# ASSESSMENT OF IMPLEMENTATION OF COOPERATIVE LEARNING TOWARDS THE PERFORMANCE OF LEARNERS WITH HEARING IMPAIRMENT: THE CASE OF LAKE ZONE INCLUSIVE SECONDARY SCHOOLS IN TANZANIA

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A DISSERTATION SUBMITTED TO THE FACULTY OF SPECIAL NEEDS EDUCATION AND REHABILITATION IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF

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## Declaration

I hereby declare that this thesis entitled "*Assessment of implementation of cooperative learning towards the performance of learners with hearing impairment: the case of Lake Zone inclusive secondary schools in Tanzania*" is my original work and has never been presented for a degree in any other university.

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## Dedications

I dedicate this research to my grandmother Ernestina Kagemulo Mazima, whose desire for attainment of the highest level of education has pushed me this far, to my beloved daughter Joyance Ainomugisha who inspires me for better achievements. To my friends; Irene Sadock, Steven Kajuna, Frank Muganyiza and Allen Ishangoma for their tremendous support.

## Abbreviations and Acronyms

CHAVITA        Chama Cha Viziwi Tanzania

CRPD           Convention on the Rights of Persons with Disability

D/HH           Deaf/Hard of Hearing

EFA            Education for All

LRE            Least Restrictive Environment

MoEC           Ministry of Education and Culture

MoEST          Ministry of Education Science and Technology

MoEVT          Ministry of Education and Vocational Training

NECTA          National Examination Council of Tanzania

SEN            Special Education Needs

SwHI           Students with Hearing Impairment

TEN            Tanzania Education Network

TLM            Teaching and Learning Material

TSL            Tanzania Sign Language

UPE            Universal Primary Education

UN             United Nations

UNESCO         United Nations Educational, Scientific and Cultural Organization

URT            United Republic of Tanzania

WFD            World Federations of the Deaf

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**Abstract**

The study aimed at assessing the implementation of cooperative learning towards the performance of learners with hearing impairment: the case of Lake Zone inclusive secondary schools in Tanzania. Literature review by the researcher has shown that others have conducted research in the area of Deaf Education and implementation of cooperative learning towards academic achievement but there still exists a huge knowledge gap in the areas under investigation in this study. The study used qualitative approach. Semi-structured interview was chosen as the main data collection method. In addition to semi structured interview, non-participant observation was also used. In order to generate in depth knowledge of the phenomenon, purposive sampling was used to get participants of the study which involved six teachers teaching students with HI, eight students; four with HI and four hearing students and two Heads of school making a total of sixteen participants as the researcher's target population. Data were analyzed using thematic analysis where interview transcription and coding was done to obtain the main themes. Presentation and discussion of the findings was done regarding the emerged themes and categories supported by the verbatim quotes from the participants. The study found that generally in both schools only special teachers apply cooperative learning and through this method both students with hearing impairment and hearing students improve their understanding in some of the subjects taught by special teachers. There is a negative perception among teachers towards the implementation of cooperative learning which limits their success in concentrating on the hearing-impaired students though the schools encourage cooperative learning to be used in class at all levels. A number of challenges that students with hearing impairment face during cooperative learning most of it being communication challenges. Also, hearing-impaired students seemed to be isolated during group discussion due to lack of vocabulary and misinterpretation of signs from hearing students. In both schools the available TLM and other equipments are not relevant neither modified to suit students with hearing impairment. This study recommends strategies and by laws in schools to be put in place to increase awareness among the teachers and students on the importance cooperative learning; teachers, peers and the community should be included because they are aware of what should be done to control these difficulties facing children with hearing impairment. The measures to be taken by teachers and other education stake holders to children with hearing impairment should be proper and accurate basing on their diversity for proper provision of teaching and learning material; there should be policy guideline from the government with clear implications and objectives in school curriculum adaptations and flexibility in terms of content and time for children with hearing impairment; this will ensure quality performance. intensive in-service training of teachers on Tanzanian Sign Language and methods of teaching Deaf learners; and more government allocation of resources to Deaf schools. The Ministry of Education in conjunction with Tanzania Institute of Curriculum Development and other stakeholders should revise and simplify the curriculum to suit the needs of Deaf learners.

**CHAPTER ONE**

## 1.0 Introduction

This chapter describes the background to the study, statement of the problem, purpose of the study, research objectives, and research questions. It also, put forward the significance of the study, conceptual framework, theoretical frame work, scope of the study, limitations of the study and definition of terms of this study.

## 1.1 Background to the study

Several definitions of cooperative learning have been offered by educationists. Felder and Brent (2010) define cooperative learning (CL) as students working in teams on an assignment or project under conditions in which certain criteria are satisfied. These conditions include team members being held individually accountable for the completion of content which in turn facilitate the completion of the assignment or project. Johnson, Johnson & Holubec (2013) defined cooperative learning as the instructional use of small groups so that students work together to maximize their own and each other's learning. It is an instructional programme in which students work in small groups to help one another master academic content. Similarly, Duplass (2006) and McKeachie (2007) state that cooperative learning is instruction that involves students working in teams to accomplish a common goal, under conditions that include the positive interdependence, individual as well as group accountability, appropriate use of collaborative skills and group processing.

The idea that students learn more by doing something active than by simply watching and listening has long been known to both cognitive psychologists and effective teachers (Bransford, Brown, and Cocking, 2000 and McKeachie, 2002) and cooperative learning is

by its nature an active learning method. Beyond that, cooperation enhances learning in several ways. Weak students working individually are likely to give up when they get stuck; working cooperatively, they keep going. Strong students faced with the task of explaining and clarifying material to weaker students often find gaps in their own understanding and fill them in. Students working alone may tend to delay completing assignments or skip them altogether, but when they know that others are counting on them, they are motivated to do the work in a timely manner. It is important to note that there different types of cooperative learning with their attending structures, this paper is based on the Johnson and Johnson (2014) model.

The early forms of cooperative learning appeared in the 18th century when pioneered by English educators Joseph Lancaster and Andrew Bell. The Common School Movement in the United States in the early 19th century laid a strong emphasis on collective learning methods. The promotion of cooperative learning in the 20th century was marked by the work done by John Dewey, and later Alice Miel and Herbert Thelen. He believed that learning should be an active and dynamic process based on children's expanding curiosity in their world. It should be child-centered and responsive to the child's own developing social interests and activities. In this regard, he believed that schools had a responsibility to build on students' natural interest in their social environment by fostering interpersonal communication and group involvement. By interacting with others, children receive feedback on their activities, they learn socially appropriate behaviors, and they understand what is involved in co-operating and working together (Dewey, 1940, 1966). Research reports indicate that cooperative learning facilitates the process of learning (De Baz, 2001; Hert-Lazarowitz, & Baird, 2006). Learners are assigned to small groups in

which they work together to maximize their own, and one another's learning. The school system seems to over emphasize academic attainment of students with little consideration to whether the learning process is meaningfully done, or by rote. Teachers and managers of the educational system are satisfied, once performance in terms of grades is high. However, with the many researches that have been conducted to improve academic performance in schools, results continued to be poor (Makanjuola, 2002; Ochu, 2006; Fasanya, 2006). This is a pointer to a problem in the teaching and learning. It may be that the teaching is poor and ineffective or the learning is not meaningful, or both.

One of the reasons why performance of students with hearing impairment are poor in academic. (Fasanya, 2006) may not be the absence of "teaching" but the ineffectiveness of the way a subject is taught and learned in schools. This was corroborated by Adams (2013) who blamed poor performance of students to poor teaching methods, and teachers' inability to vary teaching techniques. Clearly, no one teaching style or method is suitable for the realization of all teaching outcomes. However, research reports point to the importance of cooperation, collaboration, discussion / verbal interaction and group work. (Hogan, 2002; De Baz, 2001; Doymus, 2008; Gocer, 2010). These studies confirm the social nature of learning.

Since the world's education system is becoming increasingly diverse, it is crucial that learning strategies are beneficial in educating a wide variety of student; teachers must engage students so they retain and comprehends the subject matter through in the classroom and provide them with the proper social skills needed to succeed beyond the classroom environment. One of the learning method educators can use to help students develops those necessary skills is cooperative learning method. In order cooperative learning method to breakthrough, students and teachers should both have positive attitude hence it develops

healthy interaction skills, promotes success of the individual students and group members, and forms personal and professional relationships (Hogan, 2002).

Students with hearing impairment are more vulnerable to a number of problems that hinder their learning capability. Most of them suffer from social maladjustment, psychological problems, emotional disturbances, and difficulties in interpersonal relationships, having poor self-concept and personality problems (Heward, 2006).

Students with hearing impairment, therefore, need special education that will address the student individual differences and needs. Ideally, this process involves the individually planned and systematically monitored arrangement of teaching procedures, adapted equipments and materials, accessible settings, and other interventions designed to help learners with special needs to achieve a higher level of personal self-sufficiency and success in school and community than would be available if the students were only given access to a typical classroom education (Heward, 2006).

The right to education is universal and extends to include all children in spite of their sex, color, ability, disability or their social status. These principles of social justice, equity and basic human rights were advocated by various international declarations including the World Declaration of Education for All (EFA) of 1990, the Salamanca Statement of 1994, and the Convention on the Right of Child (UNESCO) of 1989. Since the 1990's inclusive schools' movements have become the basis for educational reforms in many countries in the world. For the last two decades international policy on development has turned focus on providing quality education for all learners within the mainstream classes, thereby removing the stigma and stereotyping of learners with barriers to learning (Prinsloo, 2001).

Tanzania in particular enrollment of students with hearing impairment; the trend is worse whereby only four out of ten (4/10) children with disability attend school in the community (UNESCO, 2006). Therefore, in order for children with special needs to enjoy the same access to education like the other children is to enroll them in the inclusive classrooms. Article number seven of the Salamanca Statement of 1994 requires all children to learn together regardless of their difficulties or differences they have.

In Tanzanian secondary schools they meet more challenges of inexperienced teachers with limited or no knowledge about deafness, inclusive classes dominated by hearing peers and worse of all, a new language of instruction, English yet the modes of instruction used are hearing oriented (Batamula, 2009). The frequency which the DHH students are exposed to; the subject content and the kinds of strategies used to enable them understand, are crucial in deaf education (Knoors & Renting, 2000). In Tanzanian students with hearing loss may have difficulties while growing up in developing effective social strategies which are very important in advancing positive attitude towards cooperative learning; As a result of hearing loss, their academic performance is affected. Hence forth they may face increasing difficulties in forming positive relationships with hearing peers due to the attitude they have towards each other

In achieving quality education for all children in the inclusive classrooms, the changing of teaching practices is emphasized to respond to the learners' diversity. So, the emphasis is put on the use of participatory teaching methods around the world, which will be able to accommodate the needs of all students in the participation of learning

In order to improve teaching and learning process in Tanzania, the main emphasis has been put on the use of the participatory teaching methods since 1990's. The participatory

teaching methods are sometimes referred as learner-centered teaching methods (MOEC, 1995). This encourages learners to be actively involved and take responsibility of their own learning through participatory and interaction teaching and learning methods in the classroom. Participatory methods like cooperative learning also help learners to be able to solve problems, make decisions, think critically, communicate ideas effectively and work well with teams and groups.

Teachers in Tanzania have been reported to be using a combination of participatory methods in teaching, the most frequently used methods were group work and presentations, problem solving and enquiry, debates and group discussions Tanzania Education Network (TEN, 2012). Inclusion means educating students with disabilities in regular classrooms. The Least Restrictive Environment (LRE) principle requires that students with disabilities be educated in settings as close to the regular class as possible in which an appropriate program can be provided and the child can make satisfactory educational progress (Heward, 2006). Inclusion means that if a child with learning disabilities is in a general education classroom, she/he receives the type of explicit instruction needed to ensure meaningful academic progress (UNESCO, 2003).

