

UNIVERSITY OF EDUCATION, WINNEBA

**APPROACHES TEACHERS USE IN TEACHING DAILY LIVING SKILLS
TO PUPILS WITH VISUAL IMPAIRMENT AT AKROPONG SCHOOL FOR
THE BLIND IN THE EASTERN REGION OF GHANA**



**A THESIS IN THE DEPARTMENT OF SPECIAL EDUCATION, FACULTY
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PARTIALFULFILLMENT OF THE REQUIREMENTS FOR AWARD OF
THE MASTEROF PHILOSOPHY (SPECIAL EDUCATION) DEGREE**

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DECLARATION

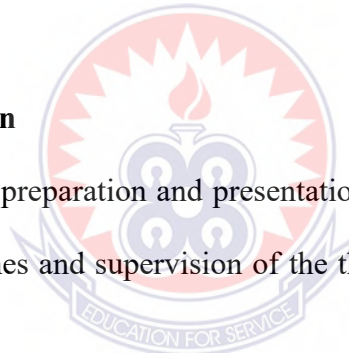
Student's Declaration

I, Belinda Asamoah, declare that this thesis, with the exception of quotations and references contained in published works, which have been identified and acknowledged, is wholly my own original work and it has not been submitted, either in part or whole, for another work elsewhere.

Signature: **Date:**

Supervisor's Declaration

I hereby declare that the preparation and presentation of this thesis was supervised in accordance with guidelines and supervision of the thesis laid down by the University of Education, Winneba.



Principal Supervisor: Dr. Yaw Nyadu Offei

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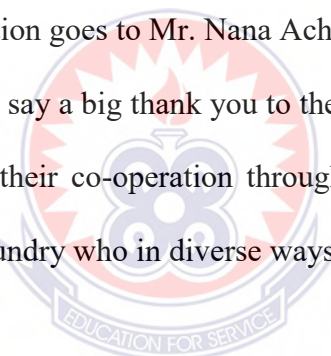
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DEDICATION

I wholeheartedly dedicate this work to my husband and children.



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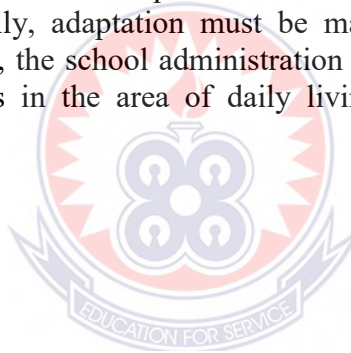
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ABSTRACT

The purpose of the study was to find out the approaches teachers use to teach daily living skills to pupils with visual impairments at Akropong School for the Blind. The study was mainly qualitative and adopted a case study design. The study used purposive sampling technique and semi-structured interview guide was used to gather data from 10 participants. The findings revealed that hand-over-hand technique; hand-under-hand method, and peer tutoring were approaches teachers used to teach daily living skills to the pupils. Teachers mainly concentrated on three areas of daily living skills which included personal care skills, housekeeping skills and home management skills. Additionally, teachers made use of tactile learning materials, visual learning materials and few auditory learning materials as ways of adapting the daily living skills for the pupils. The results of the study revealed challenges teachers face during the teaching and learning of daily living skills which included, inadequate provision of teaching and learning materials, and lack of fine motor skills and poor teacher-pupil ratio. Views of the pupils with visual impairment were also sampled. The researcher further recommended that, the school must include the areas of the daily living skills in the school curriculum; teachers should make use of other approaches such as one-on-one teaching, teacher-directed approach and group learning. Again, teachers should make intensive adaptations to the environments and teaching and learning materials. Finally, adaptation must be made to the environment and the materials available. Also, the school administration should provide intensive training opportunities to teachers in the area of daily living skills in order to reduce the challenges.



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Daily living skills (DLS) are the countless activities that human beings perform almost on daily basis of their lives. They include activities such as self-care, home living, personal hygiene, housekeeping, communication, socialization, time and money management and organizational skills (Holiday, 2013; Seesurun, 2015). DLS have been widely discussed in areas of intellectual disability, multiple disabilities and autism spectrum disorder (Riosa & Accardi, 2012; Ruteere, 2009; Ruteere, Muta, & Runo, 2015). Similar to individuals with intellectual disability, multiple disabilities and autism spectrum disorder, visual impairments may be caused by either congenital or adventitious factors. Individual with visual impairment also manifest some limitations including difficulties in daily living skills.

In Africa, it is believed that one in every 1,000 children is visually impaired compared to one in every 5,000 in Europe and North America (Ocloo, 2012). Ocloo concluded that on a small population of children with visual impairment in Africa find themselves in schools for the children with visual impairments. The Vision 2020 Action Plan (2006-2011) added that, in Africa there are about 300,000 children who are blind, who manifest difficulties in DLS. Also, the World Health Organization [WHO] (2017), reported that about 285 million people all over the world have visual impairments, with 39 million with total blindness and 246 million having severe visual impairments with majority of them lacking daily living skills for independent living.

Development of DLS allow pupils with visual impairments to socialize in their communities with better outcomes (Weaver, 2015), develop healthy personal and family relationships, become a well-groomed person, learn scientific management of self and home, become aware of safety precautions to be taken in the home, expedite comprehensive rehabilitation including economic independence, develop a positive self-image and reduce dependence upon care-takers (Activities of Daily Living Skills, 2017). A study by Odera, Makorimoke, and Odongo (2016), the results revealed that children with visual impairments need DLS to empower and equip them to fit in their communities and enable them to gain personal self-esteem.

The developed curriculum lacks essential skills that would otherwise help persons with visual impairments; therefore, they remain dependent on sighted persons to a certain extent for self-reliance in their daily living activities. Limited research had been done to explore the influence of curriculum in the acquisition of DLS by learners with visual impairments and how the skills are helping them cope independently after their transition to adulthood (Avoke 2005).

Recognizing the difficulties of pupils with visual impairments in performing DLS, teachers employ variety of approaches to teach these skills to them. Olurunda and Ogunleke (2006), reported that children with visual impairments were not trained in DLS in the olden days although it was necessary for their independent living. Even though, research on daily living skills in youth and adults with visual impairment is limited, existing studies show that daily living skills development needs to start at a younger age (Hendricks & Wehman, 2009; Kanne, Gerber & Quirnbach, 2011; Smith, Maenner, & Seltzer, 2012; Thomson, Walters, & Martin, 2011).

Majority of pupils with visual impairments lack the ability to develop daily living skills incidentally through observation (Strickling, 2010), therefore, appropriate approaches for teaching pupils with visual impairments those skills is important if these children are to benefit from instruction in daily living skills. Independence, in and outside school, can only be achieved if teachers use effective approaches in teaching DLS to pupils with visual impairments. Thomson, Walter and Yu (2011) stated that several approaches have been used to teach DLS to youth and adults with disabilities especially those with autism. These, according to authors, include verbal, gestural or physical prompting, reinforcement or praise, task analyses and error correction procedures. In addition, role-playing social situations, individual instruction, pictures, virtual realities, hands-over-hand coaching and peer tutoring have been found to be effective in teaching DLS (Laarhoven et al., 2010; Stoddart, Burke, & King, 2012). Ocloo (2001; 2003) is of the view that pupils with visual impairment learn DLS better when tactual materials, audio materials and real objects are used in the process of teaching these skills.

Visual materials that teachers use to teach DLS need to be adapted for use by pupils who do not have the visual skills required for the task. Adaptations that meet the needs of pupils with visual impairments are important considerations if students with visual are to successfully learn these skills. Naidoo (2014), found in a study that there was inadequate adapted teaching and learning materials for training pupils with visual impairment in early childhood development in order to acquire DLS. These adaptations are possible where teachers have the professional competence to adapt materials to suit pupils with visual impairment. Even professionally competence teachers face challenges including large pupil-teacher ratio and poor fine motor skills in the process of teaching DLS to students with visual impairments.

In spite of the importance and need to teach DLS to pupils with visual impairments, there is limited research conducted regarding DLS for pupils with visual impairments although there is enough research conducted on DLS on persons with other disabilities such as mental retardation, autism spectrum disorder and multiple disabilities.

1.2 Statement of the Problem

DLS play a significant role in the functioning and integration of pupils with visual impairments in school and in the mainstream society. They include activities such as self-care, home living, personal hygiene, housekeeping, communication, socialization, time and money management and organizational skills. DLS enable pupils with visual impairments to, develop healthy personal and family relationship, communicate effectively, learn scientific management of self and home and above all becomes independent in life (Holiday, 2013; Seesurun, 2015). However, sighted pupils learn DLS incidentally whereas pupils with visual impairment due to their disability are not able to learn DLS incidentally, pupils with visual impairment look unkempt, and it appears pupils with visual impairments are not taken through the appropriate approaches to learn DLS.

