TEACHERS’ ROLE IN ENHANCING COMMUNICATION SKILLS OF LEARNERS WITH SPEECH AND LANGUAGE DISORDERS. A CASE OF JOY TOWN SPECIAL PRIMARY SCHOOL KIAMBU COUNTY, KENYA.

BY

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E55/29053/2014

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SPEECH AND LANGUAGE PATHOLOGY DEPARTMENT OF SPECIAL NEEDS EDUCATION SCHOOL OF EDUCATION KENYATTA UNIVERSITY

MARCH 2019
DECLARATION

This research is my original work and has not been presented for an award of a degree
in any other university for consideration of certification. The study has been
complemented by referenced sources duly acknowledged. Any information borrowed
from other sources, including the internet has been specifically accredited and
references cited using current APA system and in accordance with anti-plagiarism
regulations.

Signature: .......................... Date: .......................... 15/7/2019

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We confirm that the work reported in this thesis was conducted by the candidate under
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DEDICATION

I dedicate this study to my dear husband J.N. Mucheru for his selfless support to my study. He was of unlimited practical support, encouragement and inspiration. I also dedicate this work to my two dear children Joy Mumbi and Ray Mucheru for their great motivation and technical assistance. Moreover, I dedicate this thesis to all persons of human heart who have extraordinarily provided support to individuals with speech disability to maximize their potentials and lead more meaningful and fulfilling lives.
ACKNOWLEDGEMENT

First, I acknowledge my adoration to our heavenly father who has offered me an opportunity to pursue this course.

I acknowledge the great initiative made by Kenyatta University for pioneering training in speech and language pathology in the country and above all for granting me an opportunity to pursue the course and award of the degree.

I gratefully acknowledge the great assistance I have received from my lecturers and supervisors Dr. Tom Abuom and Dr. Mathew Karia for their professional training and scholarly advice. Indeed, they have been of great mentorship to me in a tremendous commitment and dedication.

I acknowledge the great support I have received from the principal Thika high school for the blind, Mr. Alfred Kamau and the Deputy Principal Mrs. Ann Mwanthiby enhancing my opportunity to pursue this course.

I also acknowledge the great assistance I have received from my colleague teachers including Ann Njuguna and Ngaruiya Mburu who have constantly availed themselves whenever I needed help.

I sincerely register my appreciation to my supervisors Lorna Muthama (SLP) and Halley Gitonga (SLP) in Gertrude Children Hospital for their professional and clinical supervision during my one year full time clinical practicum where I extensively learnt and acquired comprehensive speech therapy expertise and competence on evidence based strategies for effective remediation of disabled communication.

I wish to present my appreciation to all friends who provided enormous support towards the writing of this study. Their contribution and willingness to help is highly recognized.

I appreciate and recognize the contribution of my fellow graduate students, Charles, Erick and Gregory whose cooperation and overwhelming support cannot escape my notice. They have been of great motivation and good role models.

Finally, I want to thank my dear husband, Joe and my children, Joy and Ray, whose constant love, moral and financial support made the writing of this thesis possible.
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**ABBREVIATIONS AND ACRONYMS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAC</td>
<td>Augmentative and Alternative Communication</td>
</tr>
<tr>
<td>ASHA</td>
<td>American Speech and Hearing Association</td>
</tr>
<tr>
<td>IDEA</td>
<td>Individuals with Disability Education Act</td>
</tr>
<tr>
<td>KICD</td>
<td>Kenya Institute of Curriculum Development</td>
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<tr>
<td>KISE</td>
<td>Kenya Institute of Special Education</td>
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<tr>
<td>MOEST</td>
<td>Ministry of Education Science and Technology</td>
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<tr>
<td>SLD</td>
<td>Speech and Language Disorders</td>
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<tr>
<td>SLP</td>
<td>Speech and Language Pathologist</td>
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<tr>
<td>SLT</td>
<td>Speech and Language Therapist</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>U.S.A</td>
<td>United States of America</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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ABSTRACT

The purpose of this study was to investigate teachers’ role in enhancing communication skills of learners with speech and language disorders. Teachers play a major role in supporting children’s educational, social and emotional development although may be unprepared for supporting children with speech and language disorders. The study objectives included establishing teachers’ knowledge about signs of speech and language disorders in the communication of learners in Joy town primary school, finding out the extent of knowledge possessed by teachers of learners with speech and language disorders and assessing teachers’ competence in the use of teaching strategies for learners with speech and language disorders in the school under the investigation. These objectives would be the basis for the accomplishment of the role of teachers. The study utilized a conceptual framework based on the underpinnings of Social Interactionist Theory of Vygostky. The study location was Joy town special primary school and the school teaching staff purposively sampled constituted the study population. This research used descriptive case study design mainly using qualitative approach. Data was primarily collected using questionnaires and observation schedule for teachers and interview guide for the head teacher. The study instruments were validated using the supervisors’ suggestions and expert judgment. The study reliability was determined by pilot-testing on the questionnaires using Cronbach coefficient alpha test. Qualitative data was analyzed thematically, while simple descriptive statistics was used to analyze quantitative data. The study found that most teachers were well trained in special needs education, but had not received training in speech and language disorders. It was revealed that they lacked knowledge about identification of learners with speech and language disorders. The study further showed that teachers lacked competence to use informed teaching strategies and materials to enhance learners’ communication skills. Conclusively, although teachers are competently trained to execute national curriculum, they are not trained in speech and language pathology and lack competence to accomplish the teaching of learners with speech and language disorders. It is recommended that adequate teacher supportive structures to be set up to promote their role in enhancing communication skills of learners with speech and language disorders. The study further recommends a further research to be conducted to examine collaboration among teachers and speech and language pathologists to promote children’s literacy and language to enlighten on the need to establish appropriate integrative school interventional approaches with a view to helping children become effective communicators, problem solvers and decision-makers and benefit from a fulfilling and excellent learning experience.
CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1. Introduction

This chapter presents the background information, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, study limitations and delimitations, assumptions, theoretical framework, conceptual framework and operational definition of terms as used in the study.

1.2. Background to the Study

Communication skills are at the heart of life’s experience particularly for children who are developing language critical to cognitive development and learning. These skills include reading, writing, gesturing, listening and speaking. They help learners to attain academic excellence and develop effective inter-personal relationships with family members at home, with teachers and peers in school and later with colleagues in workplaces and the general community. Typically, communication skills begin developing in the first year of life when children begin producing different sounds through their vocal mechanisms. As they grow cognitively they start to associate meaning to these sounds forming language (Schramm, Keilmann & Brahmaier, 2010). While most children are effective communicators by school-age, some do not have speech and language skills that are equivalent to their peers (McLeod & McKinnon, 2007). For these children, their speech and language incompetence can limit their social and learning engagements (McLeod & McAllister, 2011: McLeod, Daniel &Barr, 2013). The early years of schooling are a significant time in children’s development, because it determines their educational excellence, future lives and
community (Grunewald & Rolnick, 2007). Thus, teachers need to understand this
critical phenomenon to make differential recognition of learners’ speech and language
communication needs and informed therapeutic teaching engagement to facilitate the
process of early intervention for children with SLD. The terms learners and children
are used interchangeably in this thesis.

A report by the American Speech, Language and Hearing Association (ASHA, 2005),
shows that the number of children with disabilities, ages 3-21, served in the public
schools under the Individuals with Disabilities Education Act (IDEA) was 6,068,802
in the United States. Of these children, 1,460,583 (24.1%) received services for
speech or language disorders. This report indicates the importance of using
consultative model by teachers and Speech and language pathologists (SLPs) in which
learners communication goals are integrated with academic and social goals, hence the
need for speech and language pathology services in schools to help children become
effective communicators, problem solvers and decision-makers and benefit from a
successful and satisfying teaching and learning experience.

Spoken language provides the basis for the development of reading and writing
consequently building the general language and literacy competence from early
childhood to adulthood. Since learning occurs in the process of communication,
learners with speech and language disorders (SLD) frequently perform poorly in
school, elicit low self-esteem sometimes due to bullying by other learners, struggle
with reading and writing, avoid school attendance, have trouble communicating with
peers and adults and have difficulty with understanding and accurately using language
(McCormack, Harrison, McLeod & McAllister, 2011). These communication-oriented
challenges can easily be minimized if teachers obtained a deeper understanding of SLD to enrich their expertise to competently implement interventional teaching programs.

Teachers have professional expertise and aptitudes in the educational discipline, and according to Morales, (2009), they play a very pertinent role in the intervention spectrum in enhancing language development and communication progress of learners. The key role is to identify learners with speech and language communication disorders and provide effective teaching management by proper use of classroom instructions and presentations to help learners learn new concepts and apply them in independent problem solving situations. Teachers can create a more successful and satisfying learning environment besides enriched peer relationships to promote memory training, cognitive reorganization, language enhancement and achievement of pride and self-esteem as shown by Slastenin & Podymova (2006) in a report known as Creative activity of the teacher in pedagogical work which showed that teachers need to have innovative ideas and experience permitting them to perform the pedagogical activity effectively. Ysseldyke and Algozzine (2006) conducted a research to show the importance of differential instruction as a teaching strategy. This research was known as The 2005 Differentiated Instruction: A Research Brief for Practitioners, conducted by University of Alberta. The research found that all groups of learners (small group and one-to-one interventions) in the context of those with disabilities and those at risk of academic failure experience the greatest gains through a differential approach. The role of the teacher in this strategy is to promote an environment in which learning differences are tolerated, expected and valued.
Teachers are required to be members of diagnostic assessment teams in collaboration with other relevant professionals such as speech therapists, audiologists, psychologists, dentists, educational counselors and parents to provide multi-disciplinary approach to comprehensive diagnostic evaluation and treatment of speech and language disorders to promote learners’ communication competence, academic excellence and social integration. A study by Gargiulo (2006), points out that in collaboration with speech and language pathologists (SLP), teachers should integrate therapy strategies including speech and language exercises and providing learners with immediate feedback to promote interventions and teaching outcome.

Other evidence-based teaching strategies include focus on phonological awareness to improve reading and spelling as pointed out by Snowling and Hulme (2011). Teachers are expected to use individualized teaching to offer tutorial guidance and support by allowing children to exploit their potentials at their own pace. Gargiulo (2006) pointed out the importance of provision of assistive communicative devices such as computer software programs to promote memory and cognition through graphic presentation.

Recast is another instructional strategy in which the teacher corrects learners without obstructing communication (Saxton & Mathew, 2010) and modeling in which the teacher demonstrates a new concept and children learn by observation and imitation (Vasilyeva, Huttenlocher & Waterfall, 2006). Teachers in other parts of the world have reported effectiveness of these teaching strategies although teacher support is still a major concern. In Kenya, although teachers have adequate professional teaching competencies to execute national educational curriculum, they face challenges in meeting curriculum needs for learners with SLD, due to the existing shortage of teacher support to promote their understanding of the learners’ unique
learning and communication needs. The greatest challenge is that there is little evidence in literature on the level of knowledge possessed by teachers about speech disabilities and competence to identify and teach learners with SLD in schools in the developing countries such as Kenya.

It is therefore imperative that there is continuous teacher professional development in speech and language communication problems to constantly develop their knowledge and competence to be able to perform their role including identification of learners with SLD and provision of appropriate learner support. This includes making informed assessment decisions and choice of instructional strategies and competence to apply them in the interventional teaching programs. The underlying gap is due to lack of training of teachers in speech and language pathology and provision of teacher support systems appropriate for learners with SLD. This study is essential to add information in the field of research to inform the need to equip teachers with adequate knowledge about SLD, ensure appropriate resource allocation and enhance partnerships and consultation systems for expert advice and professional support.

In the United States of America (USA), development programs are available for professionals including special educational teachers, SLPs and medical personnel. These programs are provided by local education agencies, unions, school districts, state departments of education, colleges and universities (Massachusetts Department of Education, 1994). In the United Kingdom (UK), teachers are members of multi-disciplinary assessment teams who conduct classroom and playground observation on school children (Wright, 1992). However, evidence shows that there is lack of a shared understanding between teachers, parents and other practitioners which can have
a negative impact on meeting the child’s needs (Barron, Holmes, MacLure and Runswick-Cole, 2007). According to the U.S Department of Education (1994) speech and language services have been expanded in schools to meet the needs of children with SLD. Teachers have a duty to consult with school-based SLPs for expert advice and professional support. Emphasis is put on working in interdisciplinary teams of special education teachers and SLPs to effectively work with children with SLD (Clark 1994). However, in many schools the availability of school-based SLPs who can liaise with teachers has been a challenge (Edgar & Rosa-Lugo, 2007).

The available support is much less in the African continent and many other third world countries globally where speech and language pathology has been lacking. For example, in South Africa few assessments have been developed but research shows that selection and implementation of intervention approaches is affected by inadequate assessments and limited evidence base in South African context (Joffe & Pring, 2008). The situation is much worse in Kenya, particularly in Joy town special primary school for physically challenged learners where about two thirds of learners have cerebral palsy which is a major cause of speech and language difficulties. Therefore, the current study is crucial to inform the need for adequate teacher training, professional and technical support to innovate evidence-based approaches and strategies that can be used in the Kenyan context to deal with communication, educational and social challenges faced by learners with SLD to optimize their communication strengths, promote their academic success and acquire enhanced social gratification.
1.3. **Statement of the Problem**

Most children are competent communicators while some require extra reinforcement to enhance their communication skills and competence. Drawing from the study background (see 1.2, paragraph 1), communication skills are very important to learners because they help them to attain academic excellence and develop effective inter-social relationships with family members at home, with teachers and peers in school and later with colleagues in the employment context. Research shows that SLD represents one of the most prevalent disabilities in early childhood (Special Ed. 2006).