## 1.2 Statement of the problem

A powerful tool for increasing learning and participation is cooperative learning. For inclusive education to take on, the curriculum has to be underpinned by a model of learning which is itself inclusive; it needs to accommodate a range of learning styles and to emphasize skills and knowledge which are relevant to learners. It must allow for interaction, cooperation, discovery and creativity, and progression at different levels of skills.

The current curriculum for secondary education recommends participatory teaching methods. However, there are suggestions that this recommendation does not sprinkle down into classrooms (e.g. TEN/MET 2006, PEDP Evaluation 2007). Inadequacy of teaching and learning materials, teaching methods and strategies as well as assistive devices, hampers access to curriculum of many learners, not only of children with disabilities, and need to be addressed as a matter of urgency. Furthermore, although teachers have the choice to adapt the curriculum according to the needs of learners, teachers are not prepared or lack the skills to do so. Very few teachers have been trained in the new competence-based curriculum (PEDP Evaluation, 2007).

Tanzania Institute of Education has the responsibility of developing curricula for secondary and teacher education, as well as designing learning materials. It is therefore crucial that TIE is centrally involved in the development of inclusive education.

There is a gap between teacher's professional competencies, inclusive teaching approach learner's differences and children diversity in Tanzania mainstream classes (Kapinga, 2012; Karakoski & Stroem, 2005). This gap has caused students with special needs to be left out in both social, physical and academic achievements due to lack of inclusive knowledge and strategies, skills and practices among teachers in Tanzania (Mkumbo, 2008).

This is due to the fact that most of the teachers lack knowledge and skills to teach effectively both special and inclusive classes in Tanzania (Kapinga, 2012, 2014).

Since the majority of teachers in Tanzania inclusive schools are graduates from regular teacher programmes, of whom numbers of studies have shown that they lack knowledge and skills to teach inclusive classes (Forlin & Chambers, 2011; Kapinga, 2012, 2014; Mmbaga, 2002).

Therefore, it was the central attention of this study to assess the implementation of cooperative learning towards the performance of students with hearing impairment.

## 1.3 Purpose of the study

This study assessed the implementation of cooperative learning towards the performance of learners with hearing impairment. This is simply because students with hearing impairment have social, emotional, physical, and intellectual needs which must be met to enhance cooperative learning and develop their performance hence when the above are not well met might lead to negative attitude towards cooperative learning which can lead to poor performance.

## 1.4 Objectives of the study

(i) To identify the application of cooperative learning in the classroom teaching process.

(ii) To ascertain the challenges faced by students with hearing impairment during cooperative learning.

(iii) To determine the extent to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning.

## 1.5 Research Questions

(i) What is the level of application of cooperative learning in the classroom teaching process?

(ii) What are the challenges faced by students with hearing impairment during cooperative learning?

(iii) To what extent does availability of teaching and learning resources influence students with hearing impairment towards cooperative learning?

**1.6 Significance of the study**

The study might provide:

(i) Assistance to students with hearing impairment understand the impact of their attitude towards the learning method on their motives, social skill and academic performance

(ii) Help to teachers in understanding their student's attitude and interpretation of the group they are assigning.

(iii) Strategies and skills which might lead to positive attitudes towards cooperative learning of students with hearing loss.

(iv) Help teachers and school administrators, in particular for understanding the feedback of students for the implementation of the cooperative learning method.

(v) A plan for better ways to Education stakeholders such as minister, head of schools and teachers in which these children might be assisted academically and socially as well.

(vi) A good ground for future investigation on the challenges in their academic carrier and also to create awareness on the care and support of students with hearing loss so as to meet their rights to education.

**1.7 Delimitation of the study.**

This study focused on public secondary schools in the Lake Zone which offer inclusive education for students with hearing impairment. However, when conclusions are made regarding the state of cooperative learning towards the performance of learners with hearing impairment in other inclusive school of the country, we need to be very careful because the factors differ from one school to another according to the locality. Also, the

only people who participated in this study are students, teachers and head teachers who are part of the inclusive education settings.

## 1.8 Limitation of the study

In addition to its strengths and significances, this study had some certain limitations. Therefore, the researcher faced the following challenges

☐ Limited related studies, particularly studies on relationship between cooperative learning towards the performance of students with hearing impairment. However, with this regard, resources referring relationship between cooperative learning and performance students with hearing impairment were utilized from online journals publications.

☐ In addition, the researcher had inadequate financial resources, limited time and material to do this study. In dealing with this challenge the researcher chose to cover only three schools in the lake zone part to represents other inclusive schools

☐ In addition, there were limited researches done on the areas of cooperative learning methods in Tanzania the researcher is aware of this insufficiency literatures and reference materials to fully scrutinize the natures of the problem. However, this does not mean that the objectives of the study were not achieved but researches and literatures with similar themes written elsewhere were utilized.

## 1.9 Conceptual Frame Work.

A conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. Strong conceptual framework captures something real and is easy to remember and apply. The conceptual framework of the study is presented in figure 1

**Independent variable**
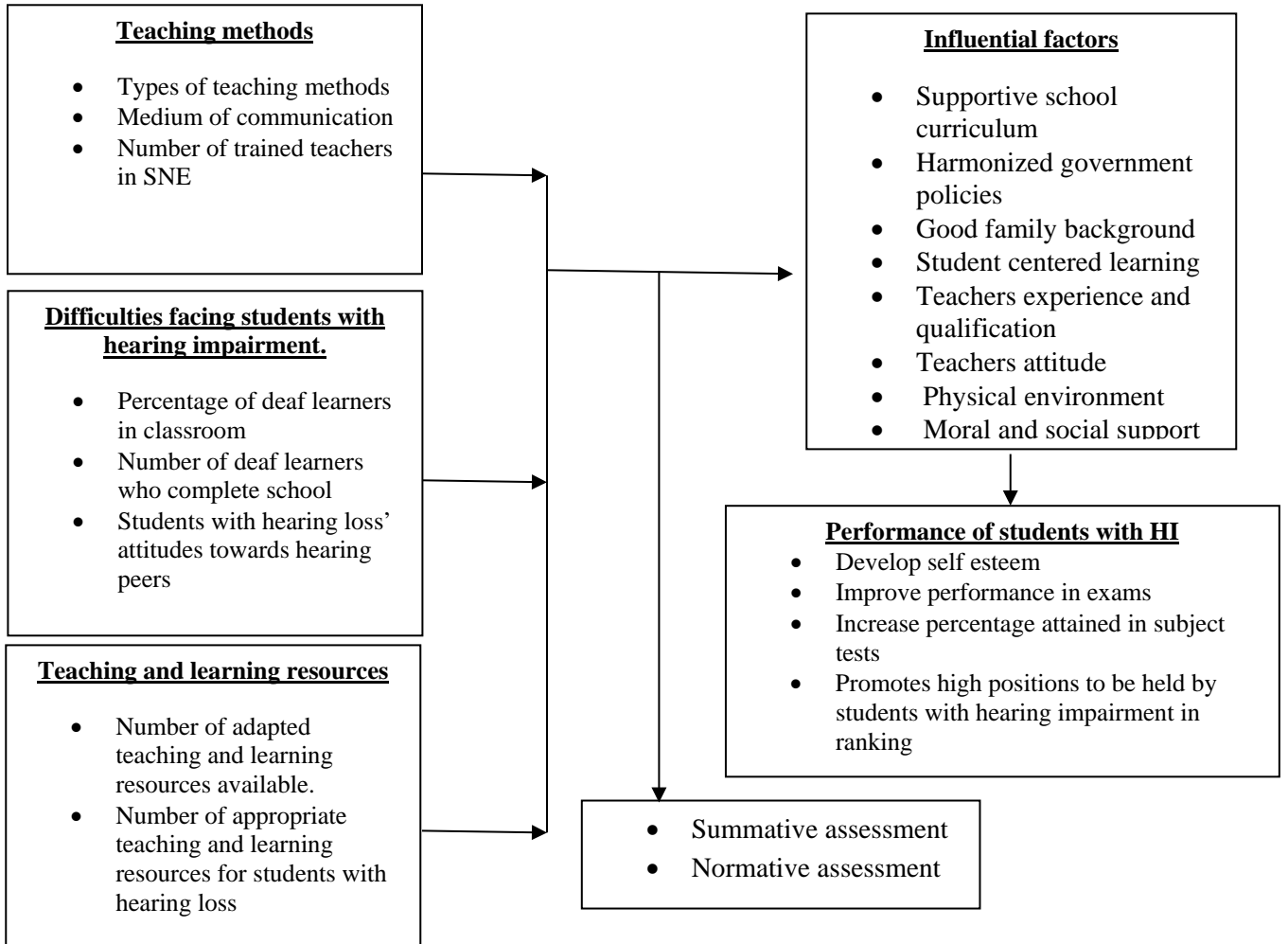


**Figure 1 Conceptual frame work of the study**

**1.10 Theoretical Framework**

Theories were utilized to guide this research study; there are at least two general theoretical perspectives that have guided research on cooperative learning, the social interdependence theory which suggests that when individuals share common goals, and each person's success is affected by the actions of the others; which is supported by the cognitive developmental theory which emphasizes that when individuals cooperate on the environment, socio-cognitive conflict occurs that creates cognitive disequilibrium, which in turn stimulates perspective-taking ability and cognitive development.

**1.10.1 Social interdependence theory.**

Social interdependence exists when individuals share common goals, and each person's success is affected by the actions of the others (Deutsch, 1962; Johnson & Johnson, 1989). It may be differentiated from social dependence (i.e., the outcomes of one person are affected by the actions of a second person, but not vice versa) and social independence (i.e., individuals' outcomes are unaffected by each other's actions). There are two types of social interdependence: cooperative and competitive. The absence of social interdependence and dependence results in individualistic efforts. Social interdependence is one of the most fundamental and a ubiquitous aspect of being a human being and it affects all aspects of our lives (Deutsch, 1949, 1962).

Theorizing on social interdependence began in the early 1900s, when one of the founders of the Gestalt School of Psychology, Kurt Koffka, proposed that groups were dynamic wholes in which the interdependence among members could vary. One of his colleagues, Kurt Lewin, refined Koffka's notions in the 1920s and 1930s while stating that: (a) The essence of a group is the interdependence among members (created by common goals),

which results in the group's being a "dynamic whole," so that a change in the state of any member or subgroup changes the state of any other member or subgroup; and (b) an intrinsic state of tension within group members motivates movement toward the accomplishment of the desired common goals. For interdependence to exist there must be more than one person or entity involved, and the persons or entities must have impact on each other in that a change in the state of one causes a change in the state of the others. From the work of Lewin's students and colleagues, such as Ovisankian, Lissner, Mahler, and Lewis, it may be concluded that it is the drive for goal accomplishment that motivates cooperative and competitive behavior.

In the late 1940s, one of Lewin's graduate students, Morton Deutsch, extended Lewin's reasoning about social interdependence and formulated a theory of cooperation and competition (Deutsch, 1949, 1962). Deutsch conceptualized three types of social interdependence: positive, negative, and none. Deutsch's basic premise was that the type of interdependence structured in a situation determines how individuals interact with each other, which, in turn, largely determines outcomes. Positive interdependence tends to result in promotive interaction; negative interdependence tends to result in oppositional or contrient interaction; and no interdependence results in an absence of interaction.

**1.10.2 Cognitive developmental theory**

The cognitive-developmental perspective is largely based on the theories of Piaget (1936) and Vygotsky. The work of Piaget and related theorists is based on the premise that when individuals cooperate on the environment, socio-cognitive conflict occurs that creates cognitive disequilibrium, which in turn stimulates perspective-taking ability and cognitive development. The work of Vygotsky and related theorists is based on the

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premise that knowledge is social, constructed from cooperative efforts to learn, understand, and solve problems.

## 1.11 Scope of the study.

The study took place in two out of three inclusive schools of the lake zone in Tanzania, as it was to assess the implementation of cooperative learning towards the performance of students with hearing impairment. Where by these secondary school have a good number of students with hearing loss who will enable the researcher to obtain useful information, furthermore this study was conducted from August 2018 to August 2021.