There seems to be many areas of teaching daily living skills to pupils with visual impairments. However it is not known the specific areas teachers at Akropong School for the Blind teach pupils with visual impairments in the school.

In addition, teaching children with visual impairments require appropriate adaptation to the teaching and learning materials, yet, very little is known about adaptations teachers in Akropong school for the blind make to the teaching and learning materials available for teaching DLS to pupils with visual impairments at Akropong School for the Blind. Finally, Mugambi (2015) reported in his study that

teachers face challenges in teaching pupils with visual impairment, but it is not clear the specific challenges teachers at Akropong School for the Blind face in teaching DLS to children with visual impairment.

1.3 Purpose of the study

The purpose of the study was to find out the approaches teachers use to teach DLS to pupils with visual impairment at Akropong School for the Blind in the Eastern Region of Ghana.

1.4 Objectives of the study

The study specifically sought to:

1. Find out the approaches teachers use to teach DLS to pupils with visual impairments at Akropong School for the Blind.
2. Identify the areas of DLS teachers teach pupils with visual impairments at Akropong School for the Blind.
3. Find out adaptations teachers make to learning materials when teaching DLS to pupils with visual impairments in the school at Akropong School for the Blind.
4. Identify the inherent challenges teachers in Akropong School for the Blind encounter in teaching DLS to pupils with visual impairments.

1.6 Significance of the Study

The results of the study would help in revealing the approaches teachers use to teach DLS, for pupils with visual impairment in Akropong School for the Blind. This will enable the school authorities to find means of exposing the teachers to other specific approaches for teaching DLS.

The results of the study would help in revealing the areas of DLS that are taught to pupils with visual impairments in Akropong School for the Blind. This will help pupils gain knowledge in daily living activities that can help them have independent lives.

The findings from the study would also bring to light the various adaptations teachers make in teaching and learning materials they use in teaching DLS to pupils with visual impairments. This would help teachers know the specific adaptations that should be made to teaching and learning material during teaching and learning of DLS.

The results of the study would further help in revealing challenges teachers face in teaching DLS to pupils with visual impairments. This would further allow teachers to find ways of addressing the challenges in order to improve upon the teaching of DLS. Finally, the results of the study would also add up to existing literature for any researcher interested in similar studies.

1.5 Research Questions

The following research questions were formulated to guide the study:

1. What approaches do teachers use in teaching DLS to pupils with visual impairments at Akropong School for the Blind?
2. What areas of DLS do teachers teach pupils with visual impairments at Akropong School for the Blind?

3. What adaptations do teachers make to learning materials when teaching DLS to pupils with visual impairment at Akropong School for the Blind?
4. What inherent challenges do teachers encounter in teaching DLS to pupils with visual impairments at Akropong School for the Blind?

1.7 Delimitation of the Study

According to Simon and Goes (2011), the delimitations of a study is the scope of the study defining the boundaries of the study. Even though, there are pupils with visual impairments in other special schools in Ghana, this study focused on only pupils with visual impairments at Akropong School for the Blind. The study particularly focused on the, approaches teachers use to teach DLS to pupils with visual impairment, areas of DLS teachers teach pupils with visual impairments adaptations teacher make to teaching and learning materials in teaching DLS and the inherent challenges teachers face in teaching DLS to pupils with visual impairments at Akropong School for the Blind in the Eastern Region of Ghana.

1.8 Limitation of the Study

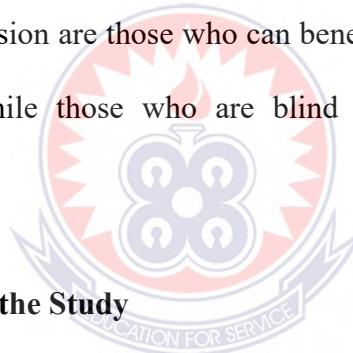
The sample size was limited to 10 participants. This made the findings unlikely to be generalized to a wider population especially because the number of teachers of pupils with visual impairments in the study was very small. The study may have generated other findings if a larger number of participants were involved. Again, it was difficult arranging appointments with the teachers because of scheduling difficulties. The researcher overcame this challenge by visiting the teachers in their homes on Saturdays for data collection.

1.9 Operational Definition of Terms

Approaches: This refers to methods use for teaching daily living skills to pupils with visual impairments

Daily living skills (DLS): This refers to everything entailed in human life and relationships. They are the basic activities necessary during an ordinary day. There are hundreds of activities which a person performs from the moment he wakes up in the morning till he goes to sleep at night.

Pupils with visual Impairments (children with visual impairments) : Pupils with visual impairments is an umbrella concept encompassing pupils with various degrees of visual loss. It is used to mean both students who vision loss and those who are blind. Pupils with low vision are those who can benefit from print material with some form of adaptations while those who are blind benefit from tactile, audio and electronic materials.



1.10 Organization of the Study

The thesis was presented in five chapters. Chapter one comprised the background to the study, statement of the problem, aim and objectives of the study, research questions, significance of the study, delimitations of the study, limitations, and operational definition of terms and general layout of the study. Chapter two focused on the literature reviews and the theoretical framework of the study. Chapter three dealt with the methodology with the focus on the research approach, research design, population, sample size, sampling technique, instruments used in data collection and data analysis, instruments use to collect data. Chapter four covered the presentation and analysis of data collected, interpretation and discussion of results.

Finally, the summary of findings, conclusions, recommendations and suggestions for further research formed the concluding chapter of the report.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the literature reviewed for the study. The literature was reviewed from research articles, refereed journals, and books. The literature reviewed first covered the theoretical framework and the review on the key themes raised in the research questions. The areas covered were:

1. Theoretical Framework
2. Approaches teachers use to teach daily living skills to children with visual impairments.
3. Areas of daily living skills teachers teach pupils with visual impairments.
4. Adaptations teachers make in teaching DLS to pupils with visual impairment
5. Inherent challenges teachers face in the teaching and daily living skills to pupils with visual impairments face
6. Summary of literature review

2.1 Theoretical Framework

The study was guided by Albert Bandura's Social Theory of Learning (1977). Bandura explained that human beings are influenced by their environment. These means that learning a skill involves the use of external and internal reinforcements. Teachers used varieties of approaches to demonstrate skills to be learnt to pupils. Learners would pay attention to demonstrations with high status, high competences, and expertise which the learners believed their teachers have.

Social Learning Theory involves demonstrations that are rich and well understood by learners. Social Learning by Bandura consisted of demonstration

(demonstration at the learning pace of learners, remembering what had been learned, and motivation, i.e., the ability to perform skills learnt independently (Kirk & Gallagher, 1989). Teachers are therefore expected to provide conducive environments for learners. Another important aspect of social learning that Kirk and Gallagher identified was self-efficacy. Self-efficacy, according to the authors, refers to peoples' judgment of their capabilities to organize, execute and accomplish certain performances. It is the teachers' responsibilities to ensure self-efficacy for their learners by guiding learners with child-centered teaching approaches, verbal prompts and emotional arousal that assist learners to acquired skills with ease. With these conducive environments provided by teachers, children with visual impairments would acquire DLS to become independent.

The implication of Bandura's (1977) Social Learning Theory on approaches teachers use to teach DLS is that, teachers must use approaches that are appropriate to the learning styles of pupils with visual impairments. Therefore, teachers must place pupils with visual impairments first place in teaching DLS. Also, teachers must demonstrate high competences, and expertise in teaching DLS. Furthermore, teachers need to motivate pupils with visual impairments so that they can learn.

2.2 Approaches Teachers use in Teaching Daily Living Skills

Approaches teachers use in teaching differ from teacher to teacher, and subject to subject. Teaching DLS as practical skills may require different approaches to teach than other subjects that do not impart practical skills.

Adjorlu, Hoeg, Mangano, and Serafin (2017) conducted a study to investigate how DLS training in virtual reality helps children with autism spectrum disorder in a real shopping scenario. This experimental study was conducted in a period of ten days. Nine participants, between the ages of 12 and 15, were randomly selected for the study. A pre- and post-experience performance was observed. Virtual reality training followed a baseline assessment in a real supermarket. After running seven virtual reality training sessions over 10 days for the treatment group, participants were assessed again in the real supermarket. The results indicated that there were some benefits of training in DLS using virtual reality. Participants showed significant progress in shopping in the real supermarket.

Patrick (2016) employed the descriptive survey design to examine the effect of teachers' use of communication techniques in teaching activities of DLS to learners in selected schools in Uganda. Patrick used the semi-structured interview and observational guide for children with deaf-blindness at the Government Primary School in Uganda. The theory that guided the study was; Social Interaction and Language and Communication. Purposive sampling technique was used to select 30 teachers and 10 learners with deaf-blindness. Findings from the study revealed that, teachers were not trained in the use of communication technique for teaching DLS. Again, it was further found that, communication skills such as hand-under-hand, tactile technique, and sign language were not used properly. The study recommended that, the Ugandan Government should embark on capacity building by training more

teachers in the area of deaf-blindness by securing scholarship opportunities for people interested in serving learners with deaf blindness.