It is shown that with the right support by teachers, many of these children can catch up with their age peers. The prevalence is said to decline across the 0-16 years’ age range (Law, Boyle, Harris, Harkness & Nye (2000). The nature and impact of SLD change as children get older in relation to the changing educational demands (Cont-Ramsden & Botting, 1999) and the achievement of learners’ educational goals is relative to the professional development of teachers.

From the background information, it is clear that teachers have professional repertoire to accomplish teaching programs and assist learners to realize their learning goals. However, much training in special needs education has been done in other areas of disabilities such as hearing impairment, mental retardation and physical challenges. Some of these challenges are accompanied by speech and language difficulties which have been overlooked. Teachers have a role to play in helping learners acquire speech and language. The major concern for this study is that teachers in the country are not trained in speech and language pathology and so lack enough understanding about signs or characteristics of SLD. Often, teachers face difficulties with identification of
the heterogeneous needs of learners with SLD and choice of intervention approaches despite their professional teaching background.

In Kenya, speech and language training has been lacking and so teachers are not well equipped with adequate skills to effectively promote communication skills of learners with SLD which contravenes the requirement of article 29 of the United Nations (UN) statement on *The Aims of Education*, originally adopted in 2001, which identifies that the goal of schooling is to empower the children by developing their skills and that this can be met by ensuring availability of resources required to support learners’ learning needs and teachers’ knowledge of those needs is pertinent (UN, 2001).

Similarly, the requirements of Sessional Paper No. 1 of 2005 on a policy framework for Training and Research have not been adequately met despite the ministry of Education having set out guidelines for providing training for special education teachers in the country. Training of teachers in special needs is an on-going process in the country but, speech and language needs have continued to be overlooked making it difficult for teachers to satisfactorily meet curriculum needs for learners with SLD.

The Persons with Disabilities (Amendment) Act of 2007 provides a comprehensive legal framework which outlaws all forms of discrimination against persons with disabilities. In line with the United Nations Convention on the Rights of Persons with Disabilities (UN, 2006) the Act requires all learners to be given equal educational opportunities including access to approximately adequate resources and a teaching workforce well equipped with professional repertoire. The Kenya Institute of Curriculum Development (KICD) established by the Act of Parliament No. 4 of 2013 for the co-ordination of institutions such as Kenya Institute of Special Education
(KISE) devoted to the training of special education teachers also prepares educational materials and school curricular. However, the curriculum and instructional materials prepared for learners with special needs do not fully meet the individual needs of learners with SLD thereby barring teachers from helping them achieve communication skills and academic aspirations.

The Sessional Paper No. 6 of 1988 states that there is urgent need to develop teacher education including training teachers specially to work with children with speech and language communication challenges but so far, more emphasis has been put on the training of teachers in other areas of special needs while training in SLD has largely been ignored as noted earlier. Even though teachers have professional proficiency in the teaching fundamentals, they lack adequate understanding of speech and language learning and communication needs, particularly in Joy town special primary school in Thika where approximately 95% of learners have physical challenges including cerebral palsy which is a major cause of speech and language communication disorders in children.

The underlying challenges have consistently drawn teachers back from executing their role in enhancing communication skills of learners with SLD, and that is why this study is essential to inform the need to establish adequate teacher support structures to create a consistent platform for effective accomplishment of their professional expertise in the teaching of learners with SLD, to help them acquire improved communication skills and the ultimate achievement of academic aspirations and employment prospects.
1.3.1. **Purpose of the Study**

The purpose of the study was to investigate teachers’ role in enhancing communication skills of learners with SLD.

1.3.2. **Objectives of the Study**

The study was guided by the following objectives;

1. To establish teachers’ knowledge about signs of SLD in the communication of learners in Joy town primary school.
2. To find out the extent of knowledge possessed by teachers of learners with SLD in the school under the study.
3. To assess teachers’ competence in using teaching strategies to enhance communication skills of learners with SLD in Joy town primary school.

1.4. **Assumptions of the study**

The study assumed that learners with SLD have ineffective communication skills. That SLD impact on their inter-personal skills and school success. The majority of children with physical disabilities are assumed to have SLD. It is also assumed that teachers lack adequate knowledge about identification of signs of SLD. The study further assumed that teachers working with this category of learners have certain instructional strategies and materials that they use to promote literacy and development of communication and inter-personal skills.
1.5. Limitations and Delimitations of the Study

1.5.1. Limitations
The study involved only teachers of children with SLD in Joy town primary school. This significantly compromised the study generalization because most schools for learners identified with SLD were not included in the study. Some teachers to a large extent felt threatened by the study hence were unwilling to participate in the study and completely refused to fill the questionnaire. The researcher mitigated this problem by assuring them of strict adherence to confidentiality and anonymity. That their participation was very pertinent and the information would be used for academic purpose only.

1.5.2. Delimitations
The aim of the study was to investigate the role of teachers in helping learners to acquire communication skills. Three objectives were presented: to establish teachers’ knowledge about signs of SLD in the communication of learners in Joy town primary school, find out the extent of knowledge possessed by teachers of learners with SLD in the school and assess teachers’ competence in using teaching strategies to enhance communication skills of learners with SLD in the school under the study. The study sought to investigate these three objectives focusing on teachers working in Joy town special primary school regardless of their age and gender. Joy town is the largest special primary school in the country for learners with physical disabilities which are accompanied by speech and language problems. Although parents have vital information concerning their children, this study did not include them, because teachers had the information that was needed for the study. The aspects looked into
were the qualification of teachers and extent of their knowledge about SLD, signs of SLD, teaching strategies, teaching materials, challenges encountered by teachers and proposed measures to the problems.

1.6. **Significance of the Study**

The study was significant because the findings were expected to assist in making informed decisions in the allocation of resources and provision of teacher training to advance their knowledge of SLD. Teachers’ understanding of SLD may be the baseline for informed evaluation and choice of appropriate teaching strategies to remediate the SLD affecting communication efficacy of school children. The study may promote understanding between teachers and parents or caregivers of children with SLD through school advocacy and sensitization forums to show the need to support their children at home to promote therapeutic teaching consistency.

The findings of the study may also put impetus to policy makers including Ministry of Education Science and Technology (MOEST) and other related stakeholders to make informed decisions in the formulation of educational policy frameworks that can help to meet the needs of children with communication disabilities.

Furthermore, the results of the study may enlighten the KICD on the need to develop special curriculum that serves largely specific needs of children with disabilities with special reference to SLD. The study may ultimately provide insights for making informed diagnostic decisions, therapeutic choices and sufficient training of teachers in relevant professional knowledge and expertise that can support the implementation of treatment programs during learning activities.
1.7. The Theoretical and Conceptual Framework

1.7.1. Theoretical Framework
The theoretical framework for this study was guided by zone of proximal development (ZPD) a social interactionist theory (Vygotsky, 1978). Vygotsky describes knowledge as the product of social interaction. According to the theory, teachers are expected to provide an interactively conducive environment for successful learning through guidance and support.

According to Vygotsky, ZPD is the range of abilities that learners can perform with assistance but cannot yet perform independently. Vygotsky argues that the ZPD is a moving target. As children gain new knowledge, this zone moves progressively forward to a higher zone, but as learning progresses to higher levels and reinforcement reduces they can construct new knowledge on their own.

Vygotsky advances the concept of the More Knowledgeable Other (MKO) as the person who has a higher level of knowledge than the learner and provides critical guidance during the learning process. In this theory, MKO is the teacher who is required to provide initial guidance to children so that they can develop new ideas in problem-solving situations. The study showed the reason why teachers must be well knowledgeable to provide informed support to learners with SLD to construct new knowledge independently.

The implication of Vygotsky’s theory for this study is that the teacher has the duty to create a healthy and conducive social interactive learning environment, which is secure, interesting and motivating to the learners. This role, according to the theory is relative to the teachers’ professional knowledge and competence to innovate and use
informed teaching strategies. Therefore, teachers need to be well trained in speech and language pathology to understand the diversity of children’s communication needs. Sufficient knowledge about speech and language will help teachers establish learner’s communication strengths and weaknesses in order to determine the appropriate teaching strategies to help them communicate effectively, formulate knowledge independently and acquire problem solving skills.
1.7.2. Conceptual Framework

Figure 1.1. Conceptual Framework on Teachers’ Role in the intervention

**INDEPENDENT VARIABLES**

- Teachers’ role
  - Making referrals
  - Classroom teaching
  - Assessment
  - Collaboration
  - Enlightening parents
  - Improving learning environment

**Teacher characteristics**

- Training in SLD
- Knowledge about SLD
- Competence
- Teaching strategies
- Teacher attitude to SLD

**DEPENDENT VARIABLES**

- Communication Skills

**OUTCOME**

- Family background
- Child medical status

*Researcher’s own conceptualization of the study*
The conceptual framework shows that the ultimate interventional teaching outcome of communication skills is largely influenced by the teachers’ active role which is not limited to classroom teaching but also assessment and making referrals for diagnostic evaluations and liaising with other related professionals for consultations and expert advice. Teachers are required to work closely with parents through advocacy to enlighten them on the need to support intervention programs during vacations. Above all, teachers should create a conducive, healthy and secure social interactive-learning environment. The outcome of enhanced communication skills, is determined by their training in SLD and knowledge to competently apply informed teaching strategies to remediate learners’ communication difficulties. Teachers’ positive attitude towards learners with SLD may also have a positive influence on the final outcome of learners’ communication abilities. The study findings have shown that lack of teacher training and expertise in SLD and lack of competence to effectively use teaching strategies and besides, having a negative attitude may tend to promote stereotyped thinking and negative impressions among learners with SLD. This may adversely affect the role of teachers and have a significant negative implication on the outcome of communication skills of learners with SLD. In as much as intervening variables significantly affected the findings, the study only focused on the dependent and independent variables.
1.8. **Operational Definition of Key Terms**

**Approaches:** A way of dealing with a situation or problem.

**Communication skills:** Ability to convey information to another person effectively and efficiently.

**Collaboration:** Action of working with someone to achieve a certain goal (Marinez-Moyano, 2006).

**Competence:** Ability to do perform a communication task more successfully or efficiently.

**Children:** Young school-age persons below the legal age of maturity.

**Consultation:** A deliberation of professionals about a diagnosis or treatment in a particular case (Saunders, 2007).

**Disorder:** Impairment in the ability to comprehend and use language (ASHA, 2009).

**Disability:** Communication difficulty that restricts learning activities and social participation.

**Difficulty:** State of being hard to deal with or understand speech and language disorders

**Diagnosis:** Identification of the nature of speech and language communication disability.

**Expertise:** Expert skill or knowledge about speech and language.
**Early intervention:** Doing things as early as possible to work on the child’s communication support needs.

**Identification:** Process of recognizing signs of speech and language disorders

**Knowledge:** Practical understanding of communication disabilities (Stanley, 2002).

**Language:** System of symbolic communication used by human beings (Ndung’u and Kinyua, 2009).

**Learner:** One who is learning literacy, communication and social skills.

**Speech:** System of forming and producing sounds that form language (Ndung’u and Kinyua, 2009).

**Speech intelligibility:** Speech clarity or a measure of how speech is understandable in given conditions.

**Speech-language Pathologist/Speech therapist:** A professional trained to prevent, assess, diagnose and treat speech, language and swallowing disorders in children and adults (ASHA, 2009).

**Skills:** Ability to carry out a task effectively within a given time (Howland, 2013).

**Strategy:** A plan of action designed to achieve a goal (Mintzberg, 1996).

**Technique:** Execution of interventional teaching tasks.

**Teachers’ role:** Supporting children’s educational, social and emotional development as in using classroom instruction and presentations to help learners learn new concepts and apply them in independent problem solving situations, creating interactive
learning environment, acting as role models, mentoring and protecting learners by behavioral teaching, making referrals, joint-collaborative initiatives and creating understanding with parents and guardians.
CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

The reviewed literature presented the following: teachers’ knowledge about the signs of SLD in the communication of learners, extent of knowledge possessed by teachers of learners with SLD and teachers’ competence in using teaching strategies to enhance communication skills of learners with SLD.

2.2. Teachers’ Knowledge about Meaning and Signs of Speech and Language Disorders

Speech disorders are difficulties with formulation and production of intelligible speech sounds while language disorders affect the understanding and use of language. A language disorder is an impairment in understanding and sharing thoughts and ideas by processing of linguistic information. Speech and language disorders are impairments that affect the way learners talk, understand and process information. Thus, speech and language disorders adversely affect the way children talk, understand and process information and it is important for teachers to recognize and understand the different types of characteristics that their learners may present not only for differential instruction, but also to recognize possible disorders if an official diagnosis has not yet been made (Ysseldyke & Algozzine, 2006). If a learner is struggling with a speech or language disability, a quick and accurate diagnosis should be made so that proper instructional strategies can be implemented as soon as possible.
Speech disorders include dysfluency of a child’s spoken words, reduced voice quality and lack of speech clarity. Language disorders include a child’s inability to understand others, make meaningful conversations, solve problems independently and difficulty with expressing thoughts independently through spoken or written words. Language and communication skills in a child’s development are extremely important in that even mild to moderate disturbances can have a profound impact on all aspects of life including poor inter-personal skills, communication difficulties and poor educational grades (Turnbull & Wehmeyer, 2007). Teachers need to have relevant knowledge to be able to identify speech and language difficulties and successfully conduct their role in supporting learners according to their needs.