## 1.12 Definition of terms

## 1.12.1 Hearing Impairment

Hearing impairment is a partial or total inability to hear. A deaf person has little to no hearing. Hearing loss may occur in one or both ears. In children hearing problems can affect the ability to learn language and in adults it can cause work related difficulties. In some people, particularly older people, hearing loss can result in loneliness. Hearing loss can be temporary or permanent (Turner, 2014).

## 1.12.2 Cooperative learning

This can be referred to as an educational approach which aims to organize classroom activities into academic and social learning experiences.

Cooperative learning has been defined as groups of students working together to complete a common task (Johnson, & Holubec, 2002).

# CHAPTER TWO

# LITERATURE REVIEW

## 2.0 Introduction

This chapter presents various literature reviews that are related to the study. Since the main purpose for this study was to assess the implementation of cooperative learning towards the performance of students with hearing impairment and discover several methods which could be helpful in completing the research work. The chapter starts by reviewing literatures on cooperative learning, then the international and national declarations and advocacy for the deaf followed by the review of related literatures which will focus on the above subject of study under the following objectives of the study;  the application of cooperative learning in the classroom teaching process, the challenges faced by students with hearing impairment during cooperative learning., the extent to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning. In addition, we also encountered general lack of literature in the area of focus in this study. Hence the review specifically addressed only issues of interest in this study and finally the gap of knowledge.

## 2.1 Cooperative learning

According to Gillies, (2006) cooperative learning is widely recognized as a pedagogical practice that promotes socialization and learning among students from pre-school through to tertiary level and across different subject domains. It involves students working together to achieve common goals or complete group tasks goals and tasks that they would be unable to complete by themselves.

Borrowing heavily from Johnson and Johnson (2009), we outline the major structural elements that would guarantee a successful cooperative learning classroom. They believe that in order for student achievement and behaviour to improve considerably, two characteristics must be present: A: When designing cooperative learning tasks and reward structures, individual responsibility and accountability must be identified. Individuals must know exactly what their responsibilities are and that they are accountable to the group in order to reach their goal. B: All group members must be involved in order for the group to complete the task. In order for this to occur each member must have a task that they are responsible for which cannot be completed by any other group member. Johnson and Johnson (2002) examined the effects of cooperative, competitive, and individualistic learning on a number of academic, personal and social dependent variables (i.e. achievement, interpersonal attraction, social support, self-esteem, perspective taking, learning together, and controversy) and found strong effect sizes between cooperative learning in comparison to competitive and individualistic learning.

In another instance, the study conducted in Pakistan by Akhtar (2012) to explore on effects of cooperative learning on students' academic achievement. This study was set out to examine the views about cooperative learning in domain of group projects of graduating students of the Departments of Statistics and Economics of Arid Agriculture University Rawalpindi. A semi-standardized instrument measuring the attitudes on a three-point Likert scale was adopted for data collection. Analysis of the data yielded that student was favorable to do work on group projects along with associated cooperative learning methods. The study shows that traditional class activities create a win-win situation, where one can only succeed if other loose, while cooperative learning is direct opposite to it; here

conquest of all is success of all. Cooperative learning has edge over other teaching methods in terms of its effectiveness for improved cognition, social skills and motivation.

Two major attributes that have distinguished cooperative learning from traditional learning include interdependence (positive) as well as accountability as each member of group is important for success (Slavin, 2014). Cooperative learning also improves positive attitude towards learning (Johnson & Johnson, 2008), improved social relations (Johnson & Johnson, 2005), in addition to high self-esteem and cohesiveness (Sahin, 2010). Cooperative learning can be also stated in terms of instructional strategy in which students work together to achieve learning target (Abrami, Poulsen & Chambers, 2004).

In support of using cooperative learning to teach hearing impaired students in Kelvin Miller's study he found that the cooperative leaning positively influences the conversational turns, initiations, moves and mean length of turn for the student studied in (1995). It has also been found that when D/HH students get opportunities to use language in the context of a conversation, these students often display increased pragmatic abilities (Miller, 1995).

## 2.2 International, national declaration and advocacy for the deaf

Tanzania being a member of the International Community follows various UN conventions, e.g. Convention on the Rights of Persons with Disabilities (2006).

The international rights of persons with disabilities are grounded in a broad framework based on the United Nations Charter, the Universal Declaration of Human Rights, international convention on human rights and other human rights instruments.

The CRPD requires participating countries to periodically report to the United Nations (UN) on their progress in implementing and enforcing treaty obligations. Treaties are a

powerful tool, and are used by advocacy groups to monitor, highlight, and promote human rights. The CRPD helps increase public awareness of barriers faced by people with disabilities; promote law and policy changes at the national level; provide remedy in individual cases of rights violations or abuses; and channel resources into programs that support the rights of for people with disabilities. Also, the CRPD requires nations to recognize that the human rights of people with disabilities deserve the same level of commitment that governments demonstrate toward the rights of people without disabilities and society as a whole. In essence, the CRPD is a shift from the medical to a human rights model of disability. According to the World Federation of the Deaf (WFD), an international, non-governmental organization, "linguistic and cultural viewpoints of Deaf people are strengthened by the Convention. The Convention is the first international treaty ever that recognizes sign languages and the linguistic human rights of deaf people. "The CRPD specifically states that governments are to recognize sign language as an official language in the Constitution and/or special legislation, ensure professional interpreter services, and guarantee education to deaf people in their sign language. The WFD also states that, "The Convention also aims at better ensuring the right of Deaf people to get [an] education in sign language, use sign language in official interaction with authorities, promote access to interpreters and receive services as well as information in sign language. In addition, it includes the recognition and support of cultural and linguistic identity. (www.wfdeaf.org).

In Tanzania policy documents are very essential as they provide a reflection of a government's decision-making process, hold governments accountable for services delivered, shape societal view points and actions and record a society's progress and

change over time. Having a policy in special needs education is a significant milestone towards achieving various global initiatives to ensure equal education opportunities to people with special needs.

Tanzania has adopted, and to some extent, implemented a number of laws, policies and documents pertaining to people with special needs. The following are highlighted: These are:

The 1977 Tanzanian Constitution with its amendments stresses the equality and equity of all citizens. For instance, part 3 explains that every person is entitled to recognition and respect for his dignity, and all persons are equal before the law and are entitled to protection without any discrimination and with equality before the law. The constitution prohibits discrimination against people with special needs.

The Universal Primary Education Policy of 1974 (UPE) emphasizes the right of all Tanzanian children to a free primary education. Schools were built in almost every village resulting in high enrolment in primary schools. This remark enabled the literacy rates to reach 98% by the mid 1980's. In relation to Special Needs Education, the Universal Primary Education initiative addressed it in a general manner by the means of including learners with special needs in the general statements such as the right to education to every child of school age 7 to 12 years.

Tanzania Persons with Disability Act 2010 is a law enacted by Parliament in April 2010 and was assented by the President of the United Republic of Tanzania on 20th of May 2010. The Act makes provisions for health care, social support, accessibility, rehabilitation, education and vocational training, communication, employment or work protection, and

the promotion of basic rights for persons with disabilities. In terms of education, the act prohibits discrimination of any kind in the provision of education at all levels. The law stipulates that, Persons with disabilities of all ages and gender shall have the same rights to education, training in inclusive settings. (Tanzania Human Rights Report 2010).www.state.gov.

## 2.3 Application of cooperative learning in the classroom teaching process.

Some studies try to show how the use of cooperative learning approach will enhance the development of favorable construction of individual knowledge of students with hearing loss. Jolliffe (2007) indicates that cooperative learning requires pupils to work together in small groups to support each other to improve their own learning and that of others.

A study conducted in Turkey by Toklucu and Tay (2016), the study was conducted to determine the effect of the cooperative learning method and the systematic teaching and constructivist learning approaches on student achievement and retention in teaching the social studies lesson unit "The Place We Live" in a 4th grade class at the elementary school level. The research was based on pretest-posttest control group experimental design. Accordingly, experiment group 1 received instruction based on the cooperative learning method, experiment group 2 received instruction based on the systematic teaching method, and control groups 1 and 2 were instructed through the constructivist learning approach. A total of 110 students were assigned to the experiment and control groups, the result of the study revealed that, cooperative learning method and the systematic teaching and constructivist learning approaches are effective ways of enhancing students' achievement. Conversely, experiment and control group post test scores were not significantly different from each other. The cooperative learning method and the systematic teaching and

constructivist learning approaches (control-1) were found to secure retention of knowledge, but failed to achieve retention of the knowledge among students in control group 2.

Another study conducted in Sudan by Alrayah (2018), aimed at examining the effectiveness of cooperative learning activities in enhancing English as Foreign Language learners' fluency. The researcher has used the descriptive approach, recorded interviews for testing fluency as tools of data collection and the software program SPSS as a tool for the statistical treatment of data. Research sample consisted of (48) first year-students, studying English language in the Faculty of Education at Omdurman Islamic University-Sudan. The most important result indicates a statistically significant correlation between the Cooperative Learning activities and the improvement of EFL learners' oral fluency of speaking. The study further suggested that, cooperative learning has social benefits as well as academic. One of the essential elements of cooperative learning is the development of social skills to learners with hearing loss such as communicating, building confidence, providing leadership, and managing conflicts, such skills contribute to the general contentment of learning. Students with hearing loss work with classmates who have different learning skills, cultural background, attitudes, and personalities. Watkins, et al. (2007) Mention that in the first step of cooperation, and when learners explain their meaning-making to each other, they enrich their knowledge, make sense of challenges and communicate in such a way that their own understanding is consolidated.

The above is also evidenced by the study conducted in Central Washington State by Remillard (2015) to explore cooperative learning and the impact on middle school students overall academic achievement. The study included 47 students from a small private school,

ranging from grades sixth through eighth. The researcher examined student perception of cooperative learning, implementation process and the overall impact of cooperative learning groups. The study found that in the classrooms where cooperative learning was implemented, students had academic growth in math that exceeded the national average, they built strong relationships with their classmates, and they enjoyed working in the cooperative groups. Students in these classrooms expressed a positive impression about math.

In relation to students with hearing loss the study done in Tanzania to assess the inclusion of students with hearing loss suggested that, in a cooperative learning classroom the learning environment is structured in a way to ensure students work together and are able to see diverse viewpoints or ideas. Group work is not complete until everyone has mastered the concept McCracken (2005). By starting students out with small amount of times and building to longer periods of time to work as a group will help students with hearing loss feel more confident working with others. Communication is the key and students will learn equal opportunity, to share ideas, give and receive feedback, how no one person takes over and information being original ideas of the group. "Students who are not on task, not challenged enough, or lack confidence to complete a task successfully find other things to take up their time, usually in the form of disruptions" (McCracken, 2005, p.12). Cooperative learning enhances students' interest, motivation, creativity and success. Cooperative learning creates a more positive and tolerant learning environment.

**2.4 Challenges faced by students with hearing impairment during cooperative learning.**

Learners are not isolated individuals but part of a larger society. Hearing impaired students' learning is affected by their homes, parents, peers and the community as a whole. The goal structure of individuals is directed at the same communally held objectives, and there exists a high interdependence among the goal attainment of the individuals (Gocer, 2010). By the time the child with hearing loss gets to school and meets a different climate, his learning ability becomes affected in different ways.

### 2.4.1 Poor social skills

The study conducted in Zimbabwe in 2014 on the Challenges Faced by Students with Hearing Impairment in Bulawayo Urban Regular Schools showed that besides communication problems, students with hearing impairment experience feelings of anger, frustration and isolation depending on lack of social skills. The researcher through the literatures has shown that deaf children are less socially mature than hearing children and the gap between hearing and deaf children widens with increasing age (Marschark, 1993).It has been shown that deaf children and deaf adolescents generally have less positive ideas about themselves than do comparable groups of hearing peers. It has also been reported that there is a high incidence of emotional and behavioural problems in hearing impaired children of all ages (Meadow, 1980, Marschark, 1993). Reasons advanced for the difficulties of hearing-impaired children include absence of interaction and appropriate mode of communication among these children and their hearing parents and peers. The researcher added that delayed language development experienced by most hearing-impaired children results in more limited opportunities for effective and satisfying interaction, (Moores, 1996, Quigley and Paul, 1994). Unless a hearing-impaired child has

other disabilities such as brain damage, there is no causal relationship between deafness and intelligence. However, the child will be slow in reaching his or her full potential without early stimulation and training in communication.