A study by Ruteere (2009) employed the descriptive research design to investigate the effectiveness of teaching methods for DLS to learners in special units in primary schools in sub-country Kasarani, in Kenya. The study used open-ended questionnaire and observational checklist to collect data from participants. The findings of the study showed that learners with intellectual disabilities and visual impairments were not taught DLS effectively, because teachers did not use appropriate methods that met the needs of the learners. Additionally, the study found that, teachers used peer tutoring, team teaching, individual instruction and co-operative teaching to teach DLS to learners with intellectual disabilities. It was recommended that schools with special units must be headed by teachers who are specialists in the area of intellectual disabilities, because they can better understand the needs, abilities, and interests of the learners and provide appropriate learning environments for them. Also, teachers with good background training in intellectual disabilities can offer necessary support to the teachers in the units. Aykut, Emecan, Dayi, and Karasu (2014) also found out that using video prompting in small group instruction helped students with intellectual disabilities to acquire skills such as peeling orange, stitching, and folding a paper puppy.

Ivy (2014) carried out an analysis of graduated guidance to teach spoon-use to children with multiple disabilities. She employed interview and observation to collect data. The measurement system for this study included descriptive assessment, the dependent measure and procedure fidelity. For reliability, two independent observers, and a graduate student in vision program of study were trained to collect data on the dependent measure and procedural fidelity. Multiple probe design, with inter and

intra- subject replication was planned across four participants and three instructional settings. There were three student participants in the study, each participant was given 58-70 experimental sessions. The study revealed that, three participants improved in performance of spoon feeding with the use of graduated guidance. The study recommended that; administrators should motivate teachers to provide training for learners.

Mikiashvili (2011), explored the strategies for solving tasks by persons with blindness. The author employed a qualitative methodology with purposive sampling technique to sample participants for the study. For the purpose of the study, participants were to meet a set of criteria as regards age, length of loss of sight and degree of vision. Seven respondents (4 males and 3 females) participated in the study. Semi-structured interview was employed to collect data for the study. The themes on the interview guide were based on participants' background, and their ability in (a) self-care, (b) personal hygiene, (c) matching clothes to one another, (d) getting dressed, (e) bed-making, and (f) strategies for recognition of personal belongings using mental images. The findings of the study revealed that; strategies used to teach mental images to individuals with blindness assisted children with visual impairments and blindness to perform DLS. The study recommended that essential course should be designed to teach persons who recently have become blind how to perform basic DLS activities using mental images in addition to what they have.

In 2014, Wanjiku conducted a study on the teaching strategies used by teachers to enhance learning to learners with multiple disabilities in selected special schools in four counties in Kenya. The study employed the triangulation mixed-method design and used interview, Likert scale questionnaire and observation guide as instruments for data collection. The target population for the study comprised of

teachers of learners with multiple disabilities and head teachers from special units. The sample for the study was 66 (9 head teachers and 57 teachers). The study used descriptive statistics for the quantitative data where tables of frequencies, mean, standard deviation, and percentages were used to analyse data. Qualitative data were analysed using descriptions and thematic texts. Results revealed that majority of the teachers taught learners with deaf-blindness. Further, the study revealed that teachers of learners with cerebral palsy and intellectual disability used task analysis, activities of daily living, and real objects. The study recommended that enough training should be given to teachers teaching learners with multiple disabilities. The current study aims at finding out the approaches teacher use in teaching learners with visual impairments using the qualitative approach.

Hand –over -hand method

Hand-over hand method was also known as hands –on signing, which describes a situation where the receivers’ hands are placed upon the back of the hands of the signer to read the signs through touch and movement (Wanjiku, 2014). Walker (2014) opined that hand-over-hand is only one form of person-to-person contact. She further added that, overuse of person-to-person contact can lead to problems. Freeman, (1985), McInnes and Treffry, (1982), and Walker (2104) indicated that hand-over-hand guidance is the easiest technique in which an adult puts his or her hand over hand of a student with visual impairment to assist that particular teacher to teach DLS to students with visual impairments at school and at home.

Coonts (2005) propounded that hand-over-hand approach was commonly used to teach skills and routines to children with visual impairments by teachers and parents. Coonts further explained that these approaches can be effective during the early stage of teaching a DLS with perfection of DLS this approach should be

discourage to allowed independence of the student with visual impairment. Most children with visual impairment dislike having their hands manipulated and feel threatened by the lack of control. Others become passive and prompt-dependent. They learn to wait for an adult's hand on their own as a prompt to initiate an action (Downing, 1999; Miles, 1998). However, hand-over-hand guidance may be an essential strategy for children who have severe physical disabilities because they often need assistance to manipulate and explore objects. Teachers use hand-over-hand approach to teach brushing of teeth, table setting, table manners and personal hygiene. The Special Issue (2004), stressed that in using the hand-over-hand approach to teach children with visual impairments, a teacher would grasp the back of the child's hand, then child is guided to the objects to be explored, and guided through the motions of the activity to be learned. The hand-over-hand approach used by teachers seems to have numerous benefits to pupils with visual impairments to acquired DLS.

2.2.1 Hand-under-hand method

Hand-under-hand method was an opposite of hand-over-hand method used by teachers to teach DLS to learners with visual impairments. Dote-Kwan and Chen (1999), and Miles (1998) stated that in using hand-under-hand method, the teacher places his or her hand slightly under the child's as they explore objects together. The teacher can rest a hand underneath the child's and wait for the child to initiate an interaction. Hand –under -hand was used to introduce unfamiliar objects to pupils during DLS lessons .Hand-under-hand method involves placing the child's hand on top of the adult's hand while the adult grasps an object. The adult then slowly rotates his or her hand so that the child is gradually introduced to the shape of the object. Another strategy involves gradually withdrawing the adult hand until the child's fingers touch the surface of the object or texture being explored (Dote-Kwan & Chen,

1999). For hand-under-hand strategies to be effective, the child must be willing and able to keep his or her hand on top of the teachers' hand.

2.2.2 Peer tutoring

Peer tutoring refers to a situation where an individual is tutored by a person with a similar status, age or class level, but in most cases, is not the teacher or professor. Bobroff and Sax (2010) explained that peer tutoring provides opportunities for teachers to support other children in acquisition of skills such as DLS and vocational skills. They further added that, peer tutoring enhances personal growth by giving children with visual impairments greater self-confidence and increased independence. History about the use of peer tutoring indicates that it was first used in the late 1700's in England. The superintendent of a military male asylum, named Andrew Bell, began using it to better educate his male students and to save money for his school whose budget faced serious problems. From that time, peer teaching has been adopted and used for different purposes for teaching DLS to children with visual impairments throughout the world (Constatini, 2015; Goodland & Hurst, 1989).

Scruggs, Mastropieri, and Marskak (2012) stated that, peer tutoring assisted children with visual impairments and children with other disabilities to perform more than children without disabilities in activities of DLS. The authors suggested that teachers can measure the effectiveness of peer tutoring on DLS achievement through pre-test before the intervention and post-test after the intervention. Coonts (2005) stated that peer tutoring helps in including children with visual impairments in classroom activities it is used to teach DLS to children with visual impairments.

Pupils have been used as peer tutors, cross-age tutors, peer advocates, peer buddies or helpers, and simply friends who enjoy being with someone who is with visual impairments. It is also important to note that children with different abilities working

on the same DLS together encourage all children to build supportive relationships. It goes beyond the basic needs that all children have for the give and take, the assistance, and the sense of belonging that comes from having friends. Not only would children with visual impairments master DLS their mates taught them but they would develop friendships, which assist children in forming strong values, attitudes, and social skills necessary for becoming successful, contributing members of society (Coonts, 2005).

2.3 Areas of daily living skills teachers teach to pupils with visual impairments

DLS are necessary for managing adult life which include skills related to personal care such as eating, dressing, clothing selection and care; home economics such as food preparation, money management, time management; and housekeeping such as cleaning, and home maintenance (Burnett & Sanford, 2008).

2.3.1 Personal care

According to Collins dictionary (2018) personal care helps give people with disabilities essential or everyday activities such as dressing, washing and brushing of teeth. Punani and Rawal (2000) also mentioned that personal care, such as hygiene, grooming, social graces, and toilet activities are some of the daily living activities people with visual impairments are taken through for independent living.