The severity of SLD can range from relatively mild to quite severe up to including a complete inability to speak. A speech disorder is characterized by difficulty in articulation of sounds, syllable, words and phonological delay (McLeod & Baker, 2017). Learners with speech sound disorders have difficulties with the production of intelligible speech according to an article known as International Aspirations by McLeod, Verdon, Bowen and the International Expert Panel (2013) on Multilingual Children’s Speech. The focus of the article was to draw on the knowledge of the members of the panel to create resources for SLPs and teachers to work with children and families who do not speak the same language as them. The more prominent speech disorders are motor speech disorders including dysarthria and apraxia of speech mainly attributed to brain damage (ASHA, 2009) and problems in oral motor function. Mullen & Schooling, (2010) reported that in the U.S 74.7% of learners across 25 states were receiving speech and language pathology services focusing on phonological awareness training for improved articulation and increased speech
intelligibility. This report is an evidence of the role played by SLPs in supporting teachers to promote children’s learning and communication skills in the classroom-based intervention.

Language disorders may revolve around the following linguistic components; morphology (word structure), syntax (sentence formulation), semantics (content) and pragmatics or language use in context (Batshaw, 2002). Speech and language are slightly different from each other although they are classified together. A study by Ndung’u and Kinyua (2009) points out that language is the system of symbolic communication by which human beings unlike animals communicate using spoken, written or signed modality and that literature has shown that speech and language are said to be disordered if they differ from what is considered to be the norm. The review of this literature further indicated that normal communication includes all means by which information is transmitted between the sender and the recipient. The means of communication as shown in the study are verbal and non-verbal, oral and written, formal and informal intentional and unintentional and so speech is the system of forming and producing sounds that are the basis of language.

Language disorders may be attributed to a receptive problem (difficulty with understanding language of others) or expressive problems (difficulty in using language) including improper use of words and their meanings, inability to express ideas, inappropriate grammatical patterns, reduced vocabulary and inability to follow directions or a combination of problems in both reception and expression where a child may hear or see a word but fail to understand its meaning and have trouble in making others understand what he/she is trying to say.
Speech disorders include voice, articulation, stuttering and phonological process (Roseberry-Mckibbin, 1995). Voice is characterized by sounds produced by an individual including pitch, quality and sound volume or intensity. A voice disorder is produced due to incorrect phonation or resonation. Incorrect resonation is also associated with hyper-nasality or hypo-nasality. Pitch, volume, quality and rate are other features that determine a voice disorder.

Speech sound disorders involving articulation (sound production) encompass use of articulators such as lips, teeth, mouth and tongue to produce intelligible speech sounds. Articulation disorders may take the form of sound omission (e.g. fi’ for fish), addition errors (e.g. fisha for fish), sound deletion and consonant clusters, distortion of normal speech sounds (e.g. a lisped sh in fish), substitution errors (e.g. ‘t’ for ‘k’ as in titi for kiti, ‘d’ for ‘g’ e.g. das for gas). There are also prosody errors which affect sound intonation or rhythm and problems with phonological processes or sound patterns (Williams, 2006). These errors are often treated with a focus on speech sound (phonemes) production accuracy (Bernthal, Bankso & Flipsen, 2012). In more severe speech disorders, intervention may be improving global speech intelligibility targeting the whole word production rather than individual sounds (Camarata, 2010; Camarata, 2014). When overall speech intelligibility is extremely limited, intervention includes augmentative and alternative communication protheses (Constantino & Bonati, 2014).

Speech dyfluency affects the smooth flow of speech (Batshaw, 2002). Fluency involves appropriate pauses and hesitations to produce intelligible speech sounds. Fluency disorders are made if sounds are very rapid (cluttering), or if sounds are
repeated, characterized by prolonged pauses or blocked speech (stuttering). Each of these components constitutes an important aspect of communicative competence and must be understood by all learners (Bloom, 1998). In a recent examination of persistence of SLD, Rice and Hoffman (2015), found that learners with SLD had poorer rates of vocabulary development. These results supported the earlier conclusion drawn by Stothard and colleagues (1998) that if a child’s language difficulties are still present at age 5-6 prognosis is likely to be poor and the child will be at high risk of language, literacy and educational difficulties throughout childhood and adolescence.

Teachers play a key role in identifying and supporting learners in the use of classroom instructions. The Bercow Report (2008), a review of services for children and young people (0-9) with speech, language and communication needs in England, recommended the following; that communication is crucial, early identification and intervention are essential, joint working is critical and that the standards for qualified teacher status ensure that teachers develop a better understanding of children and young people’s speech, language and communication needs and how to address those needs. The report was the culmination of a major consultation process and support across England to ensure that all services understand the importance of supporting learners with SLD. The report however, noted that despite these clear recommendations, speech and language disorders are not well recognized by the public and policy makers and that although the government had accepted to incorporate speech, language and communication needs in the initial teacher training curriculum it was not clear how much time would be devoted to SLD. It is shown that despite these recommendations, this has not been done ten years on and there is still
poor understanding of speech and language communication needs (Bercow Review, 2018). The report expressed concern that the issue of SLD was not taken seriously and stated the need to be training teachers about SLD on how to identify the signs in classroom to put effective intervention in place to avert long term academic and social disadvantages.

Thus, educating learners on the appropriate ways to produce speech sounds and encouraging them to practice speech and language therapeutic exercises over time may ultimately develop natural speech production and language. In this case therefore, teachers should have clear understanding of signs or characteristics of SLD and be able to identify learners who require intervention to enhance their communication skills. However, literature has shown that in the global perspectives special education teachers are not trained well in speech and language pathology and so, lack adequate knowledge. In Kenya, where speech and language pathology has been lacking, the situation is much difficult particularly among teachers in Joy town primary school for children with physical disabilities. Thus, the present study supports the need to provide adequate teacher professional development through training, workshops and seminars in speech and language to effectively perform their role in enhancing learners’ communication skills.

2.3. **Extent of Knowledge Possessed by Teachers of Learners with Speech and language Disorders**

According to a report by the American Speech, Language and Hearing Association’s National Joint Committee on Learning Disabilities, (2000), teachers must possess a rich understanding of pedagogical and content-specific knowledge to be able to teach
effectively. The report asserts that professional development is an ongoing process, not an event, which prepares teachers in the effective use of appropriate academic modifications and accommodations, facilitates collaboration among staff, families and community for increased learning enhancement. The knowledge also prepares teachers to use technology within the curriculum to meet the unique needs of learners with learning disabilities. This concurs with the federal government through the Individuals with Disabilities Act (IDEA), which ensures that learners with disabilities (5-18) years old are provided with Free Appropriate Public Education that is tailored to their individual needs.

A study by Paul and Norbury, (2012) indicated that treatment programs for children with speech and language disorders require that someone usually an adult, provide an environment that promotes speech and language growth. The study thus considers professionally trained teachers as important agents of this crucial engagement in the school setting. An investigation by Sadler (2005) into levels of teacher knowledge about SLD noted that over 60% lacked confidence in their ability to work with children with SLD. This was a survey conducted in UK involving a group of training sessions for teachers and teaching assistants working with children with SLD in seven mainstream primary schools. Pre-and post-training questionnaires and classroom observations were used to examine the impact of the program.

The UN identifies that educational programs need to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (UNESCO, 2015). That is, teachers need to be prepared with the understanding and skills required to provide learners with relevant learning experiences, in an educational environment
that supports the development of all children’s personality, talents, mental and physical abilities to their fullest potential (UN, 2001). According to Dockrell and Lindsay (2001), teachers require additional professional development to close gaps in their knowledge, and additional support to meet the needs of children with speech and language disorders. The research reported here applied qualitative research methods to investigate the learning and schooling experiences of a sample of children with speech sound disorders in order to better inform teachers, parents and other professionals who may be involved in supporting their development and education. The research was conducted in an Australian state where speech and language pathology services were not provided within schools.

The Australian Journal of Teacher Education by Daniel and McLeod (2017) pointed out that teachers play a major role in enhancing learners’ communication abilities to achieve their educational, social and emotional gratification but noted that they may be unprepared to support learners with SLD. The study reported numerous challenges faced by teachers in meeting learners’ developmental and educational needs. The study found that these challenges were centered on the need for specific expertise in the school setting and access to material and professional services to support learners’ engagement in the learning and social environments of school.

Gardner (2006) asserts that the SLPs need to understand the school community and curriculum demands in the school context to support teachers in enhancing pupil’s outcome. In the UK teachers identified a need for further training and a difficulty with providing effective support (Dockrell and Lindsay, 2001). The SLPs’ knowledge of the school systems can help them work effectively with teachers to promote their role
in the intervention to enhance communication skills of children with SLD. According to the Developing People to Support Learning (2006) report, teacher training and development needs to be part of long-term strategic planning. This is a toolkit prepared in USA to provide advice and support to teachers and other professionals.

In a study by Glover, McCORMack and Smith-Tamary (2015) in Australia, teachers and SLPs expressed a desire for increased training and knowledge and collaborative practice. They expressed frustration at inadequacies with regard to funding, personnel and resources. In different parts of Australia, as in the UK, school-aged children with SLD must meet certain disability criteria to be eligible for individual funding to enable them access school-based therapy services (Health Workforce Australia, 2014) and that some do not receive it at all (McLeod & MacKinnon, 2010). As a result, most of these learners are left to teachers who are increasingly challenged by the learners’ learning and support needs (McLeod & MacKinnon, 2007). Teachers are also the most commonly accessed source of information for parents in relation to their children’s special needs (McAllister, McLeod, Harrison & McCormack, 2011). Many teachers feel that they do not have the required knowledge, skills or expertise to identify signs of SLD, manage or intervene for learners (Law, Boyle, Harris, Harkness & Nye, 2000).

Teachers from a range of countries including the UK and Australia have reported that meeting the needs of learners with SLD is particularly challenging indicating that they require additional professional development to close the gap in their knowledge as pointed out by McLeod and McKinnon (2010). Training of teachers need to have
enough understanding to promote positive speech, language and communication strategies since these skills impact effective access to the whole curriculum.

From the general review of literature, there is lack of enough evidence to support the level of knowledge possessed by teachers about speech and language disorders. The review has clearly exposed lack of adequate understanding, skills and confidence as the greatest obstacle to the effective implementation of teacher school-based intervention programs in both global and local perspectives particularly, in Kenya where speech and language pathology has not been available. This is essentially important to the current study which sought to close the gap by creating insight into the need to provide relevant teacher professional development and support to effectively facilitate acquisition of communication competence, educational success and social independence for learners with SLD.

2.4. Teachers’ Competence in Using Teaching Strategies to Enhance Communication Skills of Learners with Speech and Language Disorders

Teachers’ proficiency in handling learners with SLD would highly rely on the orientation they receive from experts in pre-service or in-service situations to design suitable teaching and learning approaches and materials that suit their purpose. Researchers have recommended a curriculum-based intervention strategy for learners with SLD (ASHA, 1999; Wallach, 2008). This model focuses more on reading, spelling, writing and mathematics which are skills that affect the learner’s educational performance. The Individuals with Disabilities Education Act (IDEA) plays a major role in the curriculum focus by emphasizing focus on classroom skills that affect learner’s educational outcome. One of the main target of these skills is phonological
awareness which involves understanding and awareness of sound components of words (Bialystok & Ryan, 1985). Learning to read involves the identification of sound elements and their mapping onto letters and sequences of letters (Adams, Foorman, Lundberg & Beeler, 1998; Blachman, Ball & Tangel, 2000).

In 2002, the National Reading Panel, commissioned by the U.S. Congress, identified 52 studies evaluating the effectiveness of phonological awareness training in improving reading and spelling (Ehri, Nunes, Willow, Schuster, Yaghoub-Zadeh & Shanahan, 2001), concluding that its effect was moderate. A more recent literature review by Snowling and Hulme (2011) yielded similar findings. Caravolas, Hulme and Snowling (2001) indicated that understanding what is read involves language knowledge of vocabulary, grammar, sentence meanings, understanding of story structure and verbal reasoning such as inferencing what has been spoken.

One study found that social activities and inter-relationships are more important than formal learning with children with SLD (Maxwell, 2006) and that creating a communicative supportive environment beneficial to all children in the classroom is important (Dockrell, 2006). In western education systems, learning emphasizes on constructive learning principals which mobilize learner interaction predominantly through spoken communication as central tool for learning (Vygostky, 1986). According to Vygostky, constructivist learning is described as embedded within social events and occurs as a child interacts with people, objects and events in the environment.

Exploratory talk between learners and teachers is acknowledged by Gillies (2014), for its capacity to promote intellectual development and educational attainment.
According to Slavin (2011), this technique is implemented in group-learning process such as cooperative learning pedagogies in classroom environments. An understanding of these strategies is therefore important for those who support learning engagements and educational outcome of learners with SLD.

Individualized teaching is a classroom instruction strategy which recognizes the uniqueness of each learner and thus provide for adequate tutorial guidance and other support services to help the child (Reynolds & Fletcher-Janzen, 2001). The goal is to provide learning environment that can maximize the child’s potential by learning at their own pace. Tomlinson (2001) suggests areas of individualizing instructions such as content, materials and pace of learning based on the abilities of the learner.

The American Speech and Hearing Association (ASHA, 2009), a national professional, scientific and credentialing association for different professionals including audiologists, SLPs and other related specialists, shows that there are effective strategies available to improve children’s communication skills particularly in the developed world. Collaborative working is an essential strategy because there are benefits of joint working between teachers and other professionals particularly SLPs (ASHA, 2009). Speech and language pathology services are integrated into learners’ educational programs in countries such as the US (Giangreco, Prelock& Turnbull, 2010) and the UK according to the Department of Education (2008). These benefits include improved communication of school children, improved access to national curriculum and greater esteem (Wright & Kersner, 2004). Wright and Kersner (2001), pointed out that teachers can also reduce stress and anxiety as they can share concerns and gain personal and professional support from each other.
A report of a case study conducted in the UK to establish whether class-based interventions are effective in improving communication skills in children with SLD, indicated that using an enhanced collaborative model by school professionals and a combination of the above mentioned strategies has proved to be effective (Mecrow, Beckwith & Klee, 2010). The report suggests that a collaboration can be done through consultation in which teachers who have direct contact with the child in the classroom consult SLPs for expert advice (Hartas, 2004). This was a qualitative case study involving twenty five teachers and seventeen SLTs who were asked to complete questionnaires and participate in group discussions to provide information about their perception of collaboration with their colleagues at a school for children with SLD.