## 2.4.2 Poor physical environment

The similar study in Zimbabwe by Gudyanga (2014) on Challenges Faced by Students with Hearing Impairment in Bulawayo Urban Regular Schools, the study points out that there is a risk of students with hearing impairment being excluded from the teaching and learning that goes on, unless measures are taken to make sure they are fully included. This prompted this desktop study on problems associated with the physical barriers towards hearing impaired students in secondary schools. The study established that besides communication problems, students with hearing loss challenges are dictated by the environment. This was supplemented by (Aldoyo, 2008) established some theoretical models showing how environmental factors have been influential in cooperation and deaf education, the researcher pointed out the report on their influence of Brofenbrenner's model. It identifies four levels that influence children's learning outcomes. These are the Microsystems, which is the immediate context of the child like the school, classroom and home), the ecosystem, which is about the outside demands that affect children), and the macro system, which is about the cultural beliefs or institutional policies that influence individuals' behavior. The ecosystem perspective indicates that the learning environment needs to be considered in the light of the students' needs and include. Furthermore Ainscow, (1995) suggested the ideal physical environment for students with hearing impairment as he says "interaction with other students is important and the arrangement of furniture within the teaching area can do much to maximize these opportunities.

### 2.4.3 Communication barrier

Based on study conducted in Georgia by Tsuladze (2015) aimed at understanding the teaching and learning process of deaf students in an ordinary vocational education setting, which is a new initiative in the Georgian context. The study elaborates that, in spite of educational level, there are common difficulties associated with deaf individuals' education. Communication needs and teaching practices are the most often raised matters as the potential difficulties associated with deaf students' inclusive education (Cawthon, 2001, p. 212).

similarly, the report to investigate on Inclusive instruction and learning for deaf students in postsecondary education Long at al. (1991), shows that that deaf students' perception of ease of classroom communication was a significant predictor of their test scores and grades (as cited in, Richardson, Marschark, Sarchet & Sapere, 2010, p. 359). Communication provides the platform on which inclusive teaching practice for deaf students is built on. When some scholars make the main accent on classroom communication, others propose to find the factors apart from it that constitute effective and responsive teaching of deaf students. According to Stewart (2006), "there is a more to good teaching than just the way a teacher communicates". According to Antia, Stinson and Gaustad (2002), supplement that inclusion is impossible without deaf student's access to communication, but latter is not an only sufficient factor, but also deaf learners and their teachers' unique needs must be accepted by the school community (p. 214). Powers (2002), suggested several indicators of inclusive practice for deaf students among which are: acceptance of differences by the learning community, an effective communication environment and regular opportunities to interact with hearing peers, access to formal curriculum via flexible approach and

effective teaching strategies, knowledgeable teachers and learning assistance, proper attitudes towards deaf learners (pp. 237-238).

## 2.5 The extent to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning.

A Kenyan study done by Muiti (2010,) elaborates that, teaching/learning resources are materials used by the pupils or by the teacher or both to facilitate learning It is important to note that it is only in very rare occasions for learning materials to be specific for a given category; most learning materials can be used by all learners with disabilities. Research findings reported by most Kenyan researchers show that there are learning resources which both the teacher and pupils cannot do without. These are teaching documents, schemes of work, lesson plans, progress records, IEPs, resource personnel and so on. These resources can also be used by learners with other different disabilities.

The study conducted in Tanzania by Rishaelly (2017), on factors influencing academic performance of hearing-impaired students in inclusive education: a case of Moshi technical secondary school points out that lack of school resources affects learning in both primary and secondary schools in Tanzania. It utilized purposive sampling technique to obtain sample from hearing impaired students, ordinary students who study in inclusive classes, teachers who teach in inclusive classes, the head of the school and the academic master. Data were collected by using interviews, Focused Group Discussions and classroom observations. Data collected were analyzed by using descriptive thematic analysis framework. The findings revealed that inclusive teaching and learning environment for hearing impaired students was not friendly due to shortage of specially trained teachers for hearing impaired students, lack of sign language skills to teachers who teach in inclusive

classes, as well as shortage of teaching and learning facilities. The factors are specified as school resources like, size of the class, textbooks, library, and visual aids among others. The researcher is in support of this as it is also what takes place in most of Tanzanian schools because lack of school resources actually leads to poor teaching methods. Teachers and pupils are not able to expose themselves to these resources in order to have effective teaching and learning. According to Coombs (1995), teaching materials are used to promote learning; maintain interest, add variety to the lesson and to relate one subject to other subjects. The inadequacy of materials and equipment may have adverse effects to learners who are hearing impaired especially the hearing devices for those who are deaf Tum (1996) is in support of Eshiwani as he says that lack of many facilities is a primary contributory factor to poor performance, which comes as a result of poor teaching methods. It is true that lack of any reading books and other facilities manifest poor continuous teaching and learning especially in special schools and units which are mostly marginalized and their vote head interfered with by the head of institutions.

Maundu a Kenyan researcher in (1993), states that variation in quality and quantity of teaching/learning and facilities suggests that pupils receive poorer education.

Furthermore, previous researches in other districts have shown that pupils are clustered in one room and being taught by different teachers under one roof. This situation can be found in Tanzanian schools' special units where physical classrooms for these children are never constructed hence their being put in one room. Special unit teachers are also withdrawn from the special unit class to teach in the mainstream classes. The review clearly indicates the studies having been done in other parts of Kenya and Meru North being one of the

districts, a similar problem might be there which can be a hindrance to effective learning of pupils who are hearing impaired.

In another study conducted in Kenya on the factors influencing the academic achievement of deaf learners in Kilifi county (Mwanyuma, 2016). The study was conducted from a target population of 46 respondents which is the entire population under study. The researcher therefore employed census sampling technique to sample 46 respondents including 1 head teacher, 37 teachers and 8 parent representatives of Sahajanand School for the Deaf. A pilot test with a retest preceded the main research to test the research instrument in preparation for the actual study. The research instrument was subjected to the expert opinion of the supervisor to determine content validity and utilized the test-retest method and Pearson's Moment correlation coefficient to test for its reliability. The data collection instruments used were questionnaires and interview guide. Quantitative data was organized and analyzed using simple statistical techniques including tables, mean and standard deviation.

The results of the study revealed that teachers in Kenyan schools for the Deaf and units lack adequate resources to design classroom experiences that can help Deaf learners understand the content being taught. In addition, the teaching and learning materials meant to be used in Deaf schools are unavailable or inadequate and the few available ones are not adapted to suit the Deaf learners. Also, the researcher revealed that, large scale studies on school effectiveness have pointed out the importance of teaching and learning resources Deaf learners' achievement. Fuller and Clarke, (1994) researched on studied school effectiveness in developing countries that adjusted learners' achievements for their family background and found quite consistent school effects related to availability of textbooks

and other accompanying reading materials. Boissere (2004) said that teaching and learning resources such as text books and writing materials were essential contributors to the academic achievement of Deaf learners at the primary level in developing countries. Studies conducted by Michaleowa (2001) found that the availability of textbooks had a significant positive on the academic achievement of learners. Much literature in developing countries suggests that the most important and cost-effective input is the textbook and other pedagogical learning materials (Fuller and Clarke, 1994).

Instructional materials such as diagrams, pictures, graphs and flow charts are very essential in the teaching and learning process and more so to a Deaf learner as they reduce language and reading demands. This is because visual methods of teaching and learning create a more lasting experience and relate most readily to other sensory experiences (Sumner, 1985).

## 2.6 The gap of knowledge.

Various gaps have emerged from the review which includes the need for a current study which may apply and be relevant to today's situation and review more to the current status of qualification of teachers, their attitude, their experience of teaching children who are hearing impaired. Inadequate teaching/learning resources could impede learning of pupils; those with hearing impairment included hence the need to establish it in Lake Zone Tanzania.

The previous researchers together with theorists have done a lot on these findings outside Tanzania Lake zone. And most of them have insisted much on various perceptions especially on inclusion. For instance, according to Florian et al, (2004), many schools resist

the pressure to become inclusive, because they are concerned that doing so will have a negative impact on the academic progress of other students and lower cooperative standards. Also, the researchers talked mostly on the attitudes, challenges teacher's measures and possible solutions under outside Tanzanian settings therefore researcher put into consideration and focused much on generating the information that has never been researched for a better success of the attitudes of students with hearing loss towards cooperative learning.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.0 Introduction

This chapter concerns with research design, target population, description of the sample and sampling procedures, sample size, research paradigm, description of data collection instruments, description of data collection procedures, area of the study, description of data analysis and lastly the ethical consideration.

## 3.1 Research paradigm

A term paradigm is used to describe a researcher's "worldview" (Mackenzie & Knipe, 2006). This worldview is the perspective, or thinking, or school of thoughts or set of shared beliefs, that informs the meaning or interpretation of research data. The researcher used the qualitative paradigm. Laws et al (2003) states that a qualitative approach looks more into what people think, feel and observe. The central endeavour of the Interpretivist paradigm is to understand the subjective world of human experience (Guba & Lincoln, 2005). This approach makes an effort to 'get into the head of the subjects being studied' so to speak, and to understand and interpret what the subject is thinking or the meaning s/he is making of the context. Every effort is made to try to understand the viewpoint of the subject being observed, rather than the viewpoint of the observer. Researcher chose the interpretivist paradigm because wanted to understand the nature of attitudes of learner with hearing loss towards cooperative learning, their beliefs, experience, views or behaviours. Through this paradigm researcher observed the applicability of cooperative learning as the teaching method to students with hearing loss and how the availability of teaching and learning resources influence students with hearing loss towards cooperative learning.

## 3.2 Research design

Karlenza, (1998) notes that research design is a logical and a systematic plan prepared for directing a research study. In this study the researcher used a case study as the research design. Case study research is said to allow for in-depth review of new or unclear phenomena whilst 'retaining the holistic and meaningful characteristics of real-life events' (Simon, 2011, p. 4). It is suggestions such as these that have seen the simple case study become recognized as more than merely a research method, but as a design in its own right (Hartley, 2004). Whilst the case study is often seen as synonymous with the qualitative turn, this research design is one that targets no particular data collection method. With the increasing trend of mixed methods use in research as of late (Creswell, 2009). The method is appropriate for this study because it will allow freedom for the respondents to express their views in their natural setting without manipulation regarding attitudes of students with hearing loss towards cooperative learning.

## 3.3 The area of study

According to Foster, (2002) area of study refers to the place or location, where the research was conducted. With this research the study area was the lake zone in Tanzania. The rationale behind the choice of this area is that there are many inclusive schools with hearing impaired students which is the target of the researcher. Also, another reason for the choice for the area was that no similar research has been conducted there.

**Figure 2: Map of Tanzania showing the area of study.**

## 3.4 Target population

The targeted population of this study was students (students with hearing loss and hearing students), teachers and head of schools from the chosen secondary schools. The research targets a study population of 16 comprising of 2 head teachers, 8 students 6 teachers in two selected schools. Students were selected because they are the major point of concern in this study, not only them but also teachers were chosen because they are guardians of students at school hence, they have more information as well, the heads of school were chosen because of being the major school administrators.

### 3.5 Sample

Sample size is the part of large body especially selected to represent the whole population. The sample size of this study comprised 16 respondents from two inclusive schools in Lake Zone. 8 students; both hearing- and hearing-impaired students hence 6 teachers both special and regular teachers, and 2 heads of the school. The ratio of male and female was 1:1 with the exception of the head of the school. Table 1 shows the distribution of respondents in the two-secondary school.

