introduce Ugandan sign language right away from primary level such that by the time students go to secondary, those who have interest can choose it as an elective subject

In agreement with the above findings, Adoyo (2007) stress that studies have found out that Deaf children who learn SL from a young age go through the same stages of Language acquisition as hearing children. Additionally, Lutalo-Kiingi and De Clerck (2017) found that one of the main reasons for the deficit of SL in Deaf children is a lack of early Language exposure, not the fact that the children are Deaf.

Another teacher also asserted that:

Sign language should be for all students not only the deaf, since deaf people are in our families and in the community where we live and need to fully interact with other people without difficulties. Yah, you may find a deaf child in a family but all family members cannot communicate in Sign Language. This affects this child since he/she feels neglected and segregated (T₁₀).

This finding is in line with Luft (2017) who points out that the successful development of USL depends on the learner's interactions with peers when playing in the school's compound with peers. School's environment is a place for socialization and is a key factor for learners in the development of SL.

This implies that Ugandan sign language should be taught to all learners irrespective of their hearing capacities. This is because at one time they may need to interact with people with hearing impairment both at school and within the community since sign language is an essential communication medium for many deaf people and those who can't speak.

4.4. Factors that May Facilitate the Teaching of Ugandan Sign Language

In this section, the study aimed at establishing the factors that may support teaching Ugandan sign language under the lower secondary curriculum. This aspect is very vital because it promotes effective teaching of Ugandan sign language. The factors that generally emerged were: availing teaching equipment and facilities, improving learning environment, recruiting enough teachers of Ugandan sign language, harmonization of signs, funding the programme among others. When participants were asked about the factors that may support the teaching Ugandan sign language, response from one of the participants was: *"Improve sign language learning environment that motivates teaching and learning Ugandan sign language"* (T₇).

Similarly, other participants noted that:

There ought to be availability of enough resourceful instructional materials like textbooks, physical structures, enough sign language manuals and charts, ICT proficiency, availability of computers and projectors, large screens, videos, compact discs, recorded signs and more others. Yes, these make teaching of sign language easy and students can also understand easily (T₅).

In agreement with the above findings, Kyobe and Rugumayo (2005) reveal that interactive whiteboards, creative centers, and ICT, videos among others are necessary for teaching USL under a competency-based curriculum. However, Knoors and Marschark (2014) note that majority of the schools lack essential instruction materials to cater for the teaching of SL. They note that the government distributes instructional materials to schools, however, these materials are insufficient to meet the needs of all learners and Worse still, the mostly supplied equipment and materials are for the visually impaired, ignoring the hearing disabilities.

The findings given above provide an impression that if USL as an elective subject under the new lower secondary school curriculum is facilitated with the necessary resources and equipment, then teaching of this language will be supported.

A similar view by another participant was: *“Teaching of Ugandan sign language should be funded by the government, NGOs and well-wishers”* (T₆).

Another participant stated that:

There should be recruitment of enough Ugandan sign language teachers and continuous professional development of teachers and motivating them to have love for sign language. You know,

most teachers take sign language to be difficult and tiresome to teach. When they are motivated however, it will encourage them to love the subject like any other subjects (T₈).

The findings imply that teachers are very vital in the effective teaching of Ugandan sign language and therefore there is need to recruit more competent sign language teachers in schools.

In agreement with the above findings, Lieberman & Houston (2009) noted that teachers are crucial in the effective teaching of SL in schools for the deaf and academic success of students may be significantly hindered by teachers' lack of skills and negative perceptions. Teachers with low expectations and poor signing abilities do not encourage the use of SL.

Another participant responded that:

There should be harmonization of sign language such that all countries have similar signs to avoid the confusion brought about by different signs in different countries. You know, we are operating in a global world. When a student studies Ugandan sign language, he/she should be able to use it even when in other countries. But this is only possible if all the countries have the same signs (T₆).

The findings show that sign language differ and therefore there is need to harmonize them for easy learning and understanding since we don't teach students be work and stay only in Uganda but any other part of the world.

The findings above concur with that of Meir, et al., (2010) who stress that given that USL is not global, its uses and meanings are interpreted differently and provide difficulties when used by persons from diverse language backgrounds in different

locations and nations. It is a tongue that is acknowledged as an entirely formed language separate from spoken languages.