The most important aspect of maintaining good health is good personal hygiene (Nursing Assistant Care, 2005). The author again stated that personal hygiene, which is also referred to as personal care, may include, bathing and showering, hair care, nail care, foot care, genital care, and dental care. Furthermore, personal hygiene includes cleaning the body, which helps avoid the spread of germs

from one person to another. Grooming is caring for fingernails and hair; and examples of these activities identified by Nursing Assistant Care include styling hair, shaving, trimming, and painting fingernails. According to Hassell, Lamoureux, and Keefe (2006) personal care are the skills, which prove very difficult for pupils with mild/moderate impairment and those with severe impairments.

Khorrami-Nejad, Sarabandi, Mohammad-Reza and Askarizadeh, (2016) carried out study the purpose of which was to identify and describe factors relating to quality of life (QOL) in subjects with low vision and blindness in Iran's Sistan and Baluchestan Province. The study used a cross-sectional study approach, a questionnaire, and a random sampling technique to gather the data from students with visual impairments. The study revealed that, the absence of mobility and personal care led to difficulties in social integration and social isolation. The researcher further recommended the promotion of education, community participation, and leisure programs in addition to providing rehabilitation services, training for mobility, self-care, and daily activities for individuals with blindness and low vision, especially women.

The findings from another study by Riddering (2016), revealed that few people with visual impairments found it easier to do activities related to personal care. The study was conducted to examine visual impairments and factors associated with difficulties with daily tasks. The study was a cross-sectional study, which comprised of 10, 000 respondents. Interviews and examination questions were used to gather the information from the participants.

2.4.2 House keeping skills

Punani and Rawal (2000), mentioned cleaning, care of furniture, laundry, washing of utensils, and bed-making as some of the house keeping skills persons with visual impairments need to learn in order to be independent in DLS. A respondent from a study by İşlek (2016) commented that one of the most important skills to teach students with visual impairments in housekeeping skills, which include cooking, ironing, and folding clothes. Esbensen, Seltzer, and Krauss (2008) noted that adults with Down syndrome had better functional abilities, especially in housekeeping skills and meal-related activities compared to adults with similar levels of intellectual disabilities due to other causes.

According to a study conducted by Alma (2012), perceived physical fitness among adults with visual impairments is a determinant of participation in domestic life activities and household tasks. Alam's study was conducted to determine the participation of elderly individuals who were visually impaired and the interventions to put in place for them to be able to take part in DLS. The number of elderly persons with visual impairments, selected for the study using stratified sampling technique was 350. The cross-sectional survey was the design used for the study where telephone interviews were used as the main instruments for collecting the data.

Moyo (2015), also conducted a study on the strategies for enhancing independent living among pupils with visual impairments in a special school in Zimbabwe. The study was carried out using the qualitative approach. Out of 25 teachers 6 were purposively sampled for data collection. Interviews were used to obtain responses from the teachers. The findings revealed that the participants regarded housekeeping skills to be very necessary in training pupils with visual impairments to be able to live independent life.

2.4.3 Home management skill

According to Mupfumira (2013), home management is a practical subject where student learn best when they are actively involved in the learning process. Home management is the process of properly maintaining a home and property and overseeing necessary household activities (Joseph, 2011). Home management is a practical subject where student learn best when they are actively involved in the learning process (Mupfumira, 2011). Home management skills may include money management, time energy management, furnishing the home, shopping techniques, using appliances, and care of the home (Punani & Rawal, 2000).

Mupfumira (2013), carried out a study to examine the teaching of home management to 25 students who were visually impaired. The study was a qualitative study which adapted a case study design. With purposive and convenience sampling procedures data was collected from the 25 respondents. The finding revealed that skills and competences gained from learning home management made students with visual impairments self-reliant and able to effectively run their households.

Appiah (2009), carried out a study on the impact of home management on the socialization among students with sensory impairments in selected schools in Ghana. The study made use of a qualitative approach and a phenomenological design to gather information from 67 students across five schools in Ghana. Interview was the main instrument for collecting data. The findings revealed that students with sensory impairments could socialize with their peers when they were taken through home management, adequately.

2.5 Adaptations Teachers Make to Learning Materials for Students with Visuals Impairments

In teaching children with visual impairments, adaptations to materials and text that require absolute use of the sense of sight are very important if student are to access the curriculum adequately. According to Vita and Kataoka (2014), the need to adapt the school environment, learning materials and instructional method to respond to the needs of students with special needs has led to the production of documents outlining the national curricular parameters and adaptations by the Brazilian Government. These documents suggest small examples of adjustments necessary to adapt artifacts and teaching methods for the effective participation of students with special needs in learning activities.

Adaptations to materials and instructional approach are significant to promote learning of any subject or discipline by the visually impaired. Downing and Eichinger (2011) were of the opinions that in-service presentations to improve the professional competence of regular and special education staff could include such topics as developing alternative forms of communication, adapting materials, using tactile teaching, creating social opportunities and teaching orientation and mobility skills. These authors believe that children with sensory and dual sensory impairments can benefit from the same procedure of instruction of students with other disabilities, but will need adaptations such as modification of materials used in teaching concepts and skills. Disciplines such as statistics and mathematics which require the high use of the sense of sight have seen some studies conducted in the area that highlights some adaptations that promote its learning, by the individual with visual impairments (Marson, Harrington & Wall, 2012; Spindler, 2006).

Spindler (2006), conducted a case study on teaching mathematics to a student with blindness in the University of Vermont, USA. Spindler reported on his experience of tutoring calculus to the student at the university-level, indicating the material and strategies employed. Among the strategies Spindler employed in teaching the student were: (a) the careful verbal wording of formulas and description of graphical concepts, and (b) simple manipulative materials and repetition. This author found that there are many similarities and differences between the learning of students with visual impairments and sighted students stating that teachers provided with adequate resources can help students with visual impairments and blindness learn successfully. In a review of literature on teaching statistics to students who are blind, Marson, Harrington, and Wall (2012), reviewed various studies about teaching statistics and pointed out that the statistics educator can build artifacts that facilitate learning of statistical concepts by students with visual impairments, as well as sighted students. The authors believe that building artifacts for learning creates equal opportunities for both categories of students since understanding of many statistical concepts depends on visualization. The purpose of the current study is different because it focuses on materials for teaching DLS to students with visual impairments at the basic school level.

Pupils with visual impairments need alternative forms of access, such as enlarged or audio-converted text, tactile graphics, and involvement in hands-on science to benefit from learning. Rule, Stefanich, Boody, and Peiffer (2010) investigated the impact of adaptive materials on teachers and their students with visual impairments in secondary science and mathematics classes. Fifteen science and mathematics teachers, who taught students with visual impairments, participated in the study. The study saw the teachers implementing three strategies to ensure that

accommodations addressed the needs of students who resisted accommodations to avoid appearing conspicuous to peers and students identified as visually impaired. The teachers provided the adaptations to all students in the class, convinced students of the need for adaptation and involved the class in understanding and accepting the students' impairments. The study found out that many adaptations provided for the student with visual impairments benefitted the entire class. This study supports the claim that appropriate accommodations, such as tactile or auditory materials, can engage other students in science and mathematics while making students with visual impairments successful learners.

Despite the findings by Rule et al. (2010), there are other studies that have reported inadequacy of appropriate/adapted teaching and learning materials for teaching students with disabilities. For instance, Mwakyeja (2013) conducted a study the teaching and learning materials for teaching students with visual impairments in inclusive classrooms in Tanzania. Mwakyeja employed a qualitative research method and a case study design for the study. Purposive sampling technique enabled the researcher to sample four teachers (2 males and 2 females), using a semi-structured interview and observation methods to collect data for his study. A summary of the findings were that: (1) there was inadequate teaching and learning materials for teaching student with visual impairments; and (2) teachers did not have funds to procure adapted materials for students with visual impairments. The researcher recommended that, government should fund inclusive schools adequately to ensure the availability of teaching and learning materials that will assist the teaching of students with visual impairments in the inclusive classrooms.

Similarly, Wanjiku (2014), conducted a study on the strategies used by teachers to enhance learning among learners with multiple disabilities in four selected counties in Kenya. As part of the specific objectives pursued by the researcher, the study sought to find out the curriculum adaptations that had been effected for learners with multiple disabilities (viz., deaf-blind, autism, blindness, and cerebral palsy intellectual disability). The study employed the mixed-method approach and used semi-structured interview, observation and questionnaire for data collection. The study revealed that, there were inadequate teaching and learning materials for teaching learners with multiple disabilities. The few materials available were not adapted enough to teach some of the students with disabilities.

The current study used the case study design to investigate, among other objectives, the materials teachers use in teaching DLS to students with visual impairments. This strand has further been reviewed under the headings: tactile and kinesthetic learning, auditory learning and accommodations, visual learning and accommodations.