**Table 1: Sample of the study**

| Schools | Participant | Number |
|---|---|---|
| Rugambwa secondary school | Students | 8 |
| | Teachers | 6 |
| Mkolanini secondary school | Head of school | 2 |
| | Total | 16 |

**Sampling techniques.**

The sampling technique used in this study was purposive sampling. The technique was used to obtain the sample from hearing impaired students, ordinary students who study in inclusive classes, teachers who teach in inclusive classes as well as Head of the schools. This technique was used because it helped the researcher to select the most accessible and knowledgeable participants and helped in saving time, cost and effort.

## 3.7 Data collection methods

The researcher used two instruments of data collection which are interview and observation. In this study data was collected systematically in order to provide real information and reduce error of data collection.

## 3.7.1 Interview

Kothari (2014) posted that an interview is a data collection technique that involves the interviewer to interrogate the interviewee on the matter relating to the research topic. The researcher used oral semi-structured interview to the head of the school because it was be the only way of understanding each other through consultation.

Through this technique, respondents were able to give proper, accurate and reliable information about the study. Therefore, the researcher interviewed 2 out of 3 heads of school, teachers and students in two out of three secondary schools. The researcher prepared semi-structured interview. The interview guides comprised of open-ended questions to the respondents which were asked face to face to the respondents. Three interview guides were used; (Appendix 1, 2, 3) were answered by the students, teachers and heads of school respectively. All predetermined questions were organized systematically in sections to reflect and gather information that will answer the research objectives where by all responses were coded. The researcher used the notebook to record the information provided by the participants. Whenever possible, researcher used audio recording method to secure information given from the participants.

### 3.7.2 Observation

Observation is a way of gathering data by watching behavior, events, or noting physical characteristics in their natural setting.

Kothari (2004) noted that "Observation becomes a scientific tool and the method of data collection for the researcher, when it serves a formulated research purpose, is systematically planned and recorded and is subjected to checks and controls on validity and reliability" (p.96).

Observations can also be either participant or non-participant. Participant observation is when you watch interactions, processes, or behaviors as they occur; for example, observing a teacher teaching a lesson from a written curriculum to determine whether they are delivering it with fidelity. Non-participant observation approach; refers to conducting an observation without participating in the activities that you are observing (Leavy and Biber, 2011). During this study non-participant observations were carried out in classrooms that have learners with hearing impairment.

Researcher prepared the observation checklist to guide him conduct observation in the field basing on the objectives of the study. The researcher took notes of important information according to the observed point of interest in the class during a learning session.

### Procedure for data collection

Procedure is most important thing in research methodology. Without plan and procedure, we cannot reach any conclusion. After selecting and finalizing the tools for data collection, the researcher got a letter from Kyambogo University that was presented to Mwanza Municipal Council and Kagera Municipal Council then the researcher visited

the schools under investigation personally for the taking prior permission from the Headmasters/ Headmistress of the schools for collecting the necessary data by presenting. Subsequently, the researcher discussed in detail about his investigation with heads of the respective schools and sought the permission from them for collecting the necessary data and the subjects (Teaches and Students) were made clear about the nature and purpose of the study. In the first phase, good rapport with the teachers of concerned schools was established to do the assignment carefully. Before assigning the task, instructions of each test to be used in the study was made clear. In order to giving responses to the questions free and frankly, honestly and sincerely, they were made aware that there are no right or wrong answers to these questions and their professional career would not be affected as it is only an exercise for research purpose and their responses would be kept strictly confidential.

## 3. 9 Data Analysis technique

Taylor & Cihon (2004) defined analysis the process a researcher uses to reduce data to a story and its interpretation. Data analysis is the process of reducing large amount of collected data to make sense of them. The scholars indicate that "Three things occur during data analysis: data is organized, reduced through summarization and categorization, pattern and themes in the data are identified and linked" (p. 72). Data analysis in this study took into account of the research problem and data collection techniques used. The study generated widely qualitative data. Additionally, under the interview guide that elicits qualitative data were analyzed thematically basing on the research questions and the objectives and thereafter inferences and then conclusion was drawn.

## 3.10 Reliability and validity of the study

### 3.10.1 Reliability of Instruments

According to Orodho (2005), reliability refers to the degree to which a particular measuring procedure gives similar results over a number of repeated trials. In other words, it refers to the consistency of the scores obtained, that is, how consistent they are for each individual from one administration of an instrument to another. In this study, the researcher ensured reliability of the instruments using the test-retest method during the semi-structured interview. According to Mugenda & Mugenda (2003), the test-retest method involves administering the same instrument to the same group of respondents twice.

The researcher administered the instrument to a group of subjects from school **R** then waited for two days and administered the same instrument to the same subjects under the same conditions for a second time. The researcher then correlated the scores from both testing periods by comparing the consistency of the two results.

Furthermore, during analysis thematic coding was repeated several times as well for the sake of obtaining proper themes and categories related to research questions and objectives of the study.

### 3.10.2 Validity of Research Instruments

Golafshani (2003) defines validity in terms of accuracy, rigor and trustworthiness, while Gravetter (2009) defines validity of a research instrument as how well an assessment instrument is capable of measuring what it is supposed to measure. Content validity which was used in this study is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular concept. To establish the

validity of the research, instrument the researcher sought opinions of experts in the field of study especially from the supervisors to establish how representative and suitable the questions were and to give suggestions on how to improve the structure of the tool being used.

## 3.10 Ethical implications

Hawkins & Emanuel (2008) claim that research that involves human subjects or participants raises unique and complex ethical, legal, social and political issues. Research ethics is specifically interested in the analysis of ethical issues that are raised when people are involved as participants in research. Vanden & Hoonard (2002) stressed that there are three objectives in research ethics:  to protect human participants, ensure that research is conducted in a way that serves interests of individuals, groups and/or society as a whole and examine specific research activities and projects for their ethical soundness, looking at issues such as the management of risk, protection of confidentiality and the process of informed consent.

Through the whole study, the researcher paid keen attention to ensure that the study is being conducted in line with the basic ethical considerations for research studies involving human subjects. Foremost consent was sought from all individuals who were involved in the study

Even after their enrollment, respondents were given decision to withdraw from the study any time if they feel that their integrity and confidentiality was being compromised. Confidentiality was strictly observed and efforts were made to ensure that individual

responses remain anonymous. All participants were voluntarily enrolled into the study and

no form of enticement was used for this purpose.

# CHAPTER FOUR

# PRESENTATION OF FINDINGS

## 4.0 Introduction

This part gives out presentation of findings for this study which were empirically put forward as they were collected from various sources and from the accessible population. The findings are presented thematically. Themes were earlier predetermined by specific objectives. Thus, presentation of findings was as per specific objectives regarding the assessment of implementation of cooperative learning towards the performance of learners with hearing impairment accompanied with questions. The research questions were answered by using the information collected through interviews and direct observations. In presenting data, verbatim statements from the respondents are used to maintain the originality of the information collected.

For the purpose of protecting their anonymity, names of participants were not used. Instead, composition of letters and numbers were used to identify them.

However, the number added to the identity of participants aimed to indicate the number of a given participant in a particular group. (For instance; Mtr-1 and Rtr-2 meaning, teacher 1 and 2 from school **M** and **R** respectively). The numbers have nothing to do with values or ranks of participants.

**Table 2: A profile data of participants**

| Name of the students (st) | Name of the school |
|---|---|
| MstHI-1 | M |
| MstHI-2 | M |
| Mst-3 | M |
| M st-4 | M |
| RstHI-1 | R |
| RstHI-2 | R |
| Rst-3 | R |
| R st-4 | R |
| | |
| Name of teachers (tr) | Name of the school |
| M tr-1 | M |
| Mtr-2 | M |
| Mtr-3 | M |
| Rtr-1 | R |
| Rtr-2 | R |

| Rtr-3 | R |
| --- | --- |
|  |  |
| Name of head of the school (hm) | Name of the school |
| M hm-1 | M |
| R hm-2 | R |

This chapter, therefore, starts with presentation of examining the Application of cooperative learning in the classroom teaching process, followed by ascertaining the difficulties facing the students with hearing impairment towards cooperative learning and finally on investigating the level to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning.

**4.1 Application of cooperative learning in the classroom teaching process.**

The findings presented in this section are meant to answer research question (i) which asked: "What is the level of application of cooperative learning in the classroom teaching process?" so as to achieve specific objective one (i) which stated: "To examine the application of cooperative learning in the classroom teaching process. The respondents under this particular question were 6 teachers, 8 students and 2 head of schools.

**4.1.1 Teachers' responses**

In answering the questions on applicability of cooperative learning and its effect on the performance of students with hearing impairment, four teachers had some similar views and the two had different views, while the four were talking of cooperative

learning as important method because it helps in developing social skills to both students with hearing impairment and hearing students also agreed that the cooperation of students with hearing impairment face some challenges even though the students find the method interesting when applied in class. Other teachers highlighted how method has failed to uplift the performance of students with hearing impairment compared to their peers due to communication barrier. To start with, is the first respondent who talked on applicability of cooperative learning in terms including both students with and those without hearing impairment in groups as follows;

> My contribution on students with hearing impairment towards cooperative learning is to include them in group discussions in every class work given them. (**Mtr-1**)

The second interviewee similar to **Mtr-1** added:

> Cooperative learning creates equality between students with hearing impairment and hearing students during class session, learners feel comfortable because the method includes all students basing on everyone's diversity, and helps a teacher to make evaluation of his/her lesson. (**Mtr-3**)

When she was probed to clarify more on this statement, she narrated that:

> All people are different, therefore should learn together in groups. Those with disabilities should be educated together with those without disabilities.

Another respondent when asked on the issue stressed that:

> Some students Feel neglected, loss of hope in education as well as biasness this happens because they face difficult in the way of communication. (**Rtr-2**)

Similar to **Rtr-2**, another teacher stressed that:

For cooperative learning to be effective one way is to make sure all peers know how to communicate with deaf learners I mean to improve sign language and for deaf make sure they know how to lip read and to read written materials. (**Rtr-1**)

The rest 2 teachers out of 6 teachers, who were interviewed by the researcher, responded that they are not much responsible with learners with HI because it is not their specialization. They insisted that if they may attend any a course, they may be capable to handle them.

For example, one of the two teachers responded that

The special teachers are the ones responsible to modify their teaching methods for HI students; by the way they have certificates in special needs education. (**Mtr-2**)

Furthermore, classroom observation showed some teachers switching from one method to the other in a single lesson. However, cooperative learning is everything to students with hearing impairment as it improves their social skills by working in partnership with their peers. No adaptation was observed. For instance, a teacher could change from cooperative learning to question and answer then to a lecture method without considering students with hearing impairments.

### 4.1.2 Students' responses

It was important to know how students understand and know the importance of cooperative learning. Therefore, it was important to gather information from these students on how they learn by using this kind of teaching method. In answering this question, students seemed to be aware on the importance of cooperative learning. Also,

according to the interview, hearing impaired students would like to be included and participate equally as their fellow students when working in groups one of them said,

> With cooperative learning I get the opportunity to cooperate with my friends, knowing each other well and we become more friends than when not cooperating in our studies **(MstHI-1)**

Another interviewee when asked on the meaning of cooperative learning gave the definition as follows:

> Cooperative learning is the teaching strategy or approach aiming at organizing class room activities and learning through social interaction to improve their understanding of a subject, in small teams each with students of different level of ability. (**Rst-3**)

Talking about the importance and applicability of cooperative learning, some students said cooperative learning is important although the class environments are not supportive. Starting with one student who considered the importance of cooperative learning in gaining confidence, vocabulary and other skills for students with disabilities. He said:

> This creates confidence of an individual academically also they feel proud and state of belonging with the hearing peers, cooperation makes learning meaningful to them specifically when they are included, furthermore it is easy for the student with hearing loss to acquire language and increase vocabulary which leads to improvement of the individual's academic performance, lastly they will be able to build a good social relationship. (**Mst-4**)

Student **MstHI-2 was** not far from this and she said that cooperative learning helps students with disabilities to learn together with other hearing students during their studies. On the same issue, another student in addition mentioned the advantage and applicability of cooperative learning as the way of eliminating segregation. He said that:

> Cooperative learning is good because it does not segregate students with hearing impairment to learn alone instead, they learn together with other students in groups within the same class. **(RstHI-2)**

Students said teachers do not apply the method in all subjects as the method is mostly used by special teachers. The student said that:

> Most of teachers use the method especially special needs teachers but not in all subjects.... also learning in groups is better than learning individually because cooperative learning improves ones understanding and at it helps in remembering what has been taught. (**Rst-4**)

Observation showed students are aware of the importance of cooperative learning though most of the students with hearing impairment follow the instructions from the facilitator and less according to their will due to the switching of different methods from teachers. The researcher also observed that the method when applied in class develops self-confidence which encouraged learners with hearing impairment to answer oral questions during class sessions. Further the researcher observed those cultural differences, deafness itself, and (many deaf people regard deafness and manual communication as distinctive features that define them separate). Students with hearing impairment developed distinctive behavior patterns, values, and norms based on their hearing loss and in response

to societal attitudes towards them.