Additionally, Dominguez (2009) provides that beyond 300 diverse SL are used throughout the world and they differ from each country. SL has several diverse regional accents that bring slight discrepancies in how people use and embrace signs, even in countries where the same language is spoken.

Another teacher pointed out that:

There is need for interaction of sign language teachers in different schools such that they can be able to use similar signs while teaching. For example, in mathematics the sign equals (=) is differently signed in different schools which needs to be harmonized. HUUU, I wonder why we use the same curriculum but use different signs. This confuses students especially when they change from one school to another (T₃).

Another participant explained that:

Community sensitization and involvement of all stakeholders especially parents support learning of sign language such that when students go back home, they don't learn different signs from what is taught at school. Sincerely there is need for awareness campaign about sign language such that everybody develops love for it and if possible, the government can offer training to community members about sign language (T₅).

During a focus group discussion with teachers, they pointed out that the factors that facilitate the teaching of Ugandan sign language in lower secondary schools is to equip schools with the necessary resources like computers, sign language dictionaries, projectors among others and ensure that enough teachers who have trained in Ugandan sign language are recruited in schools and those that do not

have a training background in sign language are trained such that they are all knowledgeable about this subject.

The findings given above provide an impression that if Ugandan sign language as an elective subject under the new lower secondary school curriculum is fully funded, enough teachers recruited and the needed resources and equipment provided, then teaching of this subject under the lower secondary school curriculum will be supported.

On the other hand, there were factors that hindered the teaching of Ugandan sign Language. Generally, the hindering factors that emerged were inadequate signs, different signs, poor motivation of teachers, lack of enough sign language teachers, communication issue by parents and the community in sign language among others.

From the expressions of the participants, it was stated that there are several factors that hinder the teaching of Ugandan sign language. One participant had this to say: *“There is inadequate documentation of signs that can be put into projection”* (T₁).

The other participant stated:

There are different signs used in different subjects and signs developed in some schools are different from those in other schools which confuses the students. Yah, you find that different schools sign differently which is quit confusing to students who may transfer from one school to another (T₃).

In a similar response, another participant stated:

There is no allowances given to teachers who teach hard to teach subjects like Ugandan sign language yet there is an allowance for hard to reach areas in secondary schools. This demotivates sign language teachers (T₈).

The above finding is in agreement with the *Zambian Education Information Centre (2020)* which states that it is very unfair and demotivating for teachers that teach hard subjects to be paid the same salary with other teachers. It suggests that an allowance should be introduced for teachers of hard to teach subjects in order to motivate them.

There was another participant who stated that there is inadequate competent teachers for Ugandan sign language.

There are no enough trained teachers of Ugandan sign language in most secondary schools but there are sign language interpreters and other users of Ugandan sign language who are not necessarily teachers. Actually, there are few teachers even at university level who opt for sign language. In my year at the university we had only three students specializing in sign language yet, other subjects had over fifty students (T₃).

This implies that some teachers have no training background in sign language and therefore they have no competence to teach the subject without the help of interpreters. Yet, not all schools have sign language interpreters.

This is in agreement with *Ikwen, et al. (2017)* who note that in the competency-based curriculum, teaching and learning SL as an elective topic may be hampered by the lack of special education teachers. This occurs frequently when the appropriate staff is not hired into special education centres. Most times, conventional teachers are hired to handle special education duties, and this can lead to a number of mistakes such an inability to appropriately teach students SL.

Another participant stated that:

Ugandan sign language is not an everyday language in the community and it is hard to internalize. When students go for

holidays they come back when they have forgotten it. You may find that in a whole community no one knows sign language. Even most parents who have deaf children cannot use Sign language but rather gamble to ensure that they communicate with their children. Actually, this makes children to get confused because the way they sign at school is not how they sign when they reach home (T₆).

Additionally, in a focus group discussion with teachers about the barriers likely to hinder the teaching of Ugandan Sign language in lower secondary schools, it was intimated that there is a communication barrier. Given that most parents of children with hearing impairment do not know sign language, when these children go home, they get confused because the signs that are used at home are different from what is taught at school.

One participant has this to say: *“Whenever students’ comeback from holidays they come with totally different signs that we taught them at school and changing their mind set to what is right is not easy”* (T₅).

The statements above indicate that most community members and parents of children with hearing impairment have communication issues in sign language which hampers its effective teaching. This gives a strong reflection on how important it is for everyone to be well versed with sign language such that they can communicate with people with hearing impairment.