Results suggested that most teachers and SLTs felt that time constrains limited their effort in collaborative working. However, their willingness to make professional development and learn from each other could not be underestimated. In the liaison the SLPs will provide information and rationale for the choice of strategies for teaching and supporting children with SLD to optimize their participation and success.

Interactive teaching is advocated by Brown (1994) as an important approach involving giving learners something to do, getting back what they have done and then deciding on what would be best to do next. The study further, shows that teacher’s interaction with the learner enables him or her to know if his or her efforts to explain or demonstrate a task were successful. According to the study, the interactive teacher allows the learner to interact or work together with peers in small groups to solve a problem in a safe, affirming and enriched environment. Other studies show that in the course of discussion feedback from the teacher and the peers is a significant motivator.
in the learning of school children as they desire to know whether their understanding is progressive or not (Lee, 2004). In the UK, Kennewell, Tanner, Jones and Beauchamp (2008), advanced this opinion arguing that direct interactive teaching is a contributing factor to success, along with discussion, pace, confidence and ambition in which learners’ contributions are encouraged, expected and extended with a high degree of autonomy and personalization.

Provision of basic functional communication systems have shown to be very effective particularly to learners with SLD (Gargiulo, 2006). There are computer software programs including First Words involving use of graphic presentations. Such systems are termed alternative and augmentative communication systems (AAC) such as gestures or facial expressions (aided communication systems), and those that require some tools or equipment (aided systems) including pictures, paper, pencil and computer-based speech-generating systems. Other alternative and augmentative systems include sign language and various communication boards, both manual and electronic that are used by persons with impaired oral motor skills (Beukelman & Mirenda, 2005).

The most basic devices are non-electronic communication boards limited to choices represented by real items, pictures and symbols for items. For some nonspeaking learners, picture exchange communication system is recommended by Bondy and Frost (2001), in which the learner is provided with pictures of desired objects and taught to use them to request the objects from teachers. Several studies have provided evidence that this treatment increases the number of communicative requests (Flippin, Reszka & Watson, 2010; Preston & Carter, 2009). The studies pointed out that if the
basis of communication problem is largely a limitation in speech production, and receptive language abilities are relatively unaffected, computer-based electronic communication systems are likely to be effective.

One instructional method, referred to as ‘modeling’, draws on the social learning theory that emphasizes on observational learning (Bandura, 1971). With this method, the learner is provided with an elevated set of exemplars of language form and the learner is instructed to imitate a word or sentence and given feedback when he or she makes an imitative attempt. Modeling has been found to result to gains in the targeted language forms (Leonard, Camarata, Brown, & Camarata, 2004; Vasilyeva, Huttenlocher & Waterfall, 2006).

A combination of several modes of teaching are used which said to result to gains in different types of learning contexts that may be teacher-centered, learner-centered or a mix of the two (Cleave, Becker, Curran, Van Home & Fey, 2012). The teacher-centered context is more effective in a highly structured drill and practice setting. The emphasis is on high rates of listening and speaking the targeted language forms (Paul & Norbury, 2012). According to the study, the strategy is advocated on the grounds that learners with SLD need the structure and intensity of this learning context. On the contrary, learner-centered approach emphasizes on the quality of natural teacher-learner interactions through conversations allowing the learner to lead the interaction while the teacher follows.

Hart and Risley (1975), identifies incidental teaching as one of the most prominent learner-center approach in which the teacher arranges play setting to provide for talk about the targets and motivations for talking. The teacher interjects short intervals of
focused teaching involving more directive language into the play increasing interaction engagement and positive learning outcome. According to Miller, Fenty, Scott and Park (2010), outcomes are comparable whether instructions are offered ingroups or individually.

Williams, Kraybill, Franchow and Butner (2010) identifies articulation drill, motor learning and phonological/lexical interventions as primary approaches to behavioral treatment of speech disorders including practicing moving and coordinating movements of oral structures such as lips, tongue and soft palate to improve speech accuracy (Maas, Gildersleeve-Neumann, Jakielski & Stoeckel, 2014). Articulation drill approaches focus on motor placement and production of individual sounds (phonemes) are often a primary focus of intervention for speech sounds (McCLeod & Bleile, 2004). Essentially, a learner is taught directly how to move and coordinate the articulatory mechanism for producing phonemes. For example, a learner with a mild speech disorder who says the word ‘rabbit’ as ‘wabbit’ is incorrectly producing phoneme ‘r’ as ‘w’. In this case, intervention would include direct instruction, motor practice and drill to produce an ‘r’ sound correctly.

Thus, the preliminary step is to work on individual sounds in isolation to effectively complete the drills. The production of individual phonemes in isolation is followed by practice in syllabic productions such as consonant-vowel syllables (CV). After the learner has mastered sound production at syllable level, word-level productions are initiated with a transition to phrases followed by conversational speech (Nemoy & Davis, 1954), and is still recognized as an evidence-based practice for the correction of speech disorders in school-age children (Maas et al., 2014). Phonological/lexical
approach is drawn considering speech sounds within the context of word production (Stokel, 2004). This is designed to improve word-level production rather than starting at the motor learning at individual phoneme level. Similarly, a later study by Crosbite and colleagues (2005), found that word-level speech production improved speech disorders in learners and that both speech accuracy and speech intelligibility can be improved using lexical-transactional intervention.

A number of studies have found teaching to be associated with significant gains in speech accuracy and intelligibility (Baker & McCLeod, 2011; Almost & Rosenbaum, 1998), although a literature review by Baker and McCLeod (2011) shows that there have been few long-term follow-up studies, and very few studies have been focused on learners with SLD. Similarly, in a review of literature on speech intervention in mild to moderate speech disorders, Bernthal & colleagues (2012) concluded that when comparing groups receiving speech and language communication intervention to those receiving no treatment, the intervention group consistently perform better than no treatment groups on outcome evaluation measures.

The reviewed literature indicates a wide range of strategies developed for stuttering including psychological-psychodynamic approaches and technology applications such as delayed auditory feedback devices (Nye & colleagues, 2013). However, this literature indicates that recovery rates are higher in pre-school than school-age children necessitating the need for longitudinal comparative trials. Guitar (2013) showed that stuttering in children whose dysfluencies persist into school-age and into early adolescence is the most resistant treatment hence the need for more teacher professional training and support.
The reviewed findings about the diverse evidence-based practices and their benefits to learners with SLD, are predominantly significant to educational professionals and policy makers and hence extremely pertinent to the current study with a view to informing the need for teacher professional development and resource provision and intrinsic monitoring to promote speech and language expertise and competence to integrate therapy strategies with learning tasks. Furthermore, the study intends to inform the need for increased teacher-parent understanding to promote parental participation in the administration of interventional programs in the home context during holiday breaks to enhance consistency for better therapeutic outcomes. The study also, shows the need for increased collaborative support to provide additional professional understanding about SLD and expert advice to maximally minimize the impact of speech disability and satisfy educational, social and emotional needs of learners with SLD.

2.5. Summary of Literature Review

This chapter has reviewed literature on teachers’ knowledge about signs exhibited by learners with SLD. It is clear that learners with SLD are at high risk of language, literacy and educational difficulties throughout childhood and adolescence (Stothard & colleagues, 1998). It is observed that children with SLD are heterogeneous (Dockrell, Lindsay, Letchford & Mackie, 2006). Other studies show that the challenge for the teacher is to recognize SLD since they have not been trained in speech and language pathology and so, find trouble managing learners’ communication difficulties more effectively (Daniels & Porter, 2007). The study further shows that effort to enhance learners’ communication skills is predominantly the role of
professionals and teachers play an integral part in this spectrum showing the need to provide relevant teacher professional development and resource support to facilitate execution of diagnostic assessment practices and achievement of therapeutic teaching goals.

Paul and Norbury (2012) noted that professionally trained teachers in communication disabilities are considered vital to enhance intervention programs for learners with SLD. From the general review of literature, there is lack of enough evidence to support the level of knowledge possessed by teachers about speech and language disorders. The review has exposed lack of adequate understanding, skills and confidence as the greatest obstacle to the effective implementation of teacher school-based intervention programs particularly, in Kenya where speech and language pathology has been lacking. This is essentially important to the current study which sought to close the gap by creating insight into the need to provide relevant teacher professional development and support to effectively facilitate development of communication skills of learners with SLD.

Furthermore, the reviewed literature provides some evidence based teaching strategies used by teachers in the intervention of children with SLD. Reilly and Murray (2005) argued that children with SLD can benefit from appropriate teaching approaches and Williams and McCauley (2010) reported that there are effective methods available to improve children’s communication skills which can be achieved through teacher training and co-operation with health professionals including SLPs (ASHA, 2009).

Teacher supportive systems are available in the developed nations such as USA where provision of teacher education and collaboration between them and other professionals
such as SLPs is encouraged to promote their capacity to use informed teaching strategies (Shaddock, Smyth King & Giorcelli, 2007). However, teachers feel that this support is not adequately geared towards the teaching of learners with SLD. The available support is much less in Kenya and the rest of the third world nations where speech and language pathology has been lacking.

The reviewed findings about the diverse evidence-based practices and their benefits to learners with SLD, are predominantly significant to educational professionals and policy makers and hence extremely pertinent to the current study with a view to informing the need for teacher professional development and resource provision to promote speech and language expertise and competence to integrate therapy strategies with learning tasks and teaching goals. Furthermore, the study intends to inform the need for increased teacher-parent understanding to enlighten parents on the need to administer therapeutic support in the home context during holiday breaks to enhance consistency for better interventional outcomes.
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

This chapter highlights the research design, study location, study variables, target population, sampling techniques and sample size, study instruments, pilot study, validity and reliability of instruments, data collection techniques and logistical and ethical consideration.

3.2. Research Design

This study adopted a case study design mainly using qualitative approach. Qualitative approach aims at exploring the social reality of individuals, groups and cultures (Creswell, 2003 & Creswell, 2012). The approach adopted the use of semi-structured interview guide, questionnaire schedule and non-participant observation checklist for collecting data (Denzin & Lincoln, 1994). Case study was used because the study phenomenon had similar characteristics.

3.3. Study Variables

The study variables included independent, dependent and intervening variables.

**Independent variables** included:

Teachers’ characteristics: teacher’s professional knowledge and competence, teaching strategies, teacher training and teachers’ attitude towards children with SLD.

 Teachers’ role: Making referrals, classroom teaching, assessment, collaboration, enlightening parents and improving learning environment.
Dependent variables included communication skills of children with SLD which was determined by the teachers’ ability to execute interventional teaching dispensations on the basis of their knowledge about signs of SLD and competence to innovate and use classroom instructional strategies.

Intervening variables included child’s medical health and family background. These are factors which are known to significantly affect the functions of both independent and dependent variables but were not part of the investigation.

3.4. Location of the Study

The study was conducted in Joy town special primary school for physically challenged children in Thika, Kiambu county. About two thirds of these learners have cerebral palsy which is one of the major causes of speech difficulties. Being the largest special primary school in the country Joy town has the highest number of teachers who have long experience in working with children with SLD, hence were able to provide adequate study population.

3.5. Target Population

This study targeted only 31 teachers working in Joy town special primary school regardless of their age and gender. This number was inclusive of the head teacher.

3.6. Sampling Techniques and Sample Size

3.6.1. Sampling Techniques

The school was purposively selected. The school has a national outlook drawing children from all over Kenya with different social-linguistic backgrounds and the
majority of them have SLD. All teachers working in the school were used because they were not many and since they directly interacted with children with SLD, they constituted the most suitable target population which provided the needed information for the study.

3.6.2. Sample Size

Out of the 31 targeted teachers, 2 were used during pilot-test. Therefore, the study sample size was 29 teachers who participated in the actual study. This number included the head teacher.

3.7. Research Instruments

3.7.1. Interview Guide for Head teacher

A semi-structured interview guide (see Appendix II) was prepared for the head teacher to obtain the required information. The interview guide was used in order to obtain in-depth information through probing the head teacher. Kothari (2009) asserts that this strategy allows flexibility in probing and exploring certain subjects in greater depth.

3.7.2. Questionnaire Schedule

Questionnaires (see Appendix III) were prepared for the teachers because they can individually record and interpret them well. The questionnaire constituted 3 sections covering specific items of the objectives. The questionnaire procedure was useful in this study because it was time saving and the researcher was not needed to be present during the filling of the questionnaires.
3.7.3. Observation Checklist

The study used non-participant observation method (see Appendix IV) where the researcher was merely taking notes of what she observed. Observation schedule was used to observe teachers in the classroom during teaching activities.

3.8. Pilot-test

A pilot-test was conducted with two teachers in the school under the study to ascertain the validity and reliability of data collection instruments and appropriateness of the anticipated analytical techniques. This is why the study sample size was 29 instead of 31 since 2 of them participated in the pilot-test. The reason was that all teachers in the school directly interacted with learners with SLD and faced similar experiences. The two teachers filled the questionnaires. Teacher observation during pilot-testing was done on the same teachers by the researcher in classroom teaching. The head teacher was not used in the pilot-test. The teachers used for the pilot-test did not participate in the actual research. The procedure used in pre-testing was the same as the one used in the main research.

3.8.1. Validity

An instrument is valid if it measures what it is intended to measure and accurately achieves the purpose for what it was designed. Research instruments were validated through application of content validity determined by expert judgment and inclusion of supervisors ‘suggestions. Further, a pilot-testing was used to enhance the validity.