**4.1.3 Responses of the heads of the school**

The heads of the school were asked to comment on how cooperative learning is helping in improving performance in the school and in which way do they encourage the use cooperative learning among teachers. According to the respondents, not all teachers use cooperative learning but only special teachers and the school encourages cooperative learning to be used in subjects in order to improve the performance for deaf learners.

The interviewee when asked about the issue had the following to say:

> I always use it with my fellow teachers… In case cooperative learning is used to teach students in class it improves learning and understanding the topics at hand. (**Mhm-1**)

Teacher **Mhm-1** continued that, the school encourages teachers to use cooperative learning because it seems to increase the performance of students with hearing impairment as he elaborated further by saying that:

> We do encourage teachers to use the method in class whether with or without deaf learners because of recent the performance of student with deafness is rising obvious its due to the use of cooperative learning in class as a teaching method.

Through the interview, another head of school from school **R** admitted that the use of cooperative learning helps the students improve positive attitudes towards each other. Students with hearing impairment learn differently, and have different learning need, so teachers should use different methods depending on the situation. He narrated:

Since cooperative learning involves students sit together and help each other to do the assigned work, it helps to improve their academic performance and developing positive attitudes towards one another.

Also, the respondent added that;

Cooperative learning helps the students to accept and acknowledge individual differences socially and academically. (**Rhm-1**)

The study found that generally in both schools only special teachers apply cooperative learning, and through this method both students with hearing impairment and hearing students improve their understanding in some of the subjects taught by special teachers. In school **M** students seemed to understand better in class as they could answer all questions asked by their teachers in their group discussion. The study also found that in school **R** there is a negative perception among teachers towards the implementation of cooperative learning which makes special teachers have a lot of task to deal with including both the hearing impaired and hearing students which limits their success in concentrating on the hearing-impaired students though the school encourages cooperative learning to be used in class at all levels.

**4.2 Challenges faced by students with hearing impairment during cooperative learning**

The findings presented in this section are meant to answer research question (ii) which asked: "What are the challenges faced by students with hearing impairment during cooperative learning?" so as to achieve specific objective two (ii) which stated: "To ascertain the challenges faced by students with hearing impairment during cooperative

learning." This study revealed the extent to which students with hearing impairment face many challenges towards cooperative learning. This is attributed as the respondents could list some challenges, each could mention at least four challenges, as they are all presented below.

### 4.2.1 Teachers' responses

All teachers appreciated the importance of cooperative learning for performance improvement to all students. However, all teachers pin pointed some challenges when they were asked if there are some challenges students with hearing impairment face towards cooperative learning. Collaboration between teachers and the parents for hearing impaired students. Under this category of the findings from the interview, the respondents tried to outline that:

> Yes! There are many challenges such as, communication barrier, negative attitude, hearing impairment itself and delay in acquiring second language. (**Mtr-3**)

Teachers said that, it is a challenge for students with hearing impairment to cooperate in groups with their peers, because many of them have different social backgrounds which create some diversity. As a result, another respondent on the challenges responded that:

> Most of the classes have insufficient light, no sign language interpreter in some subjects also noise from the hearing peers. (**Rtr-1**)

Another interviewee said:

> Yes! Some of the challenges are such as, discrimination from the hearing classmates, low participation during classroom activities, poor physical and conducive classroom environment (**Mtr-1**)

Also, another teacher from school R added:

It is very hard to focus on both groups when using cooperative learning especially to us regular teachers as we lack sufficient skills to teach deaf learners, we think the use of this method is to be applied by special teachers in inclusive class who can easily communicate to them (**Rtr-3**).

But one of the interviewees seemed not to be aware of any challenge that students with hearing impairment face as she just simply replied:

There aren't any challenges as they live a normal life and learn like the hearing students do. (**Rtr-2**)

The last teacher also pointed out that, students with hearing impairments have a lot of needs in the class room due to the nature of their retrieval capacity and rate of storing the materials. As he said:

Students with hearing impairment get tired so fast during the lesson, feeling disinterested in the class, fear, loss of confidence are some of the challenges the incur during cooperative learning. (**Mtr-2**)

Classroom observation showed that some teachers focus less on students with hearing impairment compared to the hearing peers but only special teachers give attention to both groups in class also some obstacles observed were poor ability of students with hearing impairment to retrieve the information, also lack of awareness, problem with vocabulary, language arts, sentence structure and idiomatic expressions are extremely difficult for them due to the effect of hearing impairment itself. Students understand well the usefulness of cooperative learning.

### 4.2.2 Students' responses

Some students with hearing impairment spotted a number of challenges however **MstHI-1,** said they put efforts encouraging fellow hearing students to help students with hearing impairments by providing notes and clarifying difficult concepts to them during cooperative learning. Under this category, respondents when asked, they were seen to be keen in mentioning some difficulties they face.

Also, according to the interview, deaf students understand better when they cooperate with their friends. The first respondent on difficulties faced by students with hearing impairment towards cooperative learning he said:

> By listing some, these are; isolation, hearing impairment itself, lack vocabulary and differences of each student's social background. (**RstHI-2**)

Whereas another interviewee when asked on difficulties she talked about the difference between the means of communication they currently use comparing to the previous one during their primary level as a challenge to hearing students. She said:

> Hearing students fail to translate some signs directly, misinterpretation of the fellow students' sign, the use of CHAVITA sings language at the secondary level which is quite different from the local signs they are used to and curriculum mismatch. (**MstHI-2**)

In addition, concerning the difficulties the third respondent mentioned some difficulties as follows:

> Mainly these are, inadequate of hearing assistive devices, inadequate of professionals and special teachers, inappropriate teaching methods to students with hearing impairment. (**RstHI-1**).

In order to make sure this strategy works the student said that the teachers should put them in groups, on the other side she added that not all teachers encourage the use of cooperative learning. Consider this statement:

The importance of the teaching approach makes us understand the concepts though not all teachers put us in groups which seem to affect our performance in those subjects. (**Mst-3**)

Classroom observation showed that it was hard for regular teachers to use the method as it seemed hard to help deaf learners due to lack of better means of communication hence regular teachers were mostly sensitive to the needs of hearing students.

### 4.2.3 Responses of the heads of the school

The two heads of school commented that there is no direct link with the individual student with the heads office to meet individual needs however they said it's their role to make sure appropriate teaching methods are used in class by supervising teachers in order to cater for individual learning needs. According to the respondent, when asked whether students ask for help from the administration about their challenges head, of school said,

At this school there is no direct link from the students to the administration but what I know they are only expressing their needs to the head of special needs unit who communicates directly to the head's office.

The respondent added that,

As the school coordinator, is to make sure appropriate methods are used in class in order to include the deaf learners and students with hard of hearing though it is very

hard due to the fact that teachers are lowly motivated due to the fact that students are many in one stream which makes it hard for the teachers to handle both groups. (**Mhm-1**)

Another head teacher from school R said that,

Currently the situation on hand is that regular teachers and special teachers have negative attitudes towards each other which affects the teaching and learning process to the students with hearing impairment. *(***Rhm-1***)* Also the respondent commented that …My role is to make sure all teachers use proper teaching methods in class basing on the student's diversities though it is hard to monitor each session which decreases the applicability of cooperative learning

Hence on this particular finding the researcher observed nothing at all.

The study found out a number of challenges that students with hearing impairment face in class especially during cooperative learning most of it being communication challenges. Hearing impaired students in school **R** seemed to be isolated during group discussion due to lack of vocabulary and misinterpretation of signs from hearing students. Also, it was found that in school **M** teachers have low working motivation due to the number of students in class and the head's office has no direct link with students with hearing impairment; it's only through special needs unit which delay their needs to be met by the school.

**4.3 The extent to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning.**

The findings presented in this section are meant to answer research question (iii) which asked: "To what extent does availability of teaching and learning resources influence students with hearing impairment towards cooperative learning?" so as to achieve specific objective three (iii) which stated: "To determine the extent to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning". This study revealed the issue of availability, the use, effectiveness and the contributions of teaching and learning resources in the participation of the hearing-impaired students during cooperative learning.

The findings of observation are also presented on this part as TLM can be evaluated through observation if they are available.

**4.3.1 Teachers' responses**

All teachers claimed to use teaching materials. They said they are very important for students with hearing impairments. The challenge is the availability of teaching materials and knowledge to adapt them, if they happen to be available. Some of the teachers are not sure if the available TLM are relevant or not. The first respondent responded that;

> Most of the teaching and learning materials are not relevant and suitable to the students with hearing impairment…...the available facilities are mostly suitable for hearing students to participate fully during cooperative learning (**Mtr-1**)

When teacher **Mtr-1**was asked if there are available teaching materials and they used, she answered: I use teaching materials but they are rarely available. They are very important to be used especially in inclusive classrooms.

The second respondent on the same question added that;

> The teaching and learning facilities are available for all students and teachers to use according to their interests in the particular subject. (**Rtr-2)**

When teacher **Mtr-3** was asked if he makes any efforts to modify these teaching materials, when they are available, the answer given was similar with what teacher **Rtr-1** said. They said that they do not adapt them, because they do not have knowledge of adapting them. Teacher he narrated:

> Frankly speaking, I cannot adapt teaching materials because myself I do not know how to modify them to specific needs of students in the class. I think this is the task of special teachers. (**Rtr-1**)

Insisting on adapting teaching resources, with the focus to the use of visualization, teacher **Mtr-2** stated:

> Using visualization for students with hearing impairments would have been better to help them understand different concepts in the class but preparation of these visual aids is difficult.

Another teacher added that:

> We are dealing with a lot of things such as preparing notice for all students, therefore there is a problem of time limit to prepare other teaching equipment that suit the hearing-impaired students only, and thus we decide to use the available

equipment according to the general syllabus being evaluated by the ministry of education and vocation training. (**Rtr-3**)

The last respondent towards the same question responded that;

The facilities available are just inclusive, some can be not friendly for the hearing-impaired students such as the books, pictures, visual materials and many others which lead to low motivation towards cooperative learning. (**Mtr-3**)

Classroom observation revealed some available facilities are not relevant for the hearing-impaired students to participate fully in class during cooperative learning. Teaching and learning materials available such as books and other learning aids are not adopted and modified to suit the learners with hearing impairment.

### 4.3.2 Students' responses

Respondents were students, both the hearing- and hearing-impaired students. They were requested to highlight the extent available teaching and learning and equipments facilitate them to participate during cooperative learning.