This finding concurs with Luft (2017) who stress that inadequate frequent communication between parents and Deaf children is one of the challenges related with teaching USL in the education of children. He added that some parents lack the time, interest, resources, or motivation to encourage academic learning of students with hearing impairment. In connection with the above, Lutalo-Kiingi

(2014) note that parents of Deaf learner's lack knowledge and skills on early childhood intervention, this is because some children are born with Deafness but due to lack of early intervention by their parents, they don't develop communication skills thus a hindrance to their learning

Additionally, Miles, Wapling & Beart (2011) note that the social-environmental conditions are important in language development when parents know USL. Similarly, Senghas & Coppola (2001) stress that that is why most parents and their Deaf children on specified days have USL program weekly in the company of their preschool going Deaf children. Therefore, as the child develops sign language, he/she is in a position to have social interaction with the parent resulting in language development because most Deaf children are born to hearing parents.

There were other participants whose major response stated that:

There is lack of instructional materials which can be used in the teaching of Ugandan sign language like projectors, Ugandan Sign Language dictionaries, textbooks, Sign Language manuals, video clips among others. When instructional materials are lacking, teaching and learning cannot effectively take place (T₃).

The findings indicate that schools face a challenge of insufficient teaching materials for Ugandan sign language. This gives a strong reflection on how important instructional materials are in teaching Ugandan sign language under the new lower secondary curriculum and without them the implementation of the curriculum will be challenging.

Related to the above findings, Kyobe and Rugumayo (2005) reveal that most Ugandan secondary schools have no special setting and resources needed to integrate SL as part of a competency-based curriculum.

Additionally, Osakwe (2010) highlighted that a major obstacle to teaching SL, particularly to students with hearing impairments, is inadequate resources. Due to insufficient resources like interactive whiteboards, chat rooms, blinking lights, digital pens, infrared systems that are appropriate with hearing aids, computer-assisted note-taking, ASL videos for test preparation and alarms, schools are not capable of providing deaf students with the necessary technology that might greatly foster the teaching- learning process (Brentari and Coppola, 2013).

Another participant stated that: *“lack of interest in sign language by some learners, teachers and school administrators hinders the teaching of sign language in school”* (T₁₀)

This is an implication that there are some students and teachers who have a negative attitude towards Ugandan sign language and therefore this becomes challenging to effectively teach it since the morale for it will be low.

In line with the above findings, Osakwe (2010) provides that the teaching of SL is difficult due to negative attitudes that students with hearing impairment receive from their hearing peers as a result of their disability. These attitudes can include mockery, bullying, avoidance, and many other unfriendly behaviours.

The other participant stated:

Financial constraint hinders the teaching of Ugandan sign language since it is expensive to buy the instructional materials yet it is not possible to tell parents to finance this idea since the majority are largely financially challenged. We as a school, we cannot afford buying these instruments and the government does not always come to our rescue. HUUUU, it is even worst with parents. During parents meeting when they are told to give us a hand in procuring these instructional materials, they say it is the

government's role and therefore no support is gotten from them (HT).

The findings given above provide an impression that teaching Ugandan sign language is expensive yet some parents are financially unwell to back their children because of their meagre resources. Given that this subject is still new, most schools do not have enough necessary materials and most parents cannot buy the necessary materials to their children because of financial burdens and because these materials are expensive.

The above findings are in agreement with Miles & Singal (2010) who indicate that parents still find it difficult to support the education of their children who are deaf and this explains why it's a hindrance because many schools that offer special education for such children are few and on top of that they are expensive.

4.5 Teachers' Professional Support Needs

When participants were asked whether there is need for continuous professional development through workshop, seminars, and symposiums among others in Ugandan sign language, there were mixed answers, some of them said it is needed to equip teachers with skills in sign language, it helps them to research for new signs and helps in perfection of sign language.

One of the participants said:

CPD in Ugandan sign language is necessary to equip teachers with new signs since sign language is varying from country to country. Through CPD, teachers learn to develop signs of particular words for different subjects. Yes, all teachers need to be developed in sign language such that they are properly equipped to teach the subject (T₂).

Others responded that: “*CPD makes teachers of sign language get competence to effectively teach Sign Language*” (T₅).