2.5.1 Using of tactile learning materials

Pupils with visual impairments mostly use tactile input to learn about their environments. Such input should not be thought of as “lesser senses” to use in the absence of vision, but as another system through which learning takes place (Klatzy & Lederman, 1988). Klatzy and Lederman further stated that tactile and kinesthetic input can provide students with information about objects they come in contact with and use. The authors added that any visual materials used in classrooms need to be adapted for use by students who do not have the visual skills required for the task. For instance, charts, models, maps, and graphs will have greater educational value for children with visual impairments if they can be “read” using the sense of touch. For

example, outlining map boundaries with string enables children with visual impairments to use their sense of touch to identify places on maps (Klatzy & Lederman, 1988). Whenever teachers use manipulatives, models, or other equipment, students with visual impairments need the opportunity to use their tactile and kinesthetic senses to become familiar with the objects to benefit from their use in lessons. Klatzy & Lederman suggested that teachers should introduce students with visual impairments to materials and equipment used in activities such as science experiments before the activity (Ocloo, 2012). Ocloo further noted that if students can learn about the materials or equipment before the activity begins, they will be more able to concentrate on the concept being taught rather than on what equipment they are using. Toward this end, a specialist will assist students and general classroom teachers with adaptations as needed.

2.5.2 Using of visual learning materials

Literature revealed that, 90% of pupils with visual impairments have some usable vision. Their visual learning can become more efficient if they can enhance their skill to use their vision through training or the use of assistive devices. Teachers are often advised to observe students to determine that they have visual skills enough for locating and tracking visual materials. Vision specialists can offer assistance in developing students' visual skills and in making accommodations necessary for helping students use their vision in productive ways. Such services include making maps, adapting reading materials, and assisting in general accommodations. Many options are available for teachers selecting reading and writing materials for students with visual impairments. According to their needs and preferences, students may use printed or Braille materials. Printed materials should be clear and be printed using an easily readable font. Providing an easel to hold reading materials can help students

with visual impairments do close work more easily (Barraga & Erin, 1992). Black felt-tip pens and soft lead pencils are useful writing utensils for students with visual impairments because of the increased amount of contrast they create against white writing paper (Koenig, 1996). An extra light source at the student's work area can be helpful for some students (Heward, 2000). If a student can benefit from an additional light, the light's placement should be determined in collaboration with the vision specialist. Some simple strategies for using printed materials can help students with visual impairments learn visually without requiring huge adjustments to the classroom environment. Simply holding books or other materials closer is enough to help some students with visual impairments (Heward, 2000). Large print materials are used to help students with low vision to access materials easily in the regular classrooms. (Barraga & Erin, 1992). Such equipment and materials are available for students who need them. Barraga and Erin outlined other considerations for general education teachers to remember during lessons and when preparing materials for use in the classroom;

- The student's position in the classroom in relation to visual presentations should allow for an unobstructed view. If necessary, allow the student to move to a position with a better vantage point when visual materials are being used.
- Information written on the chalkboard should be large. Dry erase boards are good alternatives to regular chalkboards. The bright background strongly contrasts with the colors (especially black) used on them.
- All visual aids should have clear, sharp images. Materials with high contrast are easier for students with visual impairments. For example, handouts should have very dark black or navy blue print on bright, white paper.

2.5.3 Using of auditory learning materials

Auditory input provides another way children with visual impairment can gain information. Teachers should not assume, however, that children with visual impairment will understand verbal input in the same way and at the same depth as other students understand visual input. Auditory language triggers the creation of mental images that correspond with words. Images are recalled to assist students in comprehending verbal language (Barraga & Erin, 1992). A child with visual impairments is likely to have fewer and less detailed mental images to correspond with verbal language. Such images may differ according to a student's individual experiences and verbal input he or she has received from others (Whitmore & Maker, 1985). General education teachers should observe and interact with students with visual impairments to determine whether individual students understand verbal input. The teacher must check for comprehension during class discussions and when giving directions. If students are having difficulty understanding what the teacher says, the teacher may need to clarify or expand on their background knowledge or vocabulary.

Organizations providing services for people with visual impairments offer audio taped textbooks. Classmates can be designated as note takers for students with visual impairments. Class notes can then be audio taped or transcribed using an enlarged font or Braille. General education teachers may also develop verbal or other auditory cues as signals for attending to important information or events. Teaching listening skills is also important. Efficient listening is crucial to classroom success for students with visual impairments. Improved listening skills help students with visual impairments increase their spoken and written communication and reading skills (Heward, 2000). Teachers can consult vision specialists to determine appropriate auditory accommodations for each student.

2.6 Challenges Teachers and pupils with visual impairments Face in Teaching and learning of Daily Living Skills

Children who are visually impairment can do virtually all activities and tasks that sighted children do, but they often need learn to do them in a different way or use different tools or materials. For instance, a child may need reading materials in Braille rather than in print or may need to examine a live rabbit with her hands to understand what it is rather than learning from pictures in a book. Depending on the child's abilities and needs she/he needs such adaptations to participate in the curriculum and various activities in school, as well as to make use of instructional materials. The child will most likely learn about such adaptation from his or her teacher of students with visual impairment or orientation and mobility (Dimigen, Roy, Horn & Swamm 2001).

Teachers of students with special needs face challenges in the teaching and learning process because even among these students with special needs, each student has a unique need that must be addressed. Udoba (2014) indicated that learners with special needs including learners with developmental disabilities present challenges to special needs education teachers. Udoba identified some of the challenges special educators face in teaching students with special needs as inadequate teaching material, lack of enough class space to practice activities and lack of teacher trained in special needs education.

A study conducted by Odera, Makoriomoke and Odongo (2016) employed a qualitative approach to examine the role played by teachers in the implementation of activities of daily living skills especially on learners with mental and visual impairments. The case study used focus group discussions, and document analysis for data collection. Purposive and saturated sampling techniques were used to sample 19

participants, comprising 5 head teachers, 8 teachers, and 6 education officers. Among the findings of the study were that (a) teachers faced difficulties such as lack of teaching learning materials in teaching DLS learners, and (b) poor remuneration. However, it was found out that teachers used varieties of methods to teach DLS.

2.6.1 Inadequate teaching and learning materials for teaching daily living skills

Teaching and learning materials are important in the teaching and learning process. The use of teaching and learning materials enhance the acquisition of knowledge and skills of all students. They become more importance in teaching daily living skills which are practical skill to students with visual impairments. Teachers who believe in student-centred instruction, prefer to teach using teaching and learning materials and rely heavily on hands-on activities among others to encourage active participation of learners in class (Garrett, 2008). Student-centred teaching is rooted in constructivist teaching philosophy, which advocates that students learn by doing and experiencing rather than depending on the teacher's wisdom and expertise to transmit knowledge (Brown, 2008). Slunt and Giancarlo (2004) espoused on this view commenting that the learner-centred teaching style provides the opportunity for students to take control and responsibility of their learning by being actively involved in the learning process rather than simply passively receiving information from instructors.

Ruteere, Mutia, Mwoma, and Runo (2015) conducted a study in Kenya on the challenges teachers encountered when teaching DLS to pupils with intellectual disabilities. Purposive sampling was used to sample 84 respondents. The mixed method study used semi-structured questionnaires and observation checklist as instruments for data collection. The study was carried out in special units in public primary schools in, Kenya. The researchers found that learners with intellectual

disabilities were not taught DLS effectively. The study further revealed challenges such as lack of funds, negative attitude of teachers, lack of trained personnel and inadequate teaching and learning materials. The study recommended that the government should develop cost-effective training for teachers to curb the problem of under-staffing and ineffective teaching. It also recommended that schools with special units should be headed by teachers who are specialists in the area of intellectual disabilities because they can understand the needs, abilities and interests of learners with intellectual disabilities and provide appropriate learning environments, as well as offering necessary support to the teachers in the units.

Research has however revealed lack of teaching learning materials as one of the numerous factors that hinder the learning of DLS by children with disabilities (Bam, 2012; Kearney, 2009). Children with visual impairments could learn DLS from teachers if they are provided with appropriate teaching and learning materials. Rutere (2013) employed the mixed method approach to explore among others how teaching/learning materials that enhance the teaching of DLS to learners with intellectual disabilities in Kasrani district, Kenya. Data were collected from 84 respondents. The instruments used for data collection were questionnaire and observation checklist. Findings indicated that, there was lack of teaching and learning materials for teaching DLS to learners with intellectual disabilities. It was recommended that government should provide enough funds to purchase adequate teaching and learning materials for teaching DLS.

Naidoo (2014) also explored the exclusion of children with visual impairments in early childhood development provision in South Africa. The researcher used the qualitative approach and focus group semi-structured interviews for data collection. Parents of children with visual impairments, service providers, and teachers of

children with visual impairments were selected through the use purposeful sampling technique to participate in the study. Among the findings of study was inadequate teaching and learning materials for training children with visual impairment in early childhood development in order to acquire daily living skills. The current study is different from that of because, it is a case study of a special school in Ghana which collected data from students with visual impairments and their teacher.