3.8.2. Reliability

This means the degree of consistency demonstrated in a study (Welman & Kruger, 2001). Reliability was determined by pilot-testing the questionnaires on the
purposively selected teachers. The study used Cronbach Coefficient Alpha test for internal consistency to obtain the average score of the split half estimates. The study coefficient alpha was 0.913. It is important to note that a liability coefficient of 0.70 is considered acceptable in most situations of social sciences. However, below 0.70, the internal consistency becomes questionable but above 0.70 to 0.10 correlation coefficient is perfectly high. In this case, the study items had a relatively high reliability.

3.9. Data Collection Techniques

The researcher requested for permission from the Ministry of Education through the Dean of Graduate School to conduct the research. The researcher further sought permission from the Education County Director, Thika West. The primary data was collected using questionnaires, observation schedule and interview guide. Following a successful application requesting for pilot-testing and data collection, the researcher explained the nature and purpose of the study to establish rapport with the teachers who were used for the pilot-test. Then, during the actual data collection on a separate day the researcher held interview with the head teacher early in the morning before distributing questionnaires to teachers in the staffroom during tea break. Once again, the researcher explained the study purpose to teachers who were not used in the piloting exercise and personally distributed questionnaires to them. The researcher was present to clarify any possible ambiguities during the filling of the questionnaires. Teachers’ classroom observation was done on the same day. At first, the researcher requested the particular teachers for permission to use their lessons during the observation. In the classrooms, the researcher was introduced by teachers to the
learners before sitting at the back of the class to take notes using the observation
checklist until the end of the lesson. The collection of questionnaires was done on the
following day since it was not possible to have them completed on the first day. Out
of 29 questionnaires, only 24 (82.8%) were returned.

3.10. Data Analysis
The researcher edited the data collected from the field to ensure they were error-free.
In the case of quantitative data the researcher numbered the questionnaires
appropriately. This was followed by the coding process to mark and categorize
information such as gender, age and level of education. Then, data was entered into
the computer program known as Statistics Package for Social Sciences (SPSS) to aid in
data analysis. The quantitative data was analyzed using simple descriptive statistics
such as graphs, percentages, charts, tables and frequencies. Qualitative data was
analyzed thematically and sorted according to the emerging themes (Braun & Clarke,
2006).

3.11. Logistical and Ethical Consideration

Inasmuch as the researcher promised voluntary participation, she informed the
respondents of the importance and justification of the study since their participation
was extremely pertinent for the purpose of data collection. The researcher also assured
the respondents that their identity would fully be protected by a careful exercise of
anonymity and confidentiality. Finally, the researcher disseminated the findings of the
study with accuracy, honesty and responsibility to the professional fraternity in the
educational community through publication in the International Journal of Social
CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATIONS AND DISCUSSION

4.1. Introduction

This chapter presents the findings, interpretations and discussion according to the objectives and research questions. The objectives were as follows:

1. To establish teachers’ knowledge about signs of SLD in the communication of learners in Joy town primary school.
2. To find out the extent of knowledge possessed by teachers of learners with SLD in the school under the study.
3. To assess teachers’ competence in using teaching strategies to enhance communication skills of learners with SLD in Joy town primary school.

4.2. General and Demographic Information

4.2.1. General Information

The demographic data concerning teachers of children with SLD is shown on figure 4.1. The data in this sub-section was aimed at establishing the gender of respondents. The respondents were teachers in Joy town special primary school. The respondents were purposively sampled and were expected to tick the appropriate gender.
4.2.2. Demographic information

Gender disparity was observed in favor of females. The responses are shown in the figure 4.1.

![Gender representation of respondents]

**Figure 4.1: Gender representation of respondents**

Nearly two thirds of the respondents were females 17 representing 70.8% while males were 7 (29.2%). The figure shows that females comprised the majority of the respondents in the current study as compared to male counterparts. However, gender disparity did not have any significant implication to the study.
4.2.3. Age bracket of respondents

Table 4.1 shows the record of the age brackets of the respondents.

**Table 4.1 Age bracket**

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 35</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>35-40</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>40-45</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>45-50</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>50 and above</td>
<td>9</td>
<td>37.5</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It was observed that 9 respondents representing 37.5% were 50 years and above. One third of the respondents (20.8%) ranged between 40 and 45 years and a similar percentage were 45 to 50 years old. Three (12.5%) of the respondents were 35 to 40 years old and only 2 respondents were below 35% years of age. The limited number of young teachers posed a challenge because this denied the school the contribution of the newly trained teachers who are likely to possess technical competence in modern technology such as computer skills and can easily adapt to changing teaching and intervention demands. This information is useful for the study because it showed the need to focus on progressive teacher development and consistent teacher recruitment to satisfy capacity demands, focusing more on computer proficiency and technical adaptability.
4.2.4. Professional qualification of respondents

The following table is an illustration of the respondents’ professional qualification.

Table 4.2. Professional Qualification

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>Graduate</td>
<td>16</td>
<td>66.7</td>
</tr>
<tr>
<td>Masters</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The table indicates that 20 respondents (84.4%) had both undergraduate and postgraduate degrees in special needs education. Diploma holders were only 4 (16.7%). This information was important to determine teachers’ competence in the accomplishment of national curriculum which is the basis for the implementation of interventional teaching programs.

4.3. Responses on Signs of Speech and Language Disorders

The following table indicates results for objective one which was to establish teachers’ knowledge of signs SLD in the communication of learners in Joy town special primary school.
Table 4.3. Signs of SLD

<table>
<thead>
<tr>
<th>Signs of SLD</th>
<th>Absent</th>
<th>Not sure</th>
<th>Present</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Sound omission</td>
<td>5</td>
<td>20.8</td>
<td>17</td>
<td>70.8</td>
</tr>
<tr>
<td>Substitution</td>
<td>5</td>
<td>20.8</td>
<td>18</td>
<td>75.0</td>
</tr>
<tr>
<td>Distortion</td>
<td>4</td>
<td>18.2</td>
<td>17</td>
<td>77.3</td>
</tr>
<tr>
<td>Addition</td>
<td>8</td>
<td>34.8</td>
<td>12</td>
<td>52.2</td>
</tr>
<tr>
<td>Repetition</td>
<td>3</td>
<td>12.5</td>
<td>19</td>
<td>79.2</td>
</tr>
<tr>
<td>Limited vocabulary</td>
<td>5</td>
<td>22.7</td>
<td>17</td>
<td>77.3</td>
</tr>
<tr>
<td>Incorrect use of morphological markers</td>
<td>5</td>
<td>21.7</td>
<td>16</td>
<td>69.6</td>
</tr>
<tr>
<td>Inability to form phrase/sentence</td>
<td>3</td>
<td>12.5</td>
<td>19</td>
<td>79.2</td>
</tr>
</tbody>
</table>

The respondents were required to show their ability to identify signs of SLD in learners’ communication. 5 respondents (20.8%) showed absence of sound omission errors while 2(8.3%) respondents reported that learners with SLD committed sound omission errors agreeing with the view of Roseberry-Mckibbin (1995) which stated that speech disorders include, articulation (eg. sound omission) difficulties. 17 (70.8%) respondents were not sure about the errors and could not identify them, which was a clear prove of knowledge deficit in the identification of signs of SLD among the respondents which impacted negatively in meeting the different communication needs of their learners.
5 (20.8%) respondents indicated presence of substitution errors as identified by Williams (2003a) while 1 (4.2%) person did not note the errors. Nearly three quarters of the respondents (18) or 75% showed that they were not sure about the errors another clear indicator of inability to recognize signs of speech disorders in children. One person managed to identify sound distortion errors while 4 (18.2%) respondents did not notice any sign of distortion. Three quarters equivalent to 18 (77.3%) respondents reported that they were not sure about the errors, further indicating concern about their knowledge and competence and the need for teacher training in speech disabilities to increase understanding and skills to competently perform their role in supporting learners with speech and language difficulties.

It was noted that slightly more than half of the respondents, about 12 (55%) were not sure about presence of addition errors in the speech of their learners another evidence of knowledge insufficiency about signs of SLD and the need for additional teacher professional support and training to increase their knowledge about signs of SLD and their impact in the social and academic life of learners. About 34.8% or 8 respondents showed that they did not identify any sign of sound additional errors while 3 (13%) respondents recognized them. In addition, the majority of the respondents about 19(79.2%) were not sure about sound repetition errors, another indication of lack of adequate knowledge to recognize signs of SLD. A very small number of the respondents showed that they did not notice the errors. Two respondents representing 8.3% reported sound repetition errors as a feature characterizing the speech of children with SLD agreeing with the views of Batshaw (2002) on articulation errors.
The researcher clarified the meaning of concepts such as morphological marker to the respondents as a grammatical form referring to awareness of word structure (morphological awareness). 2 (8.7%) respondents reported that learners with SLD presented incorrect use of morphological markers while 5 (21.7%) noted morphological competence in the language of learners with SLD. Sixteen (69.6%) respondents were not sure depicting challenge in their understanding of the different language needs of their learners.

Nineteen (79.2%) respondents pointed out that they were not sure about their learners’ inability to form phrases and sentences precisely proving that the respondents lacked the needed knowledge to recognize their learners’ weakness in the syntactic language domain. Three (12.5%) respondents showed that their learners expressed deficit in language sentence structure while only 2 (8.3%) respondents reported that learners with SLD can make accurate phrases/sentences when answering questions in class and engaging in verbal conversations with teachers and peers. Five (22.7%) respondents showed absence of limited vocabulary content indicating that learners with SLD have adequate vocabulary, while 17 (77.3%) said they were not sure and none of the respondents reported presence of limited vocabulary content. This is a further indication of lack of teachers’ knowledge to easily recognize signs of speech and language communication difficulties which is detrimental to the classroom-based intervention.

The role of teachers in enhancing learners’ communication skills is relative to their ability to recognize signs of SLD and understand the diversity of their learners needs, and also possess enough expertise and competence to embrace evidence-based teaching
practices in the classroom-based intervention. Daniel and Porter (2007) points out on the importance of training teachers to be able to identify signs of speech disabilities to effectively support learners with SLD. Thus, the current study gives more insight for the need to strengthen teacher professional development to integrate training in SLD in the teacher training curriculum and workshop programs to facilitate their role in making assessment decisions and classroom instruction choices to promote learners’ communication efficacy, academic success and social fulfillment.

The one-on-one interview with the head teacher showed that teachers in the school had to be very patient to understand the speech of learners with SLD in order to identify their needs. The head teacher confirmed that he also had to listen more keenly and patiently to understand what was said by the learners.

During classroom observation, it was observed that communication needs varied between learners and the study respondents had difficulties understanding learners’ speech. It was noted that during questioning and answering activities, some teachers asked learners with poor speech intelligibility to repeat what they said which seemingly drew frustrations and discouragement among both teachers and learners.

The above findings indicate that teachers are not trained in speech and language and hence, lack knowledge to recognize and understand the diversity of communication needs that affect the learning and communication of learners with SLD. The study thus, puts impetus on the importance of providing teacher training in speech pathology and support to ensure that the teachers’ role in enhancing communication skills is effectively executed.
4.3.1. Responses on Assessment of Speech and Language Disorders

The study sought to find out how learners with SLD in the school are assessed in order to identify their speech and language needs. The responses are indicated in the table 4.4.

Table 4.4. Assessment of Children with Speech and Language Disorders

<table>
<thead>
<tr>
<th>Assessment methods</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners are interviewed by teachers</td>
<td>7</td>
<td>29.2</td>
</tr>
<tr>
<td>Receiving assessment reports from education assessment &amp; resource centers</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Parents and teachers are fully responsible through interaction</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Speech therapists</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>System</td>
<td>14</td>
<td>58.0</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

7(29.2%) respondents said that learners are interviewed by teachers before admission to determine class placement and since it was noted earlier that teachers faced difficulties with identification of signs of SLD, then it is not clear about the criteria they used to determine learners’ class placement which further signifies knowledge deficit in the assessment procedures for learners with SLD. 1(4.5%) respondent reported that sometimes the school relies on assessment reports from the Education Assessment and Resource Centers (EARCS) and another person said that teachers
make observation during learning activities in the classroom. The respondent reported, ‘assessment is done through observation, that is, as learning takes place the teacher is able to tell the learner with SLD when talking or reading’. The respondent further said that parents are fully responsible for the assessment through observation during their natural interaction with their children at home. Parents are an important source of information and insight about their children and should be involved in the assessment process, but can mainly provide information about their children’s strengths and needs, and not making assessment decisions since they are not qualified to do so.

Another 1 (4.2%) respondent reported that learners with SLD were assessed by speech therapists. However, the researcher noted existence of a few school-based occupational therapists who engaged learners with sensory integrative tasks to foster mobility and school environmental adaptation, but there was no evidence of existence of a school-based speech therapy program. It is therefore, not clear where the speech therapy assessment services were offered for the learners. This concurs with a previous study by Edgar and Rosa-Lugo (2007), who reported that many public schools in the developed nations lack sufficient school-based speech therapists who can liaise with teachers and that the situation is much worse in Africa particularly in Kenya where speech and language pathology has been lacking.

14 (58.0%) respondents, showed that learners were assessed through the school ‘system’. In this case, the term ‘system’ was used by teachers to refer to their ongoing teaching experience and interaction in the implementation of special needs curriculum. It is not clear how ‘system’ was used in the assessment of learners’ communication disabilities. The extensive lack of clarity on assessment of learners
with SLD further shows that teachers lacked adequate knowledge and skills to understand them and meet their social, academic and communication needs showing the need to train teachers in speech and language pathology to increase their understanding and competence in the assessment of learners with SLD.

4.3.2. Responses on Diagnosis of Speech and Language Disorders

The table 4.5 indicates the respondents’ views on the diagnosis of SLD. Differential diagnostic evaluation is essential to establish the specific needs of individual learners in order to decisively determine the appropriate intervention approaches.