Another participant expressed that:

CPD helps teachers to acquire and develop sign language skills which create better opportunities for them as sign language teachers or interpreters even outside the teaching profession. In fact sign language is used everywhere not necessarily schools. Therefore, when teachers acquire these skills, they can work in churches, TV, among other places as interpreters (T₇).

The statements above imply a call for Continuous Professional Development for teachers in sign language as a way of supporting their needs in the teaching of Ugandan sign language as an elective subject under the lower secondary curriculum. Teachers however, are not required by policy to take sign language courses but are rather encouraged to learn sign language. There are short courses for sign language but only for SNE specializing in hearing impairment and sign language interpretation.

These findings concur with Nakabugo et al. (2011) who stress that in order to develop, expand, and broaden the knowledge that teachers have gained since receiving their initial training and to give them continuous professional development (CPD) in SL, secondary school teachers need training that takes the form of refresher courses like workshops. Teachers need to be equipped on how to counteract all the challenges they will encounter during the implementation of the CBC, particularly in teaching SL as an elective subject.

There was another participant who stated that there is need to train more teachers for Ugandan sign language.

There should be enough trained teachers of Ugandan sign language in all secondary schools other than sign language interpreters and other users of Ugandan sign language who are not teachers. Given that teachers are vital in the teaching learning process, more of them should be trained and recruited to teach sign language (T₃).

This finding concurs with Leigh & Crowe (2020) who provides that teacher's academic and professional prerequisite to the mastery of SL that contributes to the nature of pupil's mastery of the subject. Likewise, Power & Leigh (2011) note that teachers must master USL structure before they develop Signing Skills that will be used at all times for proper learning to take place in the classroom.

Another participant stated:

There is need for INSET training in sign language receptive and expressive skills by professional sign language instructors from Kyambogo University and continuous workshops by NCDC and UNEB to equip sign language teachers with the necessary skills (HT).

Another one stated that: *“Teachers for the deaf must undergo re-training to acquire the appropriate signing skills since they are key to the teaching of sign language”* (T₆).

Similarly, another participant noted that:

We as teachers require professional support to diversify our teaching knowledge of sign language such that all learners can understand and benefit from our lessons (T₂).

One of the participants also said:

The ministry of education should always organize seminars for teachers such that they acquire better knowledge to approach their teaching style and apply different theories. Yes, teachers

need support so as to deliver the new lower secondary curriculum in class (HT).

In connection with the above findings, Akach (2010) notes that teachers should have trainings to acquire theoretical understanding of how people learn, exhibit superior teaching techniques, and support their students' linguistic and academic growth. Along with having a disposition that encourages learning and real personal connections, teachers must also be familiar with the USL.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary, conclusion and recommendations. Additionally, suggested areas for further research are presented. Presentations are aligned with the objectives of the study which were meant to explore the perceptions of teachers towards USL as an elective subject under the lower secondary school competency based curriculum, to explore the factors that teachers anticipate to facilitate or hinder the teaching of USL as an elective subject under the lower secondary school competency based curriculum and to identify the professional support needs that teachers require to teach USL as an elective subject under the competency based lower secondary school curriculum. The summary focuses on the key findings of the study objectives.

5.1 Summary of Findings

The study revealed that the participants had both positive and negative perceptions towards the introduction of USL as one of the elective subjects in lower secondary school curriculum. Those with positive attitudes revealed that it is a good idea which needs to be supported because knowledge of SL fosters interaction between persons with hearing impairment and other normal people. Those with negative perceptions revealed that it was hurriedly implemented without recruiting enough SL teachers and without enough instructional materials.

The factors that can facilitate the teaching of Ugandan Sign Language training background in SNE as it gives the competence to effectively support the teaching of USL as an elective subject under the lower secondary school curriculum.

However, teachers who have no training background in SNE and have no knowledge in USL need professional development specifically to be equipped with knowledge in USL.

The study findings revealed that there were limited qualified USL teachers who had a heavy teaching load

5.2 Conclusions

The teachers who had positive attitudes were those who had been trained in Uganda Sign language while those with negative attitudes had never been trained. It was established that knowledge and skills in Ugandan Sign Language, the availability of teaching and learning materials play a crucial role in facilitating the teaching of Ugandan Sign Language. Continuous professional development was identified as key in effective use of Ugandan Sign Language in lower secondary schools. It was, therefore, good for the government to introduce Ugandan sign language as an elective subject under the lower secondary school curriculum.