In another study, Udoba (2014) investigated challenges teachers face in teaching students with developmental disabilities at Mogoro, Tanzania. This qualitative study purposively sampled four teachers for the study. Semi-structured interviews and informal observation of participants was employed to collect data for the study. Findings were that, teachers face challenges with inadequate teaching and learning materials. Similar findings of inadequate teaching and learning material for teaching students with disabilities were revealed in a study conducted in Tanzania by Maguga (2013), which employed quantitative approach and randomly sampled 100 secondary school teachers for the study.

Majority of studies conducted in Africa have revealed inadequacy of teaching and learning materials for teaching students with disabilities as one of the major challenges face by teachers who teach these students. Kiyiba and Tukur (2014), conducted a study on the challenges of providing special education to children with disabilities in Uganda. The researchers employed qualitative research approach with semi-structured interview as instrument for data collection. Participants consisted of four (4) teachers and four education officials in the same district. The study revealed that teachers have inadequate teaching and learning materials for teaching children with visual impairment. The study recommended that government should implement a strict monitoring system both on the schools and the ministry officials responsible for

budget usage to ensure that all the money is spent towards service delivery for the benefit of children with disabilities. Any official or teacher found guilty of misappropriating should be sacked and legal action taken against them.

A study by Sudy (2013), on the evaluation of effectiveness of Primary Education Development Program (PEDP) on enhancement of inclusive education for children with visual and hearing disabilities employed the descriptive survey design. Forty- six participants were sampled using stratified sampling technique. Interview, observation checklist and document analysis were used to collect data for the study. Findings of the study revealed that, teachers face the challenges of inadequate teaching and learning material for children with visual and hearing disabilities. The current study used a case study design to explore the approaches teacher uses in teaching DLS to students with visual impairments.

A similar study was conducted by Mugambi (2011) on the problems teachers encountered in integrating students with visual impairment. Among the specific objectives was to find out problems teachers faced in adapting the syllabus for students with visual impairment. Forty-seven teachers were randomly selected out of a pool of 63 to participate in the study. Data were collected using a questionnaire to investigate challenges the teachers faced in teaching students with visual impairment in integrated schools. Among the findings were (a) inadequacy of teaching and learning material, and (b) lack of support from the school administration. It was recommended that the Kenya Institute of Education should prepare more teaching materials in line with the current trend in the field of teaching students with visual impairment. It also recommended for more in-service courses, workshops and seminars to keep the teachers abreast with current trend in the area of teaching learners with visual impairment. The findings of the current study employed the

qualitative approach, one-on-one interviews as data collection instrument and the narrative approach in data analysis would be expected to add new knowledge about the approaches teachers used in teaching DLS to students with visual impairments. In view of the foregoing discussions, the special needs literature has further been reviewed under the following four sub-topics; namely, (a) Teaching and learning materials (b) Fine motor skills development (c) Teacher-pupil ratio, and (d) Training of special education teachers.

2.6.2 Lack of fine motor skills development of pupils with visual impairments

Motor skills development of children is crucial in learning activities of daily living. Motor development is required in learning and performing basic skills such as crawling and walking. Studies on fine motor skills in children with disabilities are scarce, but the few on children with autism spectrum disorder indicates motor delays, difficulties in imitating of body movements and difficulties with motor coordination (Provost, Lopez & Heimer, 2007; Smith, 2004; Williams, Waiter, Gilchrist, Perrett, Murray, & Whiten, 2006). Similar to children with autism, children with visual impairments are likely to manifest these motor difficulties although there are limited studies to that effect. Nicolosi, Harryman, and Kresheck (1996) stated that, fine motor skills are movements that are spatially oriented and require the use of a smaller set of muscles. Muratori, Lamberg, Quinn, and Duff (2013) opine that fine motor skills are those that used muscles of the hands, and mouth for manipulation and speech. Eliasson and Burtner (2008), stipulated that poor fine motor skills may affect the degree of participation in DLS and the overall quality of life of children with visual impairments. Early fine motor skills development predicts later language, spatial cognition, and object exploration and DLS acquisition (Hellendoorn et al., 2015). The

severity of motor deficits correlated with the degree of social withdrawal and the severity of social abnormality (Freitag, Kleser, Schneider, Von Gontard, 2007).

Pupils with visual impairments interactions with the environment are disrupted to some extent, because they perceive less detailed visual information from the environment. This disruption of interaction with the environment could further be attributed to poor development of their fine and gross motor. Studies have revealed that children with visual impairment demonstrate poorer fine and gross motor skills, goal-directed aiming, and postural control than children with normal vision (Haibach, Wagner, & Lieberman, 2014; Liebrand-Schurink, Cox, Va Res Cillessen, Meulenbroek & Boonstra 2015; Reimer, Cox, Boonstra, & Nijhuis-van der Sanden, 2015). Yet, few attempts have been made to uncover the nature of this poorer motor performance of children with visual impairment (Reimer, 2008). Some studies and clinical practice have shown that learning and use of DLS are problematic for individuals with autism and visual impairments because of difficulties with generalization of learned skills from one setting to another, behavioural inflexibility, sensory sensitivities, gross and fine motor difficulties, difficulties with executive functioning, lack of interest, and perceptual challenges (Kanne, et al., 2011; Smith et al., 2012; Stoddart et al., 2013).

Axle, Levent, Clapot, Ines, and Sebesta (2017) stated that, teaching DLS concepts such as dressing skills and personal hygiene required the used of the motor skills such as manipulative skills and eye-hand manipulation co-ordination. The researchers further added that pupils with visual impairments with poor motor skills seem to be at disadvantage in acquisition of DLS. Additionally, individuals with visual impairments tend to demonstrate delayed in the acquisition of skills, such as walking independently to bath, dusting furniture, and shopping (Brambring, 2006;

Celeste 2002). In a study conducted by Odera, et al (2016), on the role teachers' play in the acquisition of daily living skills, it was revealed that some of the children have poor motor skills for DLS acquisition.

Bambring (2007) also found that vision was essential for the acquisition of five motor skills in childhood. The author added that, the five motor skills assisted learners in the performance of DLS. Motor skills development appears to play very important role in the acquisition of DLS by learners with visual impairments. Pless and Carisson (2000) further revealed in their experimental study that motor intervention was necessary for children with developmental disorder and visual impairments.

In a similar study conducted by Reimer, et al. (2015) on the measurement of fine-motor skills of young children with visual impairments, it was revealed that children with visual impairments have slower and more prolonged motor learning than normal sight children. A total 256 children with visual impairments and 162 children with Normal children (NS) were included in the study. The results further demonstrated that children with visual impairments needed significantly more time than Normal children to perform all test items, especially at younger ages.

Webber, Wood, Gole, and Brown (2008), involved 119 participants in an experimental study to investigate the effects of amblyopia on children's fine motor skills. Eighty-two of the participants were children with amblyopia of different causes; infantile esotropia, acquired strabismus, anisometropia mixed, and deprivation. Visual motor control and upper limb speed and dexterity items of the Bruininks-Oseretsky Test of Motor Proficiency were assessed, and logMAR visual acuity and Randot stereopsis were measured. The results revealed that children who had amblyopia performed significantly poorer than control subjects on 9 of 16 fine

motor skills sub-items. Also, the etiology of amblyopia and level of binocular function significantly affected fine motor skill performance of the participants.

Conflicting evidence has been found regarding skills acquisition comparisons between those with and without visual impairments, where two studies found significant differences between those with visual impairments and those without (Houwen, Hartman, & Jonker, 2010; Wagner, Haibach, & Lieberman 2013) and another study revealed no significant difference between the two categories of participants (Houwen, Visscher, Hartman, & Lemmink, 2007). Webber, in 2007, completed a study on the effect of amblyopia on motor and psychosocial skills in children. One hundred and eighty-eight children were given self-esteem questionnaires to complete. Webber's study revealed that, the etiology of amblyopia and stereo acuity affected the fine motor skills development of these children. Therefore, children with amblyopia could have poor fine motor skills.

In another study, Whitfield (2012) examined the motor skills of young children with developmental delays before and after participating in an augmented language intervention. Sixty participants were sampled for the study. The study revealed that children with poor fine motor skills were challenged in acquiring DLS. It is uncertain whether the visual conditions of participants in the current study have affected their motor skills development and subsequently their DLS acquisition as the literature presents.