Table 4.5 Diagnosis of Speech and Language Disorders

<table>
<thead>
<tr>
<th>Who diagnose them?</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>18</td>
<td>78.3</td>
</tr>
<tr>
<td>Speech-language pathologists</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>Doctors</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>Not sure</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>System</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Diagnosis is clinical judgment of an illness. Teachers are not qualified to diagnose and can only identify signs of a disorder. The importance of diagnosis information was to find out if teachers made referrals to other related professionals for speech and language diagnostic evaluations which is reflective of inter-disciplinary dynamics. 18 (78.3%) respondents reported that diagnosis is made by teachers in the school, yet teachers have presented in the earlier findings their inability to adequately recognize
signs of SLD in their wide range ‘not sure report’. Besides, recognition of symptoms of a problem is actually the basis for diagnostic and therapeutic choices for individuals with communication disorders. One respondent said that learners were diagnosed by speech therapists yet, it is not clear where speech therapy services were obtained. Two (8.7%) respondents reported that the diagnosis was done by doctors while another 2 respondents said that they were not sure about who used to diagnose their learners. The study attributes this uncertainty to lack of relevant knowledge about learners’ communication needs including need for consistent liaison in multi-disciplinary programs to realize the correct diagnostic evaluation and treatment choices for learners who require speech and language intervention.

4.4. Professional Knowledge of the Respondents

Table 4.6 records the level of knowledge of SLD by the respondents and the findings for objective two.

Table 4.6 Knowledge of Speech and Language Disorders

<table>
<thead>
<tr>
<th>Meaning of SLD</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is speech-language difficulties in learners</td>
<td>16</td>
<td>66.7</td>
</tr>
<tr>
<td>Teachers are not conversant with SLD</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>It is learners having poor phonological, syntactical and semantic awareness</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>System</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Sixteen (88.9%) respondents indicated that SLD is learners’ difficulties with speech and language communication abilities as emphasized by one of the respondents, ‘it is the challenges learners encounter while trying to acquire language and communicate, They also take time to express themselves’. 1 (5.6%) respondent said that children with SLD have poor phonological and syntactical awareness and reduced semantic language skills which to a large extent affects their literacy and communication competencies. Another respondent (5.6%) reported that teachers were not conversant with SLD hence, did not understand what it meant. Six (25%) respondents expressed complete lack of understanding about SLD by referring SLD to as ‘system’. The context in which the concept ‘system’ was used in this response remains unclear to the current study further indicating knowledge deficit in SLD and the need for more training support for teachers in speech and language pathology to specifically have clear understanding of SLD to effectively enhance learners’ communication skills.

The head teacher confirmed that although he had a degree in special needs education he did not have any knowledge of SLD. However, the head teacher reported that teachers were exposed to training programs such as ‘Tusome Early Grade Reading Program’ which is a literacy enhancement program used in class one and two to improve learning outcomes.

Using the observation checklist, teachers were observed during teaching sessions in different classes. It was observed that teachers demonstrated limited understanding of communication of learners with SLD and at some point required assistance from other learners who possibly understood their peers’ communication more easily.
4.4.1. Level of Confidence by the Respondents in Teaching Learners with Speech and Language Disorders.

Responses on the level of confidence are recorded in table 4.7.

Table 4.7 Level of Confidence

<table>
<thead>
<tr>
<th>Level of confidence</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers felt confident</td>
<td>15</td>
<td>62.5</td>
</tr>
<tr>
<td>Not confident</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Not sure</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>Sure</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Although close to two-thirds of the respondents, 15 (62.5%) expressed confidence in teaching children with SLD, it is not clear how effective their teaching was since the majority of them expressed little understanding of SLD. However, the report on teachers’ professional qualification indicates that more than three quarter of the respondents were well trained in special needs pedagogies hence, had satisfactory teaching competencies and so, perhaps this explains why they had confidence in teaching learners with SLD despite their communication challenges. About one-fifth of the respondents, 5 (20.8%) presented anxiety arguing that they were not confident in working with learners with SLD. This might have been caused by their inability to identify signs of SLD due to lack of adequate knowledge and understanding about speech disabilities.
This finding was slightly a reflection of the results obtained by Sadler (2005) from an investigation into levels of teacher knowledge about SLD in which over 60% lacked confidence in their ability to work with learners with SLD. Less than one-tenth of the respondents, 2(8.3%) were not sure about their confidence in teaching learners with SLD, which exposed their limitation further. An equal percentage (8.3%) or 2 respondents, said that they were sure of their confidence in the teaching of learners with SLD and as it was shown earlier on teachers’ inability to identify signs of SLD, there is concern about their unpreparedness to teach learners with SLD without having background knowledge about speech and language pathology.

During the interview, the head teacher said that despite the fact that he was the head of the school, he did not have full confidence in teaching learners with SLD because in most instances he needed more time and patience to understand their speech in both classroom and administrative settings and required the input of other learners who were more familiar with their peers’ communication.

The observation checklist indicated that during teaching activities, some teachers appeared nervous and uncomfortable to teach before the researcher and repeatedly directed questions to particular learners who raised their hands and had consistent vocal clarity, instead of giving all learners opportunity to participate and make attempts. This indicated teachers’ lack of adequate confidence to teach learners with SLD indicating sign of incompetence and lack of understanding about the needs of those learners, hence need for more teacher training programs and professional support and guidance.
4.4.2. Experience of Difficulties Working with Learners with Speech and Language Disorders

Figure 4.2 shows responses on whether the respondents experience difficulties during their interaction with learners with SLD.

Figure 4.2 Experience of difficulties

The majority of the respondents, 19 (79.2%) indicated that they experienced difficulties in teaching learners with SLD. One of the respondents reported, ‘we experience difficulties in trying to understand what they are saying and they need more time which is not available’. This report concurs with the study by Dockrell and Lindsay (2001), who reported that teachers face challenges when working with learners with SLD, hence the need to provide further training for them to promote their role in the intervention. Less than a fifth of the respondents, 4 (16.7%) said that they did not experience difficulties in teaching learners with SLD. Again, this contradicts the finding on teachers’ inability to assess and identify signs of SLD apart from having limited confidence in teaching those learners.
Using the observation checklist, it was noted that teachers struggled to understand learners’ spoken communication in the classroom-based activities such as reading and answering questions. It was observed that, some learners consumed a lot of time expressing themselves which culminated into frustrations and withdrawal tendencies. Time constrain was noted to be a major challenge, since teachers offered selected tasks and limited feedback with a strict focus on lesson content coverage to meet the requirements of national curriculum implementation ignoring the individual needs of learners with SLD.

During the interview, the head teacher reported that he experienced difficulties during teaching tasks or administrative activities when learners were required to present themselves in the office. The head teacher said, ‘I ask such learners with severe communication difficulties to be accompanied by their peers who can clearly present their intentions which is not always easy’

4.4.3. Presentation of Difficulties Faced by the Respondents

The respondents were required to indicate the difficulties they faced when working with learners with SLD. They emphasized on the following responses in table 4.8.
### Table 4.8. Area of difficulties faced by respondents

<table>
<thead>
<tr>
<th>Area of difficulty</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners unable to answer questions</td>
<td>1</td>
<td>5.0</td>
</tr>
<tr>
<td>Teachers unable to understand learners’ unintelligible responses</td>
<td>4</td>
<td>20.0</td>
</tr>
<tr>
<td>Teachers lack skills to teach learners with SLD</td>
<td>2</td>
<td>10.0</td>
</tr>
<tr>
<td>Lack of adequate time in classroom</td>
<td>7</td>
<td>35.0</td>
</tr>
<tr>
<td>Learners use distorted pronunciation</td>
<td>1</td>
<td>5.0</td>
</tr>
<tr>
<td>Many learners have articulation problems</td>
<td>1</td>
<td>5.0</td>
</tr>
<tr>
<td>Learners’ communication is not clear</td>
<td>1</td>
<td>5.0</td>
</tr>
<tr>
<td>Some learners have comprehension difficulties</td>
<td>2</td>
<td>10.0</td>
</tr>
<tr>
<td>Teachers are not fully equipped to teach learners with SLD</td>
<td>1</td>
<td>5.0</td>
</tr>
<tr>
<td>Special needs education system</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Nearly half of the respondents, 7 (35%) emphasized on the need for more time to enable learners to satisfactorily complete classroom tasks. Slightly less than a fifth of the respondents (20%) or 4 respondents, indicated their inability to understand responses of learners with SLD. Two (10%) respondents observed that teachers lacked adequate knowledge and skills which continued to be detrimental to the accomplishment of their role in the intervention in the school setting. One person
reported that teachers are not fully equipped with enough resources to work with learners with SLD and said, *I have not been equipped properly to sufficiently work with learners with SLD.* One respondent (5%) reported that the majority of the learners identified with SLD had articulation difficulties making their speech quite unintelligible. 4 (16.7%) reported that they had a problem with the special needs education ‘system’ but, as it has been indicated earlier, the meaning of this concept still remains unclear to the study, although may be the respondents intended to indicate that special needs program has not been fully supported and is faced by immense challenges.

4.4.4. Responses on the Training of Respondents

Table 4.9 shows the findings from the responses on the training of respondents

<table>
<thead>
<tr>
<th>Trained in SLD</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>18</td>
<td>75.0</td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

When the respondents were asked whether they had any training in SLD, three quarters or 18 (75%) reported that they did not receive any training in SLD during their training in Special Needs Education. The rest of them, 6 (25%) respondents showed that they had received some minimal training in communication disability but was not enough to effectively understand the intricate complexity of the diverse nature of SLD. This made it difficult for them to recognize signs of SLD and offer appropriate
learner support. This has significantly compromised the role of the more knowledgeable other (MKO) as propelled by Vygotsky (1978). The MKO in this case happens to be a teacher who is well trained in SLD to understand learners’ communication needs and language learning challenges and support them to independently construct knowledge in problem solving situations.

The head teacher stressed in the interview that he was trained in inclusive education, but did not have knowledge of communication disorders particularly SLD, hence found trouble understanding the communication of learners with SLD and that he had to listen to them more keenly to at least gain some level of their speech clarity.

Classroom observation showed that teachers had professional teaching expertise to handle learners with special needs during classroom instructions. However, it was observed that teachers lacked additional competencies to meet the needs of learners with SLD, which include giving them extra opportunities to participate and complete learning tasks.

### 4.4.5. Place of Training of Respondents

Table 4.10 represents the information given by the respondents showing where they studied if at all they were trained in SLD.
### Table 4.10. Place of training

<table>
<thead>
<tr>
<th>Place of training</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher training college (TTC)</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>Kenya institute of special education</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>Interaction with some professionals</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Kenyatta University</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>System</td>
<td>18</td>
<td>75.0</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Two (8.3%) respondents indicated receiving college education from unspecified teacher training colleges. One person claimed to have trained in Kenyatta University while 2 (8.3%) respondents received training in the Kenya institute of special education. Another one person said that they had interacted with various unspecified professionals giving them awareness and skills to work with learners with SLD. Three quarters of the respondents, 18 (75%) reported that they received skills by going through the special needs teaching system’s interaction with the most experienced teachers. This report indicates that most teachers learnt from each other within the school setting working with learners with SLD, yet most of them have earlier reported that they were not trained in speech and language disorders implying that the underlying knowledge gap was precisely moving forward in the existing teaching parameters for these learners.

### 4.5. Teaching Strategies Used by the Respondents

The table 4.11 presents the teaching strategies used by the respondents to teach learners with SLD.
Table 4.11 Teaching strategies used by the respondents

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repetition of concepts to learners</td>
<td>3</td>
<td>15.8</td>
</tr>
<tr>
<td>Taking time to understand what is said by learners</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>Phonetics teaching</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>Spelling of words</td>
<td>3</td>
<td>15.8</td>
</tr>
<tr>
<td>Use of gestures</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>Games</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Poetry</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Parental involvement</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Total communication</td>
<td>6</td>
<td>31.6</td>
</tr>
<tr>
<td>Use of peer learners</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>Singing</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Giving learners more time to answer questions</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Recommending speech therapy</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Encouragement to raise self-esteem</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Six representing 31.6% respondents said that they used total communication as a strategy to teach learners with SLD. In as much as this strategy is useful for learners with communication disabilities, it is most suitable for learners with hearing impairments and a very effective approach to deaf education. It has been noted from the earlier findings that the diversity of learners’ speech and language needs is profoundly paramount in making interventional considerations and goals for individual learners. 3 (15.8%) respondents reported use of word spelling and repetition
activities as a strategy to foster reading comprehension skills. Two respondents indicated use of phonetic teaching strategy to increase phonological awareness while a similar percentage emphasized the importance of giving learners enough time to adequately participate in learning activities although this is highly dependent on review of the special curriculum. One person reported that they used games as a motivating strategy and reinforcement to promote learning interest and creativity while an equal number of the respondents noted the use of other learners as a teaching strategy in enhancing the understanding of particular needs of those with SLD. One of the respondents said, ‘I use other learners to interact more with those who with SLD because they understand them better. I also try my level best to understand their language’.

The observation checklist showed that teachers lacked appropriate strategies suitable for learners with SLD. It was observed that most of them used lecture method in most parts of the lesson instead of a more interactive teaching style focused on learner inclusivity in discussions and spoken conversation. This implies that teachers were not adequately equipped with relevant teaching techniques to perfectly meet the needs of individual learners’ communication disabilities. The teaching environment showed very limited direct teacher-learner interaction, lack of adequate time for learners to complete tasks and insufficient classroom learning space because some learners with profound physical impairments operated from their wheel chairs. The classroom learning environment did not fully meet the requirements of Vygotsky (1978), the proponent of social interactionist theory. Vygotsky argues that teachers are expected to intensify provision of improved social interactive, safe and comfortable learning environment for successful learning and development.
However, it was not clear to the researcher why most respondents did not involve all learners in the classes under observation but rather, preferred to give opportunity to those who had intelligible speech. This contradicts the opinion of Lee (2004) on the importance of giving feedback to learners through classroom discussions and opportunity to participate freely. This can be interpreted that, the respondents lacked enough knowledge and awareness of the importance of learning inclusivity despite learners’ disabilities.