5.3 Recommendations

These recommendations are made in view of the study objectives as follows:

1. There is need for awareness campaign about sign language such that all people develop positive perceptions towards it.
2. The government through MoE&S should support Ugandan sign language as an elective subject under the lower secondary curriculum by providing teaching materials needed like sign language dictionaries, alphabet charts, projectors, videos, textbooks and other relevant materials, by recruiting more qualified Ugandan sign language teachers and also motivate them to teach subject.

3. There should be training of teachers in Ugandan sign language such that they all acquire the necessary knowledge to teach it.

5.4 Areas for Further Research

1. A study ought to be carried out to explore how Ugandan sign language can be taught to all learners at all levels.
2. This research was conducted in one secondary school in Wakiso District. Similar research studies ought to be conducted elsewhere for comparison purposes.

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APPENDICES

APPENDIX I: INTERVIEW GUIDE FOR THE HEAD TEACHER

SECTION A: BACKGROUND INFORMATION

1. Respondent's sex?
2. How old are you?
3. How long have you been in service as a head teacher?
4. What is the highest academic qualification you have attained?
5. Do you have a SNE background?

SECTION B: PERCEPTIONS ABOUT TEACHING OF UGANDAN SIGN LANGUAGE

6. What is your perception about the introduction of Ugandan sign language as one of the elective subjects to be taught in secondary schools in Uganda?

Probes: should it be taught as a separate elective subject? Should it be taught in inclusive secondary schools too? Should the hearing students also be allowed to study Sign Language? Why or why not?

7. Do you have trained and competent teachers in special needs and inclusive education? If yes, how many? What type of training did they attend?
8. Explain how competent your school is to offer Ugandan sign language as an elective subject under the lower secondary competency based curriculum

SECTION C: FACTOR THAT MAY FACILITATE OR HINDER

9. What challenges do you anticipate in the teaching of Ugandan sign language in your school?
10. Which equipment and facilities does your school have that would be necessary to teach Ugandan sign language as an elective?
11. Give the factors that may facilitate the teaching of Ugandan sign language in your school?

12. What factors may hinder the teaching of Ugandan sign language in your school?

SECTION D: TEACHERS' SUPPORT NEEDS

13. How do you rate the knowledge/ competence of Ugandan sign language of the teachers and staff of your school?

14. What type professional support do your teachers require to be able to teach Ugandan sign language in this school?

15. What support do the teachers in your school require to teach Ugandan sign language?

End,

Thank You

APPENDIX II: INTERVIEW GUIDE FOR TEACHERS

SECTION A: BACKGROUND INFORMATION

1. Respondent's sex?
2. How old are you?
3. How long have you been in service as a teacher?
4. What is the highest academic qualification you have attained?
5. Do you have a background in SNE?

SECTION B: TEACHERS' PERCEPTIONS ABOUT THE TEACHING OF SIGN LANGUAGE

6. What is your perception about the introduction of Ugandan sign language as one of the elective subjects to be taught in secondary schools in Uganda?
7. As a secondary school teacher, how competent are you to support the teaching of Ugandan sign language in secondary schools?
8. How do you describe your understanding and/or knowledge of Ugandan sign language?
9. How do you describe your readiness to teach Ugandan sign language?
10. How best do you think the introduction of Ugandan sign language as an elective can be taught?

SECTION C: FACTORS THAT MAY FACILITATE OR HINDER

11. What teaching equipment and facilities do you use for teaching Ugandan sign language?
12. Give the factors that may facilitate the teaching of Ugandan sign language in your school?
13. What may hinder the teaching of Ugandan sign language?

SECTION D: TEACHERS' SUPPORT NEEDS

14. What is the need for Continuous Professional Development in sign language?

15. Apart from the CPD, how else can you be supported to teach Ugandan sign language?

16. General Question: Do you have anything else to say about the teaching of sign language as an elective in lower secondary schools that you have not yet said?

End.