2.6.3 Poor teacher-pupil ratio in special schools

Generally, the number of pupils in a class influences how well a teacher is able to attend to individual needs. The teacher-pupil ratio in special schools need to be low considering the compensatory skills and expanded core curricular skills learners need to acquire. In Kenya, the teacher-pupil ratio in the special schools and units was as

low as eight pupils to one teacher (MoE, 2005). Despite this commendable teacher-pupil ratio, recommended one teacher to five pupils in Kenyan special schools and units. Approaches teachers use to teach DLS to children with visual impairment and the quality of the teaching is influenced by the number of pupils in the class (Yieke, 2006). Itunga (2015) and Mushtaq (2008), stressed that, increased in enrolment in special schools means an increased workload and responsibilities of teachers in teaching DLS to children with visual impairments. When teachers are faced with such circumstances they resort to teacher-centred teaching method instead of pupil-centred teaching method thus compromising the quality of instruction of DLS.

Igune (2013) investigated teachers' opinion about the inclusion of children who are blind in the mainstream primary schools in the north-eastern part of Uganda. The exploratory-descriptive case study design was chosen for the study. Data were collected using semi-structured interview and document analysis. A total of six teachers were selected from two mainstream primary schools to participate in the study. The most critical challenging finding of the study was that teachers faced large pupil-teacher ratio in the schools. The study recommended that the government should end the schools' staff ceiling policy and recruit more teachers in order to reduce the teacher-pupil ratio.

Another study by Chacha and Zaani (n.d.) assessed the impact of free primary education on pupil-to -teacher ratio in Kuria East Constituency, Kenya. The study adopted a mixed method research approach. Closed-ended questionnaire was used to collect quantitative data from 68 head teachers, and 63 teachers in all the sixty-eight public schools. Chacha and Zaani used purposive sampling technique to select the schools that participated. The result showed that 26% of the schools sampled had large pupil-to-teacher ratio, precisely, between fifty pupils to one teacher (51: 1) to

fifty-five pupils to one teacher (55:1) in the year 2012. Additionally, sixteen percent (16%) schools had large pupil-teacher ratio of between 56 pupils to one teacher (56:1) and 61 pupils to one teacher (61:1). The authors recommended that, government should set a threshold of pupil to teacher and to employ more teachers to meet the shortfall.

Renatus (2013), used a quantitative research approach to investigate the influence of class size on achievement outcomes in primary schools in Bukombe District Council. The study employed the survey research design and randomly selected the participants for the study. Data were collected by using achievement outcome analysis and SPSS 16.0 was used to analyse the data collected. The study revealed large pupil-to-teacher ratio which affected the achievements of pupils. Renatus recommended that school authorities must recruit more qualified primary school teachers to solve problem of teacher-to-student ratio in the primary schools.

Another study was conducted by Waita (2012) on pupil-to-teacher ratio and its impact on academic performance in public school in the Central Division of. The participants consisted of twenty-four (24) head teachers, forty-eight (48) subject teachers, county staffing officers, county examination officers and quality assurance and standard officers. Open-ended and closed ended questionnaire was used for data collection. Data were analysed with statistical package for social sciences (SPSS). Findings showed that large pupil-to-teacher ratio affected achievement of pupil in the school. It was recommended that, there was the need for government to employ more primary school teachers. In the current study, a qualitative approach and case study designs were used to examine among other objectives, the challenges teacher face in teaching DLS to children with visual impairments at the Akropong School for the Blind.

2.7 Concept of daily living skills

DLS may be seen as practical skills necessary to care for oneself independently and to meet daily challenges, including personal (e.g., dressing), home or school (e.g., putting things away), and community skills (e.g., asking a trusted neighbour for help). The term “activities of daily living skills” refers to a set of common, everyday tasks, performance of which is required for personal self-care and independent living. DLS foster a sense of responsibility in children, facilitate development into independent functioning, and thus are essential for successful transition into adulthood (Baker & Brightman, 1997). DLS may enhance school-age children’s sense of competence and self-efficacy, leading to positive trajectories.

One of the most often used measure of functional ability is the Katz Activities of Daily Living Scale (Katz et al., 1963; Katz, 1983). In this scale, the set of tasks assessed are bathing, dressing, transferring, using the toilet, continence, and eating. A theoretical basis for selecting these functions is that they represent milestones in the sociobiological development of self-care independence in children (Katz & Akpom, 1976). Its original purpose was to differentiate physical functional abilities among rehabilitation and recuperating patients.

Over the years, several other measures of physical dysfunction which cover tasks similar to the Katz DLS Scale have been introduced (Kane & Kane, 1981; McDowell & Newell, 1987). There are more than several published indexes that assess DLS for the visually impaired (Feinstein, Josephy, and Wells, 1986). Most of these other measures of DLS add some measure of mobility, such as walking, getting around inside, and getting around outside (Fillenbaum, 1987). In general, these indexes of functional disability have not been well evaluated for their validity or reliability (Feinstein, Josephy, & Wells, 1986; McDowell & Newell, 1987).

Measures of the ability to perform DLS have become routine in many surveys. DLSs are more specific and concrete than an inability to perform a “major activity,” thus avoiding situational or contextual differences among survey respondents. This is particularly an issue among the virtually impaired for whom their “major activity” is ill-defined (Branch & Meyers, 1987). A DLS can be used to provide general information on the basic service needs of the virtually impaired. A person unable to feed himself or he needs help eating; if is not clear what, if any, services a person needs who is “unable to perform his major activity.” Finally, as discussed above, ability to perform DLS is a good predictor of a wide range of health-related behaviour.

As useful as they are, DLS do not measure the full range of activities necessary for independent living in the community. To partly fill this gap in disability classification, the “instrumental activities of daily living skills, were developed (Lawson & Brody, 1969). The DLS capture a range of activities that are more complex than those needed for the DLS, including handling personal finances, meal preparation, shopping, traveling, doing housework, using the telephone, and taking medications (Fillenbaum, et al., 1978).

2.8 Categories of Visual Impairments

Categories of visual impairments reflect more than just visual acuity. Students’ ability to use vision, as well as how much they use other senses for learning, are aspects of each category (Bishop, 1996; Turnbull, Turnbull, Shank, Smith, & Leal, 2002). The terms low vision, functionally blind, and blind are often used to describe and categorize levels of vision. Each category is considered in terms of the degree of acuity and its implications for students’ learning.

2.8.1 Low Vision

Generally, students with low vision are able to learn using their visual sense; however, they may need to have print magnified, contrast enhanced, or type font or size changed (Turnbull et al., 2002). Students in this category characteristically work more slowly and have trouble working with details (Colenbrander in Barraga & Erin, 1992).

2.3.2 Functional Blindness.

People with functional blindness typically use a combination of modalities to function within their surroundings (Turnbull et al., 2002). Students in this category generally read and write using Braille. Some individuals who are functionally blind have enough vision to allow them to move around the classroom safely. Others, however, may require considerable accommodations to do so.

2.3.3 Blindness

Near blindness and total blindness are included in this category. Near blindness occurs when visual acuity is reduced so greatly that learning takes place using data from other senses most of the time (Barraga & Erin, 1992). Students with total blindness receive no stimuli from their visual channel. They depend entirely on input from other senses. Incidental learning students with visual impairments lack opportunities for incidental learning that occur for their sighted peers almost constantly (Hatlen & Curry, 1987). Without such opportunities, associating words with elements of the environment is difficult. Thus, it is important that such associations be supplemented with input from other senses and through alternative activities.

The limited nature of visual associations for students with visual impairments has classroom implications. Absence of or reduced visual cues, such as a schedule written on the chalkboard or seeing the clock, can prevent these students from following classroom procedures or anticipating coming events. Students need opportunities to become acquainted with their classmates. Because students with visual impairments may not readily associate names and faces through incidental classroom experiences, teachers need to design appropriate experiences to help build relationships among all students in a class. Physical orientation of students to classroom routines or other events that take place during the day is important and must occur as soon as possible once the student is assigned to the classroom.

2.9 Summary of Literature Review

In this chapter, the researcher reviewed related literature on the current study. Attention was given to the following issues: (1) the theoretical framework of the study (2) approaches teachers use to teach daily living skills to pupils with visual impairment, (3) areas of DLS in teaching pupils with visual impairments (4) adaptations the teachers make in teaching DLS to pupils with visual impairments, In the final part, the researcher highlighted challenges teachers face in teaching DLS to children with visual impairments .

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodology for the study. The areas covered are: Research approach, research design, population, sample size, sampling techniques, instrumentation, validity, reliability, procedure for data collection, data analysis, and ethical considerations.

3.1 Research Approach

The study adopted a qualitative research approach to explore the approaches teachers used to teach DLS to pupils with visual impairments at Akropong School for the Blind in the Eastern Region Ghana.. Qualitative research involves an interaction between the researcher and the researched in the socio-cultural context of participants of a study (Kusi, 2012). Creswell (2012), explained that a qualitative research method is used in resarch to explore participants' behaviours, approaches used to teach daily living, as well as organization functioning.