Under this category, respondents when asked elaborated numbers of issues relying on the setbacks of their participation during cooperative learning, facilities and equipments. The students understand well the importance of teaching and learning materials for their academic development. The only problem is that, they are inadequate in secondary school. One of the respondents commented that;

There are no enough TLM for the hearing-impaired students in secondary school. (**RstHI-2**)

Insisting on the availability and use of teaching and learning materials the second respondent added that,

> When we were in primary school, we had a lot of learning materials because it was a special school and we used Kiswahili based sign language to communicate which is quite different here. **(MstHI-1)**

Not only student **MstHI-1** but also another student added that:

> Many subjects would be so interesting if there could be enough materials. This makes students with hearing impairment to rely their learning through vivid example. **(Rst-4)**

When another student was asked if teachers make efforts to modify these teaching materials, when they are available, she said that they are not well modified, because they do not have knowledge of adapting them but in case of any alternative they may participate well during cooperative learning. The student narrated:

> Learning materials are available though they are not well modified to suit our needs, if they will be modified, then we may be motivated to participate and understand better during cooperative learning. **(RstHI-1)**

However, despite the importance of teaching and learning resources, no single regular teacher claimed to implement cooperative learning in an inclusive class. The challenge to the implementation of Cooperative learning in inclusive class is brought up by the scarcity of teaching and learning materials that cater for individual needs. One of the students stated that:

> Cooperative learning has never been practiced by regular teachers because of the scarcity of teaching and learning materials although it has been talked about several times in our school especially inclusive classes…... (**Mst-3**)

Another respondent added that:

> We are not convinced by the available teaching and learning materials because they are not of our type. **(Rst-3)**

The rest respondents under this category had similar answers compared to the above six students. Generally, the sample selected under this particular question to represent the whole, they are seen not to be interested with the available TLM for the hearing-impaired students.

Classroom observation showed that, there are no helpful teaching and learning materials for the hearing-impaired students. For example, there are no visualized materials, captioned films, books and sign language interpreter in many subjects and many others to help hearing impaired students. Also, according to the students' explanations, they know well how proper teaching and learning material can help hearing impaired students to achieve academically.

### 4.3.3 Responses of heads of the school

The headmasters' response showed that their schools consider much on hearing students than hearing impaired students when purchasing teaching and learning materials. The first headmaster from school M narrated:

We are making the purchasing of teaching and learning materials generally and the students are given equal opportunity to use them during cooperative learning though many of them suit the hearing students. **(Mhm-1)**

The interviewee when asked on the efforts to modify and improve the available recourses in his school he added that

As a school we are doing our best to improve the available TLM that will allow the participation of all students during cooperative learning whereby the students are given opportunities to participate in the modification activities so that they master them well though still they are of not good standard and insufficient.

Another headmaster from school R when asked on the similar question she commented that,

In this case, the hearing-impaired students are not participating well in these activities of modifying these teaching and learning materials…they also lack assistive devices to help them in communicating and acquiring information.

Also, the interview finalized that the government does not provide enough fund for inclusive school to support the process of teaching the students with hearing impairment despite of the unsupportive curriculum. She narrated that:

Despite of inadequate fund from the government still the curriculum and the syllabus does not cater the needs of the learners with hearing impairment. **(Rhm-1)**

Under this category the study found that in school **R** the available TLM and other equipments are not relevant neither modified to suit students with hearing impairment whereby Inadequacy of the facilities limit the participation of the hearing impaired students during cooperative learning though both groups teachers and students understand the teaching learning recourses, head teacher **Mhm-1** stated that there is inadequate fund to adapt and modify learning materials for hearing impaired students**.** Also, in school **M** it was found that generally the school does not have inclusive harmonized syllabus to cater academic needs for learners with hearing impairment. The available teaching and learning resources do not satisfy the needs of the hearing-impaired students. It is hard for students with hearing loss to access information during cooperative learning due to lack of assistive devices.

## 5.0 DISCUSSION OF FINDINGS CONCLUSIONS AND RECOMMENDATIONS.

This chapter presents the discussion of findings, conclusions and recommendations of the study.

## 5.1 DISCUSSION OF FINDINGS

In this section the researcher discussed the presented findings obtained from the field as per title of this study whose main objective was to assess the implementation of cooperative learning towards the performance of learners with hearing impairment. The discussion interpreted the findings according to the specific objectives of the study as follows;

### 5.1.1 Application of cooperative learning in the classroom teaching process.

Teachers and students had something to say about applicability of cooperative learning and its effect on the performance of students with hearing impairment showing that they are aware of it. The answers from the interviews and observation clarifies that cooperative learning is applied in limited scope by only special teachers in both schools. However, the applicability of cooperative learning does not consider inclusivity. They do not seem to consider adaptations of teaching and learning environment because they do not reflect very much what is written in the Salamanca statement about inclusive education. The findings are in line with the study done in Tameke municipality, in Dar-es-salaam showed that teachers do not have a uniform understanding of inclusive education. The principle of inclusion calls upon educationists to prepare flexible environments that are good enough for learning of marginalized groups in inclusive classrooms. The study conducted in Tanzania by Lewis & little (2007) revealed that, teachers in inclusive schools in Tanzania

are not aware of inclusive education with corresponding teaching methods, and how to make environment become friendly and inclusive to all learners. This argument can be strengthened by the answers given by teacher **mtr-2** who declared they are not responsible with students with HI because that's the task for special teachers because regular teachers claim not to have comprehensive knowledge of inclusive education.

Despite of the challenges facing students with hearing impairments found by the study in groups and negative attitudes up risen from fellow students during cooperative learning also there is a negative perception among teachers towards the implementation of cooperative learning which makes special teachers have a lot of task to deal with including both the hearing impaired and hearing students as it was seen in school **R.** These findings are consistent with those reported by Kapinga (2012), who found out that, young learners with hearing impairments experience higher levels of stress and have more difficulties in coping the reason being is there are very few teacher training institutions in the area of special needs and inclusive education; therefore, general teachers do not acquire sufficient training. However, the issue of not understanding inclusive education as found by the study the way it is expressed in the Salamanca statement seems to be a global one, since the study conducted in Turkey and Spain, showed lack of knowledge among teachers towards inclusive education, and the whole philosophy behind it (Kesiktas & Akcamete, 2011; Simon *et al*, 2010). Proper handling of students with special needs in inclusive settings, is an important feature of successful inclusive education, and depends very much on how teachers understand inclusive education and appropriate teaching methods. Therefore, lack of knowledge may hinder proper provision of inclusive education, for students with special needs which may lead to negative perception to some inclusive teaching methods.

**5.1.2 Challenges faced by students with hearing impairment during cooperative learning**

In the findings under this specific objective, the researcher discussed the presented findings obtained from the field of the study above as follows; the answers from the interviews and observation clarifies a number of challenges in the general contest of education mainly being communication challenges students with hearing impairment face e.g. The findings are in support of the literature by Montoya (1994), member of the deaf culture exhibit specific behaviors which are different from the hearing world for instance members from the deaf culture may be blunt in their communication style than would be hearing people or they may be unusually reticent around hearing people. When interacting with other deaf, they may not hesitate to "speak up." In fact, Montoya observes that the deaf communicators seem to take their time when communicating with each other. They enjoy interacting with other sign users. As she writes, "...Punctuality brevity are not highly valued, lengthy greetings and farewells to each member of the group is customary". Contrary to many inclusive schools in Tanzania Hearing impaired students seemed to be isolated during group discussion due to lack of vocabulary and misinterpretation of signs from hearing students, but special teachers also opposed that it is easy to communicate with Deaf learners using TSL as it was also portrayed by the observation based from both schools the researcher visited. The findings are in support of the literature by Schick (2014), recognizing the expert knowledge of Deaf teachers gained from their experiences as teachers and formerly as Deaf learners, and their proficiency in sign language would contribute towards providing the learners with opportunities to learn more

Majority of deaf learners in both schools display nonverbal awkwardness. Since most children with hearing impairment are born to hearing parents, communication of the parents and the child is almost always strained. The findings are in support of the study by (Hazan, 1991) who says student with hearing impairment growing up in these conditions may not learn the accepted forms of social behavior, communication skills especially the rules for turn taking and managing conversational interaction.

### 5.1.3 The extent to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning.

Answers from teachers, students and classroom observation suggest that teachers see the importance of teaching materials in the class for students, not only for the students with hearing impairments but all students in general. The findings of these studies propose that, inclusive education for students with hearing impairments becomes successfully implemented if appropriate teaching materials are available (ICC, 2008; Mboya *et al*., 2008; Mmbaga, 2002; URT, 2008). Furthermore, the findings from this study, and other studies in the country, are consistent with the global view of this contention. Pauline (2003) claims that, the use and adaptations of teaching materials to suit the needs of students with hearing impairments in inclusive classroom, is very important.

Moreover, teachers and students said that; they are not using teaching materials, because teaching materials are not available and the available materials are not relevant and do not suit inclusive setting**.** The findings are in support of the literature by Michaleowa (2001) that, the availability of textbooks had a strongly significant and positive impact on learning outcomes. The findings also revealed that inclusive schools lack enough funds to cater the needs of students with special needs as head teacher **Mhm-1** stated that there is inadequate

fund to adapt and modify learning materials for hearing impaired students. These findings agree with the opinions that relevant teaching materials, to students with hearing impairments, are not readily available due to lack of enough funds (Mboya *et al*, 2008; URT, 2008). This situation is said to affect mostly the developing countries including Tanzania and, therefore, hindering inclusive practices in these countries (Zindi, 1997). Apart from lack of these teaching materials, teachers acknowledged that, they lack the knowledge and skills of adapting these teaching materials to become relevant to the needs of students with hearing impairments. The findings are in support of the literatures by (Lewis & Little, 2007; Miles, 2003; Simon *et al*, 2010). Who highlighted that, considering their importance, the lack of knowledge, teaching materials to teach students with hearing impairments in inclusive classrooms, suggests a big gap between the needs of students with hearing impairments, and what is actually achieved by these teachers in inclusive classrooms. This situation makes the quality of education to these students to be questionable. The results from the interviews and observation suggests that in order to address the needs of students with different learning styles, teachers are encouraged to make diversified use of learning materials, such as audio visual, pictorial, graphic representations, visualization, mind mapping, and texts, etc. Teachers need to provide opportunities for students with hearing impairment to develop their thinking skills through effective questioning. The findings concur with the research findings by Methew (2007) who suggested that students should be encouraged to express themselves openly and share their work in class and publicly to build up their self-confidence through co-operative learning, for example, peer-tutoring and co-operative learning.

**5.2 Conclusions.**

On the basis of the findings and discussion, the following conclusions were drawn from the study:

The respondents were aware of cooperative learning, application as a teaching method and its importance to the performance of students with hearing impairment but the implementation is low due to the negative attitude some regular teachers have towards the method. Due to this, the issue of dealing and teaching by using cooperative learning is left to special teachers; special teachers are having a lot of tasks to deal with including both the hearing impaired and hearing students that limit their success in concentrating on the hearing-impaired students.

From the study it is now concluded that there are many difficulties facing students with hearing impairment towards cooperative learning. These includes; Teachers' low working motivation, negative attitudes towards each other among teachers and students, communication challenges, different social background inadequate of special teachers, learning materials to support them, poor retrieval of knowledge, poor incidental learning, and misinterpretation of their fellows information, students with hearing loss face difficulties in giving feedback to their teachers and fellow students due to the negative attitude and many other factors.

It is really summoned that, the available TLM and other equipments are not relevant and modified to suit students with hearing impairment there are no clear measures to be taken by teachers and other education stake holders to provide other assistive learning equipments to students with hearing impairment. However, as per researcher observation various alternatives are used by special teachers as measures to overcome the stated

problem, though extra efforts need to be put to realize the measures needed for effective solving of the problem because inadequate facilities limit the participation of the hearing-impaired students during cooperative learning.

## 5.3 Recommendations.

Basing on the conclusions above, the following recommendations for action were developed: This was a Qualitative case study; therefore, its findings cannot be generalized to the entire inclusive secondary schools in Tanzania, but they can be applicable to other inclusive schools facing the same situation as the one used in this study. Therefore, these recommendations are particular to the school studied and other similar schools in Tanzania.

### 5.3.1 Recommendations for Improvements.

(i) There should be some strategies and by laws in schools to be put in place to increase awareness among the teachers and students on the importance and how cooperative learning as a teaching method contribute much on high performance of students with hearing impairment.