Using the observation schedule, the researcher further observed that, learners who could not express themselves well tended to keep quiet and mainly withdrew in the classroom. This meant that, maybe they could be overlooked in the teaching context or they were reluctant to participate in the presence of the researcher who was unfamiliar with their speech imprecision. It was observed that some teachers proceeded to ensure lesson coverage with quite some reasonable neglect of a significant number of learners who had difficulties expressing themselves which contravenes the policy of Education for All through the Persons with Disabilities (Amendment) Act of 2007 which provides a comprehensive legal framework which outlaws all forms of discrimination against persons with disabilities.

4.5.1. Collaboration with any Inter-disciplinary Agencies

The study further sought to find out whether the school benefited from any collaborative systems geared towards facilitation and strengthening of the teaching programs for learners with SLD. This is illustrated in table 4.12.
Fourteen (58.3%) respondents confirmed that the school does not benefit much from inter-disciplinary team systems. Ten (41.7%) respondents reported that there were functional collaborative agencies working with the school to facilitate the teaching of learners with SLD. This information was given more emphasis by the head teacher who confirmed that the MOEST was actively involved in the teacher professional development, technical and material support.

During the interview with the head teacher, it was discovered that the school has partnered with Bethany Kids a Non-governmental organization (NGO) through Kijabe Mission hospital. The head teacher emphasized that the school benefited greatly from the partnership through research, material and technical support which was evidenced by an established physiotherapy and occupational therapy department manned by clinicians employed by the organization. Collaborative effort is reported in the study by Hartas (2004) to be largely crucial for enhancing consultation and expert advice for teachers of learners with SLD.

### 4.5.2. Available Teaching Materials Used by the Respondents

The respondents were required to provide information regarding availability of teaching materials in the school. They gave their responses as indicated in table 4.13.

<table>
<thead>
<tr>
<th>Presence of collaboration</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>14</td>
<td>58.3</td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>41.7</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
<tr>
<td>Are materials available?</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>83.5</td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>16.5</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Twenty (83%) respondents pointed out that the school did not have adequate teaching and learning materials. A respondent reported, ‘there are no devices that can enhance acquisition of communication skills in children with SLD’. Four (16%) respondents cited availability of a few resources including computers, adapted pens, physiotherapy materials and swimming pool.

Although in the interview the head teacher informed the researcher that the school had adequate teaching materials, it was observed that the available materials were extremely limited and could not fully meet the needs of learners with SLD.

From the observation checklist, the researcher observed some special pens, knitting needles and threads for creative art, few computers in some classes and a computer laboratory for computer programs. However, the observation checklist did not show the use of any augmentative communication devices or assistive communication technology except the few poorly maintained computers in some classes which were being used for typing notes by only a few learners.

Additional information on resource availability was obtained when the researcher found a well established functional physiotherapy department and a swimming pool facility for occupational therapy. Occupational therapy is very important to children.
with sensory complications but it cannot substitute speech therapy. Importantly, the two can simultaneously be administered for effective outcome.

4.5.3. Rating the Importance of Effective Communication to Learners

The figure 4.3 shows the results of how teachers rated the importance of effective communication to learners.

**Figure 4.3 Rate of importance of effective communication**

Twenty one (89.7%) respondents put a lot of emphasis on the importance of effective communication skills to school children arguing that it is the basis for their learning, social integration and future job placement. Two (8.3%) respondents equally indicated some recognition of significant importance of effective communication skills to learners with SLD while one person gave it an average score. The fact that none of the respondents objected to the opinion of the importance of effective communication skills, it is a clear indication of commitment by the respondents to assist learners with speech and language difficulties.
4.5.4. Future Trends to Improve the Teaching of Learners with Speech and Language Disorders

4.5.4.1. Responses on the Importance of Teacher Training

The respondents were expected to indicate the level of their agreement with the opinion that training of teachers is important. The results are shown in the following table 4.14.

<table>
<thead>
<tr>
<th>Training is important</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Agree</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>13</td>
<td>56.5</td>
</tr>
<tr>
<td>System</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Thirteen (56.5%) respondents strongly agreed with the view that training of teachers is important. A respondent emphasized, ‘more training is needed to acquire more skills to be able to assess and handle learners with SLD because the training we underwent did not include SLD’. 5 (20.8%) respondents on average agreed on the training of teachers. However, another five (20.8%) persons strongly disagreed on the importance of training of teachers arguing that the teaching of communication skills is the work of speech therapists. These responses indicate the need for teacher training and advocacy to increase awareness of learners’ communication needs and the importance of supporting teachers in their effort to reduce the impact of speech disability in the life of school children.
4.5.4.2. Responses on Training of Teachers as Key to Effective Intervention

It was required that the respondents indicate their opinion regarding training of teachers as key to effective intervention. The results are shown in the table 4.15.

**Table 4.15. Teacher training is key to intervention**

<table>
<thead>
<tr>
<th>Teacher training is key to intervention</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers gain teaching skills</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Teachers to treat learners equally</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>Teachers to teach professionally</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Teachers to provide regular support to learners</td>
<td>6</td>
<td>25.0</td>
</tr>
<tr>
<td>System</td>
<td>9</td>
<td>37.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Six representing 25% respondents argued that training of teachers is key to intervention. The fact that learners interact most with teachers shows that they can benefit more from well trained and competent teachers as reported by one respondent, ‘through training teachers will be more enlightened and will have skills to handle learners with SLD’. Five (20.8%) persons stressed that trained teachers are able to competently teach learners with SLD. Three (12.5%) respondents pointed out that when teachers are sufficiently trained, they can practice fairness among learners and treat learners equally as an intervention strategy. One person representing 4.2% saw the need to train teachers to promote their professional skills and knowledge. Nine (37.5%) respondents used the term ‘system’ to indicate the reason why teacher training is key to intervention. The use of this term in this case is again not clear to the
study and so, it further indicates knowledge deficit and need for more training and professional support to help teachers to execute their role in helping learners attain speech and language skills.

4.5.4.3. Responses on Measures to Improve the Teaching of Learners with Speech and Language Disorders

This section was used to support objective three on the teachers’ competence in the use of teaching strategies. The study intended to obtain suggestions from teachers about functional methods which can be used to promote their role in the teaching of communication skills for learners with SLD. The responses are shown in table 4.16.

Table 4.16.Measures Suggested by Respondents to Improve Teaching Strategies

<table>
<thead>
<tr>
<th>Measures</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training of teachers handling learners with SLD</td>
<td>9</td>
<td>42.9</td>
</tr>
<tr>
<td>Early intervention</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Speech therapy</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Visual aids</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>To engage learners in increased communication</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Empower teachers with knowledge, skills and resources</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Add a speech therapist</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Giving learners enough time to express themselves</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Provision of more equipment</td>
<td>4</td>
<td>19.0</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Nine (42.9%) respondents suggested training of teachers as the core factor to strengthen their knowledge and competence to increase their effectiveness as shown by a respondent, ‘train the teacher, allow them to attend in-service courses and provide adequate teaching and learning materials’. Four (19%) respondents felt that provision of more equipment and resources would greatly facilitate the teaching of learners with SLD. Two (9.5%) persons saw the need to provide speech therapy services in the school by speech therapists and empower teachers through consultative workshops and training. One person representing 4.8% emphasized on early intervention as the means to promote the teaching of learners with SLD. Another respondent (4.8%) suggested the need to provide enough time to the learners to enhance their opportunity to fully participate in learning activities. One respondent suggested the use of visual aids in classrooms and increased communication opportunities for learners to promote cognition, understanding and language competence as emphasized by a respondent, ‘provide a lot of visual aids and more time to enhance their communication’.

During the interview, the head teacher suggested provision of adequate resources and extra training for the teachers, concurring with the suggestion of the majority of the respondents. The head teacher also pointed out the importance of community advocacy to maximize teachers’ support to promote communication efficacy and learning progress. The head teacher felt that there is need for the government to establish a strong and functional department which can sufficiently support children with special educational needs. However, the head teacher confirmed that the government has so far, through the MOEST set up a Directorate of special needs
education, but asserted that there is need to give more impetus on communication needs particularly SLD which have not been given enough attention.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter presents the summary of the findings, conclusion and recommendations of the study and areas of further research.

The purpose of the study was to investigate the role of teachers in enhancing communication skills of children with speech and language disorders in Kiambu county, Kenya. The study was based on the following objectives:

To establish teachers’ knowledge about signs of SLD in the communication of learners in Joy town primary school, to find out the extent of knowledge possessed by teachers of learners with SLD in the school under the study and assess teachers’ competence in using teaching strategies to enhance communication skills of learners with SLD in Joy town primary school.

5.2. Summary

The findings of this research indicate that learners with SLD require specific considerations in educational policy and practice. These learners have different speech and language needs which make a significant impact in their communication progress and learning. The study notes that teachers have a high level of professional teaching proficiencies to implement national curriculum, but lack adequate skills in speech and language and so face a lot of difficulties with the performance of their role in
enhancing communication skills of learners with SLD. According to the findings of this study, teachers are not trained in speech and language pathology, hence lack adequate expertise and competence to accurately make differential recognition of signs of speech and language communication difficulties which adversely affect their role in the accomplishment of interventional plans and goals in the classroom setting.

The current study shows the need for adequate professional awareness, skill development and support services to enable teachers to fully promote the development of children with SLD towards their potential. In meeting learners’ needs, teachers will be moving towards achieving the aim of education which is to empower the child by developing his or her skills, learning and other capacities, human dignity, self-esteem and self-confidence (UN, 2001). This view aligns with the opinion of Daniel and Porter (2007) who points out on the importance of training teachers to be able to identify learners with speech disabilities to effectively meet their needs. The current study therefore, supports the need to train teachers in speech and language pathology to develop their awareness of the needs of children with speech and language disorders, and of strategies that might better meet these needs in the educational environment.

5.3. Conclusions

5.3.1. Teachers’ Knowledge about Signs of Speech and Language Disorders in the Communication of Learners.

Based on the findings, it can be concluded that adequate knowledge is required for accurate identification of SLD and effective classroom-based management. Although teachers are well trained to teach learners with special needs, they lack adequate
knowledge to accurately recognize speech and language communication disabilities and competently offer appropriate learner support.

It can also be concluded that, although teachers were concerned about their stress and presented anxiety in their inability to identify learners with SLD, they were determined to improve their teaching competencies to effectively identify and understand individual needs of learners with SLD. It can further be said that despite working through frustrating experiences and withdrawal tendencies of learners with severe speech imprecision, teachers struggled with difficulties to understand their needs, especially by giving them time to respond to questions and involving other learners who were more familiar with their peers’ speech to clarify what they said.

One can also say that, even though teachers lacked adequate skills to make specific comprehensive assessment decisions and appropriate interventional choices for learners with SLD, they worked with government support agencies including Education Assessment and Resource Centers (EARCS) to determine learners’ school and class placement. This effort can be enhanced by strengthening the link between the teaching and educational assessment systems through training opportunities and resource allocation which can successfully be translated into prospective achievement of learning and communication goals.

5.3.2. The Extent of Knowledge Possessed by Teachers of Learners with Speech and Language Disorders.

Secondly, it can be concluded that, teachers value working to support children’s communication and learning in the classroom environment. The finding have however, suggested that although teachers have expertise in their teaching discipline and can perfectly handle learners with other special needs they have limited
understanding about speech and language disorders. They are faced with numerous challenges identifying learners who require specialized teaching which has remained a hindrance to the implementation of successful early intervention programs in the classroom context. The biggest challenge is lack of relevant skills, support and informed corrective measures to remediate learners’ communication difficulties. However, since teachers are professionally trained to competently accomplish teaching dispensations, one can therefore conclude that, they have potential to execute interventional teaching practices, if enhanced with relevant expertise and competencies to foster learners’ speech and language communication skills. It is therefore, necessary to streamline the existing teacher supportive programs and establish long-term service plans and delivery to expose them to greater understanding of SLD, improve teaching competencies and increase their learners’ academic opportunities and social engagement.

Again in conclusion, most special education teachers have university degrees in special needs education and thus, their ability to execute educational curriculum cannot be underestimated. However, since the majority of them are not trained in SLD, the study has shown the need to create adequate training opportunities to increase teachers’ awareness of the needs of learners with SLD to increase their confidence and reduce assessment and teaching difficulties.

The study findings suggest that, any actual progress to absolutely regulate the distinctive elements pertaining to the teaching dynamics to predominantly adjust the role of teachers as the more knowledgeable other (MKO) is indicative of a complementary output of enhanced communication and learning outcome of learners
with SLD as advanced by Social Interactionist Theory of Vygotsky. In the theory, the teacher as the MKO is able to progressively take learners forward from one level of knowledge to another referred to as the Zone of Proximal Development (ZPD). Vygotsky confirms that there is need to train teachers to be more skillful and competent to effectively support learning processes.

One can further say that the current study has propelled further, the view of social interactionist theory by highlighting the significance of teachers’ knowledge about SLD to the accomplishment of interventional teaching and communication learning outcome for learners with SLD. The study has provided evidence on the scarcity of knowledge about SLD and inadequate support for teachers thus, providing support for the need to establish supportive systems and training programs for them to confidently work against the underlying challenges and effectively conduct their role in enhancing communication skills of learners with SLD.