Thank You

APPENDIX III: FOCUS GROUP DISCUSSION FOR TEACHERS

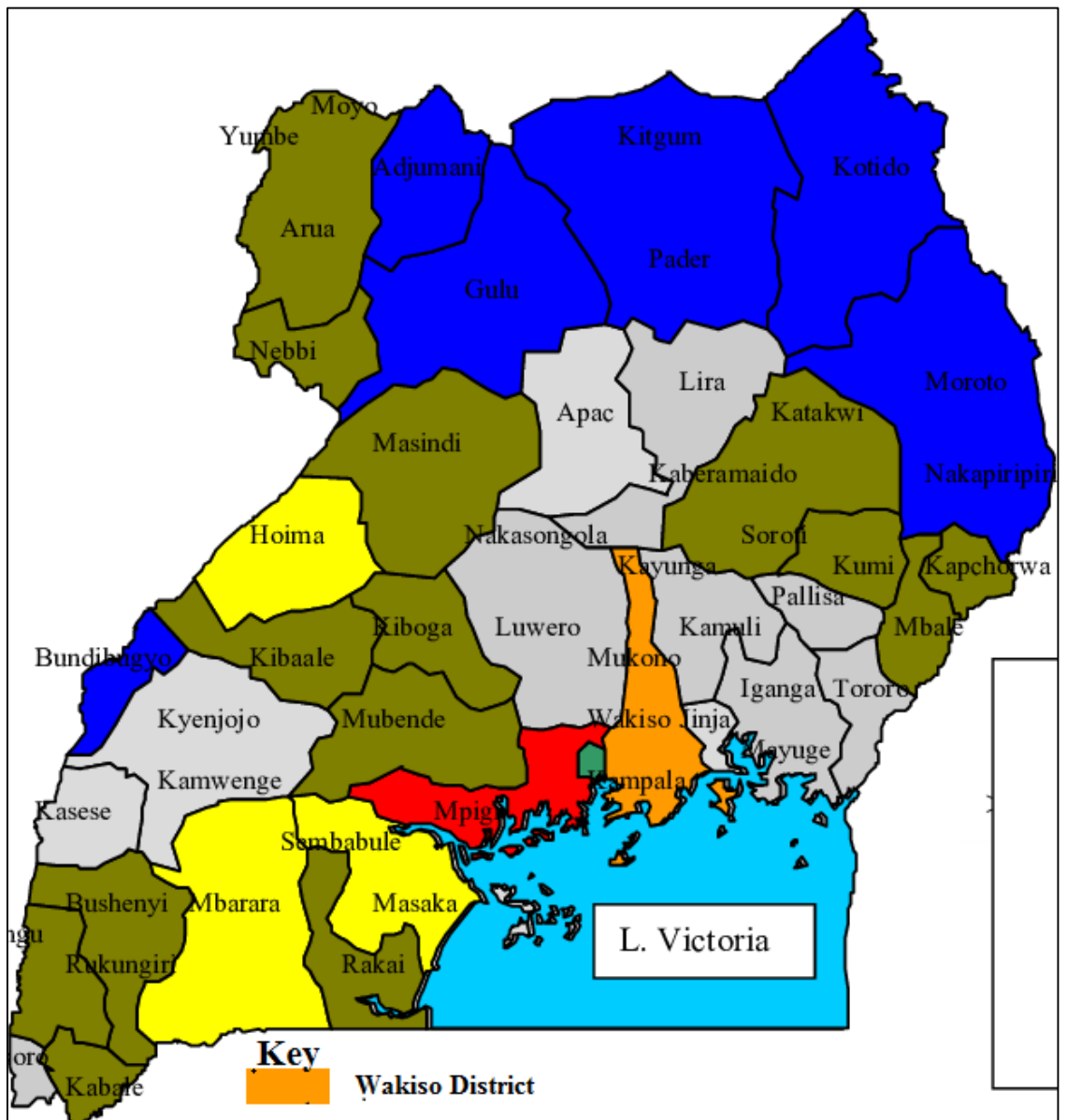
What is your perception about the introduction of Ugandan sign language as an elective subject? Was it necessary? Who should learn Sign Language?

1. How competent are the schools and teachers to implement the introduction of Ugandan sign language in secondary schools as an elective subject? How best should schools be prepared to teach Ugandan sign language?
2. What opportunities exist to support the teaching of Ugandan sign language in lower secondary schools?
3. What barriers are likely to hinder the teaching of Ugandan sign language in lower secondary schools?
4. What strategies/measures need to be adopted to ensure that Ugandan sign language is taught in schools?

End

Thank you

APPENDIX IV: MAP OF UGANDA SHOWING WAKISO DISTRICT



**APPENDIX V: MAP OF WAKISO SHOWING SECONDARY SCHOOL
FOR THE DEAF**