(ii) In overcoming the difficulties facing children with hearing loss towards cooperative leaning; teachers, peers and the community should be included because they are aware of what should be done to control these difficulties

(iii) The measures to be taken by teachers and other education stake holders to children with hearing impairment should be proper and accurate basing on their diversity for proper provision of teaching and learning material that considers one's individual needs during cooperative learning in order to provide assistance such as classroom guide, utilize visual aids, create effective communication methods, and monitor

student progress throughout the year of enrolment. It's important to meeting with a multidisciplinary team including the teacher, audiologist, speech pathologist, special education teacher, and/or others as appropriate to determine the best accommodations and modifications for the child.

(iv) Teachers keep instructions brief and uncomplicated as much as possible. When repeating    instructions, repeat exactly without paraphrasing, use more than one way to demonstrate or explain information, if possible, provide transcripts of audio information, face the class while speaking; if an interpreter is present, make sure the student can see both you and the interpreter when desks are arranged in rows, keep front seats open for students with hearing impairment.

(v) The current curriculum is rigid and unsuitable for Deaf learners and major curriculum adaptations are required to improve their achievement. The study recommends that, there should be policy guideline from the government with clear implications and objectives in school curriculum for children with hearing impairment towards cooperative learning this will ensure quality performance.

## 5.3.2 Recommendations for future research.

This study was conducted in the area of inclusive setting. On its basis, the following recommendations are made for future research as follows:

(i) The present study, focused on teachers and on how they implement cooperative learning towards the performance of learners with hearing impairment. Data were collected from 16 respondents from two inclusive schools out of many inclusive schools in Tanzania. This study should therefore open doors for further research on this area. There is a need to conduct the same study using more samples than used

in this study. It is important also, that further studies should focus not only on inclusive schools but also regular schools, furthermore; other studies should be done in different settings to enhance transferability of the findings using the same or different methodologies.

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# APPENDIX 1: LETTER OF RESEARCH APPROVAL FROM KYAMBOGO

# UNIVERSITY

**KYAMBOGO UNIVERSITY**

P. O. BOX 1, KAMPALA
**FACULTY OF SPECIAL NEEDS & REHABILITATION**
Tel: 0414-286237/285001/2  Fax: 0414-220464
*DEPARTMENT OF SPECIAL NEEDS STUDIES*

15ᵗʰ January, 2019

The DEO/DIS/Head teacher/Teacher/Community/Opinion Leader/Church Leader

............................................................

............................................................

Dear Sir/Madam,

**RE:   INTRODUCTION OF RESEARCH STUDENT ON DATA COLLECTION**

This is to introduce the bearer Rev/Dr/Sr/Mr/Mrs/Ms... MWANGA Allen ......
Reg.No:.............................................. who is a bonafide student of Kyambogo University in the Faculty of Special Needs and Rehabilitation, Department of Special Needs Studies.  As partial fulfillment of the requirement for the award of the Master in Special Needs Education (MSNE), he/she is required to undertake a research on the approved area of study.

The purpose of this letter is to request you to allow him/her have access to information from your office, school or area of operation necessary for the study.

Kyambogo University will be grateful for any assistance rendered to the student.

Yours faithfully,

Dr. Okwaput Stackus
**HEAD OF DEPARTMENT**

OS/aj

**APPENDIX 2: PERMISSION LETTER FROM MWANZA CITY COUNCIL**

## HALMASHAURI YA JIJI LA MWANZA
*(Barua zote zitumwe kwa Mkurugenzi wa Jiji)*

Simu: Mkurugenzi: 225 28 2501375
FAX : 255 028 2500785:
E.mail: mwacity@thenet.co.tz

S.L.P. 1333,
MWANZA.

Kumb. Na. MCC/EL/SEC/59/15

27 Februari, 2019

Mkuu wa Shule ,
Shule ya Sekondari Mkolani,
S . L . P. 1333,
MWANZA.

### YAH: UTAMBULISHO WA MWANGA ALLEN MWANAFUNZI WA KYAMBOKO UNIVERSITY.

Rejea mada tajwa hapo juu.

Mtajwa hapo juu ni Mwanafunzi wa Chuo Kikuu cha Kyambogo - Uganda. Anasoma Shahada ya Uzamili. Kwa sasa yuko mwaka wa pili wa masomo yake.

Ili kukamilisha masomo yake, anafanya utafiti juu ya "Assessment of the Implementation of Cooperative Learning Towards the Performance of Students with hearing Impairment".

Tafadhali mpatie ushirikiano.

N. Musagasa
**KNY: MKURUGENZI WA JIJI
MWANZA**

K r. y MKURUGENZI WA JI∪.
MWANZA

# APPENDIX 3: PERMISSION LETTER FROM BUKOBA MUNICIPAL COUNCIL

## BUKOBA MUNICIPAL COUNCIL
### (All Correspondence should be directed to Municipal Director)

Tel: 028-2220231, 028-2220226
Fax:   028-2220226
E-Mail: bmc@bukobamc.go.tz
Website: www.bukobamc.go.tz

P.O.BOX 284,
BUKOBA,
TANZANIA.

Ref. No. BMC/E.10/19/XVIII/351

7th March,2019

### TO WHOM IT MAY CONCERN

#### RE: RESEARCH PERMIT FOR MR. MWANGA ALLEN

The heading above refers.

The above mentioned is a student from **Kyambogo University** located in Kampala - Uganda, he is pursuing a Masters Degree in Special Needs Education. He has been granted the permit to conduct his research in Bukoba Municipal Council  on the topic titled **"An Assessment of the Implementation of Cooperative Learning  Towards the Performance of Students With Hearing Impairment".**

The permit validity is from **7th March,2019** to **14th March,2019.**

Please accord him any necessary assistance he may need from you.

Yours faithfully.

Lydia K. Leonard
**For: MUNICIPAL DIRECTOR**
**BUKOBA**

**CC:** Municipal Secondary Education Officer,
**Bukoba Municipal Council**

**APPENDIX 4: SEMI-STRUCTUERD INTERVIEW FOR STUDENTS**
**Introduction**

I am Mwanga Allen a student of Kyambogo University pursuing a Masters programme in Special Needs Education. I am carrying out a study research entitled**, '**Assessment of the implementation of cooperative learning towards the performance of students with hearing impairment: the case of lake zone secondary schools in Tanzania'. I would like to ask you some questions however there will be no monetary refund, and everything discussed will be treated with confidentiality hence I seek for your permission to take some notes.

**Student Interview Questions**

Name of school…………………………….

Class level/form………………………………

States of your ears {*choose the correct response*} Hearing (…..) Deaf (…..) Hard of hearing (……)

**SECTION I:** Application of cooperative learning in the classroom teaching process.

1. Please describe in your words, what cooperative learning is?

2. Can you recall ever doing this in class?

3. Do you feel you understood the things you were learning in class?

4. What do you think about the social aspect involved when you're working in a group?

5. Do you think you better remember the material?

**SECTION II**: Difficulties facing the students with hearing impairment towards cooperative learning.

6. Mention any 5 obstacles faced by students with hearing loss towards cooperative learning

7. Do you find any negative aspects to cooperative learning?

8. Do you feel you learn more or less with this form of cooperative learning?

9. Do you find it sometimes distracting or difficult to focus because someone in the group may want to go off-topic or be unfocused?

**SECTION III:** The level to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning.

10 What are the TLM commonly used in the classroom?

11 Are there some hearing aids provided to the students with hearing loss for learning purpose during cooperative learning?

12 Does the government provide sufficient support in ensuring that teaching and learning materials are available to the school?

13 Are the available teaching and learning materials adapted for the Deaf learners?

14 Does Availability of teaching and learning materials affect the achievement of Deaf Learners?

**Thank you**

**APPENDIX 5: SEMI-STRUCTURED INTERVIEW FOR TEACHERS**
**Introduction**

I am Mwanga Allen a student of Kyambogo University pursuing a Masters programme in Special Needs Education. I am carrying out a study research entitled**, '**Assessment of the implementation of cooperative learning towards the performance of students with hearing impairment: the case of lake zone secondary schools in Tanzania'. I would like to ask you some questions however there will be no monetary refund, and everything discussed will be treated with confidentiality hence I seek for your permission to take some notes.

### Teachers Interview Questions

Name of school…………………………….

Academic level………………………………

Profession……………………………………

Subject of your specialization…………………..

Position………………………………………

States of your ears {*choose the correct response*} Hearing (…..) Deaf (…..) Hard of hearing (……)

**SECTION I**: Application of cooperative learning in the classroom teaching process.

1.  What is your contribution on students with hearing loss towards cooperative learning?

2.  Is cooperative leaning used better in some subjects than the others?

3.  Do students with hearing loss cooperate with their peer in learning? (If yes! How?)

4. What is the importance of cooperative learning methods for students?

5. What do you think should be done for cooperative learning method to be effective?

**SECTION II:** Difficulties facing the students with hearing impaiment towards cooperative learning.

6 What are the physical environments that affect the students with hearing loss in the classroom?

7 Do you think there are any disadvantages on the students while implementing or reducing cooperative learning methods?

8 In general, do you think the recently mainstreamed hearing-impaired student has more difficulty in the area of social skills than the hearing students in your classroom? Please explain.

9 Does the student with hearing loss ask for clarification if he/she does not understand something that was said?

**SECTION III:** The level to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning.

10 What are specifically teaching and learning strategies provided by teachers to the students with hearing loss towards cooperative learning?

11 What are the ways used to teach the students with hearing loss before and after they cooperate during their lessons?

12 What are the TLM that you prepare for students to work with in groups?

**Thank you**

**APPENDIX 6: SEMI-STRUCTURED INTERVIEW FOR HEAD TEACHERS**
**Introduction**

I am Mwanga Allen a student of Kyambogo University pursuing a Masters programme in Special Needs Education. I am carrying out a study research entitled**, '**Assessment of the implementation of cooperative learning towards the performance of students with hearing impairment: the case of lake zone secondary schools in Tanzania'. I would like to ask you some questions however there will be no monetary refund, and everything discussed will be treated with confidentiality hence I seek for your permission to take some notes.

**Head teachers Interview Questions**

Region…………………………….

District…………………………….

Name of school…………………………….

Academic level………………………………

Profession…………………………………

Position………………………………

States of your ears {*choose the correct response*} Hearing (…..) Deaf (…..) Hard of hearing (……)

**SECTION I:** Application of cooperative learning in the classroom teaching process.

1. How familiar are you with cooperative learning techniques?

2. How is cooperative learning helping in improving performance in the school?

3. Would you recommend other schools to adopt cooperative learning?

4. Why would you recommend so?

5. In which way do you encourage cooperative learning among teachers?

6. How ready are the teachers to work co-operatively with each other?

**SECTION II: Difficulties facing the students with hearing impairment towards cooperative learning.**

7  How does hearing impairment affect the learning ability?

8  Do the students ask for help from the administration about their challenges?

9  Are there any other challenges facing students with hearing loss apart from those of their attitudes towards cooperative learning?

10  If yes! What are they?

11  Are their learning materials supporting the students with hearing loss during cooperative learning?

12  If yes what are they?

**SECTION III: The level to which availability of teaching and learning resources influence students with hearing impairment towards cooperative learning.**

13  Do you have any recommendations on the TLM used in inclusive classroom?

14  Are there any opportunities that students with hearing loss can access information easily during cooperative learning?

15  Does the school provide TLM to students with hearing loss and there teacher?

**Thank you**

**APPENDIX 7: OBSERVATION CHECKLIST**

**Table 3: OBSERVATION CHECKLIST FOR A LESSON**

| No. | Items | Description | | Reason |
|---|---|---|---|---|
| 1 | | Available | Not available | |
| | Does the school have students with hearing loss? | | | |
| 2 | Do the hearing students have positive attitude to students with hearing loss? | | | |
| 3 | Do the hearing students cooperate fully with students with hearing loss? | | | |
| 4 | Are there any challenges they face during cooperative learning? | | | |
| 5 | Do the students with hearing loss have positive attitude towards cooperative learning? | | | |
| 6 | Do teachers help the students with hearing loss cooperate in the groups? | | | |
| 7 | Are there ways used to overcome the difficulties faced by students with hearing loss? | | | |