5.3.3. Teachers Competence in Using Teaching Strategies to Enhance Communication Skills.

Thirdly, one can say that despite their knowledge deficit in SLD, teachers formulated their own strategies to enhance the development of their learners’ communication skills. However, the strategies did not reach the standard expected in the evidence-based interventional teaching practices as discussed in the study background and literature review (see section 1.2 and 2.4 respectively).

It can also be concluded that, teachers have made effort to work in partnership with supportive organs including government agencies and non-governmental organizations. Although the study does not ignore the benefits obtained from the
available partnerships, it is apparent that the said partners have not given much focus on the communication challenges affecting learners with SLD, hence have not done much to adequately support teachers to maximally enhance the communication efficacy of school children.

Finally, the findings of the study represent an ideal reflection of the researcher’s own conceptualization of the study, which shows that the ultimate interventional teaching outcome of communication skills is determined by the teachers’ role which involves classroom instructions, assessment, making referrals for diagnostic evaluations and liaison with other related professionals for consultations and expert advice. The outcome of enhanced communication skills, is relative to the teachers’ training in SLD and knowledge to competently utilize informed teaching strategies to remediate learners’ communication difficulties. Teachers’ positive attitude towards learners with SLD has a positive influence on the final outcome of learners’ communication abilities. Lack of teacher training and expertise in SLD and lack of competence to appropriately use teaching approaches work against the achievement of the intended outcome. Having negative attitude, may tend to promote stereotyped thinking and negative impressions among learners with SLD and this is likely to adversely affect the performance of teachers in enhancing communication skills of learners with SLD. The study necessitates the need to sufficiently promote the role of teachers by ensuring adequate access to training and in-service opportunities to supplement their professional teaching expertise and experience with interventional techniques that are profoundly beneficial to learners with SLD.
5.4. Recommendations

5.4.1. Policy recommendations

The study findings and conclusions have led to the following recommendations:

1. The government should ensure integration of training in speech and language pathology in the teacher training curriculum and ensure a long-term on-going process of teacher professional development, through workshops, inductions and in-service programs in speech and language pathology to empower them with knowledge and skills about SLD to make accurate identification, assessment and informed choices of interventional teaching approaches to meet the expected teaching standards of learners with communication disabilities.

2. Although teachers lack adequate skills to identify learners with SLD, they work with government support agencies including Education Assessment and Resource Centers (EARCS) to determine learners’ school and class placement. The government should strengthen this cooperation by supporting teachers with relevant skills through seminars, workshops and advocacy programs, integrating speech and language support services and parental input into the educational assessment practices to foster learners’ communication and school progress.

3. The government and other related stake holders should help to provide teaching equipment suitable for learners with SLD to promote teaching competence and efficiency. They should prioritize resource allocation, including Augmentative and alternative communication systems (AAC) to
support learners with severely impaired speech to help them communicate more effectively with teachers during classroom instructions.

4. Teachers should be part of multi-disciplinary teams for joint diagnostic evaluations and liaison to share joint understanding about classroom experiences, enhance expert advice and increase technical support.

5. Learners with SLD require specific considerations in educational policy and practice, for example, the Ministry of Education through the Kenya Institute of Curriculum Development should carefully evaluate the special needs curriculum to sufficiently meet the diverse needs of learners with SLD, including making drastic changes that can facilitate and pave way for possible teaching adaptations and adjustments to promote classroom participation, academic progress and social integration.

6. The government should establish a scheme of service for speech and language pathologists in the country and deploy them not only to hospitals, but also to schools to provide school-based speech and language services and work jointly with teachers to initiate consultative teaching and increased collaboration to promote accuracy and effectiveness in the diagnostic assessments and intervention in the school perspectives.

7. Teachers have made effort to work in partnership with supportive organs including government agencies such as Ministry of Education Science and Technology and non-governmental organizations, but the partnership has so far, not given much focus on the communication challenges affecting learners with SLD. Teachers, government and other agencies should strengthen these partnerships focusing more on teacher empowerment and resource provision.
geared towards meeting learning and communication needs of learners with
SLD.

8. The Ministry of Education and the Ministry of Health should work together to
support teachers to establish a consistent approach to the development of
evidence-based integrated intervention strategies for children with SLD.

9. The government should make specific considerations in the educational policy
and practice to ensure that existing and future leadership boards include
parents and care givers and an expert in speech and language to inform
strategic decisions.

10. The Ministry of Education should make knowledge about speech and language
pathology a core requirement of qualification of teachers to teach learners who
have challenges in speech and language.

5.4.2. Recommendations for further research

The study recommends a further research to be conducted to examine
collaboration among teachers and speech-language pathologists to promote
children’s literacy and language to enlighten on the need to establish
appropriate integrative school interventional approaches with a view to helping
children become effective communicators, problem solvers and decision-
makers and benefit from a fulfilling and excellent learning experience.
References


Stanley, C. (2002). *Knowing and Acknowledging, Must We Mean What We Say?* Cambridge: Cambridge University Press, 238-266.


APPENDICES
APPENDIX I: INTRODUCTORY LETTER

My name is Alusiah Thaara Munyi. I am carrying out a research in Kiambu County on teacher involvement in enhancing communication skills of children with SLD. To achieve this, you and your teaching staff have been selected to participate in the study. I assure you that all the given information will be treated with utmost anonymity and confidentiality and will be used for academic purpose only.

Your assistance and cooperation will be highly appreciated.

Thank you in advance.

Yours faithfully,

Alusiah Thaara Munyi
Master student, Speech and Language Pathology
Department, Special Needs Education
Kenyatta University
Date: _____________
APPENDIX II: INTERVIEW GUIDE FOR HEAD TEACHER

A. Personal data

1. Are you trained in communication needs?
2. Do you have any knowledge of speech and language disorders?

B. Information on signs of speech and language disorders.

3. How are children with SLD in the school identified?

C. Information on knowledge of SLD

4. Kindly explain briefly how the school supports teachers to develop their professional knowledge to competently teach children with SLD?

D. Information on competence in using teaching strategies to enhance communication skills.

5. Do teachers have adequate instructional materials to enhance the teaching of communication skills of children with SLD in the school?
6. Does the school work with any agency to support teachers in enhancing communication skills of children with SLD in your school?
7. What kind of support do they receive?

E. Information on measures to enhance the teaching of children with SLD

8. What steps do you think should be taken to improve the teaching of communication skills of children with SLD in your school?

Thank you for your participation
APPENDIX III: QUESTIONNAIRE FOR TEACHERS OF CHILDREN WITH SLD

This questionnaire has been designed for the sole purpose of collecting data on the teacher involvement in enhancing communication skills of children with SLD. The data to be collected will be treated with a very high degree of confidentiality and will be used for academic purpose only.

A) Background information

Please provide the following information by filling as required.

1. Please indicate your gender
   a) Male [   ]
   b) Female [   ]

2. Kindly indicate your age bracket
   i) Below 35 [   ]
   ii) 35-40 [   ]
   iii) 40-45 [   ]
   iv) 45-50 [   ]
   v) Over 50 [   ]

3. What is your professional qualification?
   i) P1 [   ]
   ii) S1 [   ]
   iii) Diploma [   ]
   iv) ATS1 [   ]
   v) Graduate [   ]
   vi) Master [   ]

B) Information on identification of signs of speech and language disorders

1. How are children with SLD in your school assessed?
   Please explain briefly……………………………………………………………………………..
   ………………………………………………………………………………..
2. Who diagnose them?
   i) Teachers [ ]
   ii) Speech and language pathologists [ ]
   iii) Doctors [ ]
   iv) Not sure [ ]
   v) None of the above [ ]

3. Are you involved in the assessment?
   Yes [ ]          No [ ]

4. Go through the following list and tick if the given signs are portrayed by learners with SLD in the school.

<table>
<thead>
<tr>
<th>Signs of SLD</th>
<th>Teachers’ findings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present</td>
</tr>
<tr>
<td>1. Omission of sounds (fi’ for fish)</td>
<td></td>
</tr>
<tr>
<td>2. Substitution errors (fith for fish)</td>
<td></td>
</tr>
<tr>
<td>3. Distortion errors (a lisped sh in fish)</td>
<td></td>
</tr>
<tr>
<td>4. Addition errors (fisha for fish)</td>
<td></td>
</tr>
<tr>
<td>5. Sound repetition .e.g. boy</td>
<td></td>
</tr>
<tr>
<td>6. Limited vocabulary content</td>
<td></td>
</tr>
<tr>
<td>7. Incorrect use of morphological items(e.g. plurals)</td>
<td></td>
</tr>
<tr>
<td>8. Inability to form phrases/sentences</td>
<td></td>
</tr>
</tbody>
</table>

C) Information on teachers’ professional knowledge

5. What do you understand by SLD?
   ……………………………………………………………………………………………………………………………

6. Do you have any special training in SLD?
   Yes [ ]     No [ ]

7. If yes, where were you trained?
   ……………………………………………………………………………………………………………………………
8. Would you prefer more training? Give reasons
.................................................................
.................................................................
D) Information on competence in using teaching strategies to enhance communication skills
9. Which strategies do you use to enhance communication skills of children with SLD? Specify
........................................................................
........................................................................
10. Indicate by ticking the description that best describes your level of confidence in the teaching of communication skills to children with SLD (Tick one)
   i. Very confident [   ]
   ii. Confident [   ]
   iii. Not confident [   ]
   iv. Not sure [   ]
   v. Sure [   ]
11. Do you experience difficulties in working with children with SLD? Kindly explain your response
........................................................................
........................................................................
12. Do you collaborate with any inter-disciplinary agency to support children with SLD in the school?
   Yes [   ]  No [   ]
13. Do you have adequate materials/equipments to facilitate the teaching of communication skills to children with SLD? Please specify.
........................................................................
........................................................................
14. How would you rate the importance of effective communication skills to learners? (Tick one).
   i) Very important [   ]
ii) Important [ ]
iii) Average [ ]
iv) Not important [ ]
v) Less important [ ]

15. Is there anything else you would like to add that would help me learn how you help children with SLD improve their communication skills?............................


E) Information on future trends to improve the teachers’ intervention strategies.

16. It is important to support teachers to promote the teaching of children with SLD. (Tick one).
   i) Strongly disagree
   ii) Agree
   iii) Not sure
   iv) Disagree
   v) Strongly agree

17. Training of teachers is key to their effective role in the intervention. Please give your opinion..............................................................

18. In your own view which measures do you think should be put in place to improve Instructional strategies for children with SLD?........................................

Thank you for your participation
APPENDIX IV: OBSERVATION FORM FOR TEACHERS

1. Knowledge and competence
   a) Shows good command and knowledge of SLD------------
   b) Demonstrates confidence in teaching children with SLD------

2. Teaching strategies
   a) Uses appropriate teaching techniques------------
   b) Instructional materials-------------
   c) Group involvement-------------

3. Teaching environment
   a) Positive learning environment---------
   b) Encouraging appropriate behavior--------
   c) Direct interaction with children---------

4. Organization
   a) Emphasizing main points---------
   b) Monitors children’s responses through listening and observing------
   c) Is thorough---------

5. Rapport
   a) Holds interest of children--------
   b) Is fair and impartial---------
   c) Provides feedback through error correction and guidance------
   d) Encourages participation---------
   e) Interacts with children---------

6. Assistance to children
   a) Assists weak children --------
   b) Involves all children---------
   c) Provides adequate time for responses--------
APPENDIX V: APPROVAL OF RESEARCH PROPOSAL

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@kun.ac.ke
Website: www.kun.ac.ke

Internal Memo

FROM: Dean, Graduate School
TO: Munyi Alusia Thaara
     C/o Special Needs Education Department

DATE: 28th February, 2017
REF: 535/29053/2014

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

We acknowledge receipt of your revised Research Proposal as per our recommendations raised by the Graduate School Board of 25th January, 2017 entitled “Teacher Involvement in Enhancing Communication skills of Children with Speech and Language Disorders, Kiambu County, Kenya”.

You may now proceed with your data collection, subject to clearance with the Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University’s Website under Graduate School webpage downloads.

Thank you.

JULIA GITU
FOR: DEAN, GRADUATE SCHOOL

CC: Chairman, Special Needs Education Department

Supervisors:

1. Dr. Tom Abuoni
   C/o Special Needs Education Department
   Kenyatta University

2. Dr. Mathew K. Kuria
   C/o Special Needs Education Department
   Kenyatta University

GC/room
APPENDIX VI: RESEARCH AUTHORIZATION

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: E55/29053/2014

DATE: 28th February, 2017

Director General,
National Commission for Science, Technology
& Innovation
P.O. Box 30623-00100,
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MUNYI ALUSIAH THAARA – REG. NO.
E55/29053/2014

I write to introduce Ms. Munyi Alusiah Thaara who is a Postgraduate Student of this
University. She is registered for M.Ed degree programme in the Department of Special Needs
Education.

Ms. Thaara intends to conduct research for an M.Ed Proposal entitled, “Teacher Involvement in
Enhancing Communication skills of Children with Special and Language Disorders, Kiambu County,
Kenya”.

Any assistance given will be highly appreciated.

Yours faithfully,

MRS. LUCY N. MBAABU
FOR DEAN, GRADUATE SCHOOL

28 FEB 2017

APPENDIX VII: RESEARCH PERMIT

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Ref: NACOSTI/P/18/77119/21766

Alusia Thaara Munyi
Kenyatta University
P.O. Box 43844-00100
NAIROBI

DATE: 5th September, 2018

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Teacher involvement in enhancing communication skills of children with speech and language disorders. A case of Jaytown Special Primary School Kiambu County, Kenya” I am pleased to inform you that you have been authorized to undertake research in Kiambu County for the period ending 5th September, 2019.

You are advised to report to the County Commissioner and the County Director of Education, Kiambu County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:
The County Commissioner
Kiambu County.
The County Director of Education
Kiambu County.