The qualitative approach was appropriate for the study because the study find out the approaches teachers use to teach DLS, areas of DLS, adaptations teachers make to learning materials in teaching those skills and inherent challenges teachers face in teaching DLS to pupils with visual impairments at the Akropong School for the Blind. Findings of the study were derived from analyses of responses from interviews that the participants voluntarily agreed to do. The qualitative analysis was further strengthened by subjecting the data to additional scrutiny with the use of statistical procedures and quantification. In qualitative research, Bryman (2008) and

Creswell (2003) suggested that participants are expected to give detailed rather than general information on the features of the specific phenomenon under investigation.

Qualitative research approach considers collecting information from participants in order to understand the phenomenon under the study from the perspectives of those involved in the research (Ary, Jacobs, & Sorensen, 2010). The current study, therefore, sought to use a qualitative approach, in order to have a detailed account of the approaches teachers use to teach daily living skills to pupils with visual impairments. Avoke (2005) posited that realistic researchers believes that gaining knowledge from sources that have “intimate familiarity” with an issue is far better than the objective distancing method that characterizes.

3.2 Research Design

This research employed case study design to find out the approaches teachers used to teach daily living skills to pupils with visual impairments at Akropong School for the Blind. Avoke (2005), defined a case study as the development of comprehensive and interactive knowledge about a single case or a small number of related cases. Also, Stake (2008) defines a case study as an intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to environment. According to Stake, the decisive factor in defining a study as a case study is the choice of the individual unit of study and the setting of its boundaries. Ary, et al. (2002) stated that a case study investigates a single individual or a single discrete social unit such a family, club, social institution, community or gaining in depth. The researcher adopted the case study design because the researcher is investigating the approaches teacher use in teaching daily living skills at single social institution which is Akropong School for the Blind. Again, the researcher chose the case study design because it allowed the researcher to obtain first-hand information

through a range of data collection techniques including questionnaires, interviews and observation.

3.3 Population

The population for the study was 69, comprising 6 teachers and 63 pupils. All 63 students (33 males and 30 females) had been diagnosed with visual impairments and the 6 teachers (2 males and 4 females) taught upper primary classes. The students were aged between 11 and 16 years old (mean = 13 years old), and the teachers were aged between 28 years old and 47 years old (mean = 38 years old). The population distribution of the respondents is presented in Table 1.

Table 3.1: Gender distribution of population

Class	Male	Female
Four	13	9
Five	9	10
Six	11	11
Teachers	4	2
Total	35	24

Source: Researchers field Data Collected, September, 2017.

3.4 Sampling size

The sample size for the study was 10, comprising of 8 pupils with visual impairments and 2 teachers. The pupils with visual impairments consisted of four males and four females, and the two teachers were females. Only teachers who had taught in the school for at least, 19 years were considered eligible for the study. The teachers involved in the study were trained in special education in the area of education of learners with visual impairments.

3.5 Sample technique

The researcher used purposive sampling technique to select the participants for the study. The researcher purposefully chose the pupil sample because they were pupils with visual impairments who could only learn through braille thus writing braille with either the hand frame and stylus or write with typewriter because their writing mode was necessarily non-visual (Ocloo, 2001). Again, these pupils with impairments have been identified as congenitally visually impaired. The teachers were also purposively sampled because the researcher sought to include teachers who have been teaching these pupils for the past ten years. Fraenkel and Wallen (2009) explained that purposive sampling is a technique in which researchers use their judgment to select a sample that they believe, based on prior information, will provide the data they need. In purposive sampling the researcher deliberately chose the participants because they suit a certain criterion that the study is interested in exploring (Gay, 1992; Orodho, 2009).

3.6 Instrumentation

The instrument used for data collection were self – constructed semi-structured one-on-one and focus group interviews. The one-on-one interview was used to retrieve the information from teachers while the focus group interview was used to retrieve the information from the pupils. The interviews offered the researcher the opportunity to gather and explore pertinent data about approaches teachers use to teach DLS. Creswell (2012) and Hancock (2002) explained that, in using case studies, the primary measuring instrument that could give the participants the opportunity to express their candid opinions about what they feel about a phenomenon is interview. Fraenkel and Wallen (2009) noted that interview is one of the main techniques used to collect data in qualitative research. In this study, therefore

the researcher employed semi-structured interview as the instrument in order to assist the participants to freely express their views about approaches teachers use to teach DLS to pupils with visual impairments.

In the interviews, the researcher included probes and prompts to aid further exploration of his own line of questioning. The probes and prompts helped to explore and develop views of respondents and to prevent respondents from going off the main line of questioning (Rodgers, 1999). Two sets of semi-structured interview guide were constructed for the two groups of participants. The interview questions were guided by the themes in the research questions raised, namely: approaches teachers use to teach to pupils with visual impairments, areas of DLS teach pupils with visual impairment, adaptations make to materials teachers use to teach DLS and challenges teachers face in teaching DLS.

3.7 Pilot-testing

The instrument was piloted in neighbouring schools with similar characteristic as the study area to determine reliability and validity of the instruments. This also helped to evaluate the clarity, sequence, wording, and redundancy of the survey items (Babbie, 1990; Yegidis & Weinbach, 2002).

The pilot testing of the instruments was done at Avakpedone Unit School for the Blind. The teachers and pupils were informed that their information would not be used in the actual study. This improved the appropriateness of the instruments and quality of the data collected.

3.8 Validity

Validity in research is achieved when the questions are agreeing with responses (Denscombe, 2007). Vanderstoep and Johnston (2009) explained validity as the ability of an instrument to measure what it is intended to measure. In this research, the researcher conducted face and content validity. For face validity the research instrument was given to colleagues to check for wrong spellings, omissions and grammatical errors. For content validity the research instrument was given to my supervisors to provide their views on the relevance of items on the interview guide and based on their recommendations items that were deemed not valid were taken out.

The purpose of the content validity was to ensure the validity of the interview items. In this regard, the semi-structured interview items were developed to cover the key themes raised in the research questions. Macmillan and Schumacher (2001) indicated that participant's in-depth interviews need to be conducted in natural settings to reflect the reality of life experiences more accurately than do laboratory settings. In this study, however, the interviews were conducted in the natural setting of the participants which is on the environment of Akropong School for the Blind.

3.9 Reliability

Creswell (2012) explained reliability to mean the consistency of scores from an instrument. Creswell further indicated that scores should be nearly the same when researchers administer the instrument multiple times at different times. To ensure reliability of the interview items, the items were given for peer review. Again, a pre-test interview was conducted on three pupils with visual impairment to detect ambiguities and weaknesses in the items for correction and modification to improve the internal consistency of the instrument. The items were further presented to researchers' supervisor, a professional in the field of the education of the visually

impaired for expert judgment, suggestions and approval. The thesis supervisor was further given the audio-taped interview and transcriptions. Merriam (2009) indicated that a review by a supervisor on some of the interviewed audio-taped and assessing whether the findings are consistent with their knowledge of the children with visual impairments, based upon the data, help to ensure the soundness of the findings.

3.10 Procedure for Data Collection

The researcher sought permission from the headmistress of the Akropong School for the Blind with an introductory letter from the Department of Special Education. Creswell (2012) maintained that it is important to respect the site where a research takes place. This respect, according to Creswell, is shown by gaining permission before entering the site. The purpose of the study was explained to the participants. Participants were asked to give their consent to participate in the study. Each participant was interviewed individually at a negotiated time. The interview was conducted during school hours in one of the rooms at a quiet place.

Participants were assured of the necessary confidentiality of information to be gathered. Each interview session lasted between 30 minutes to one hour, and the interview was tape recorded with the permission of participants to be transcribed for analysis. Tape recording was also used because it ensured the continuity of the interview, and speeded up the interview session and thereby saving time (Cohen, Manion & Morrison, 2007; Gall, Gall, & Borg, 2007; Gay, Mills, & Airasian, 2009). Also, participants could express themselves without any pressure on them. The audio-taped interview was transcribed with the children and teachers. Before analysis of the data, the researcher scheduled another meeting with the focus groups and the transcripts were read to the participants to confirm that the transcripts represented the views they shared.

3.11 Data Analysis

The data was transcribed from the ITEL S2 phone which was used to record the data. Afterwards the researcher ensured that the data reflected exactly the responses of the study participants. The researcher further developed codes with emerging themes from the transcription. Expressions of the participant were used for the analysis.

3.12 Ethical Considerations

Ethical considerations are very necessary in conducting any type of research with human subjects to protect the welfare and rights of research participants (Kimmel, 1996). To ensure that participants' health, safety, respect, and fidelity is sustained, the researcher sought verbal consent of participants, that is, students and teachers among the population had the opportunity to voluntarily participate in the study. The researcher explained to participants that their names will not be needed in the course of data collection to ensure confidentiality. Before the researcher began the interviews, he ensured that the purpose of the study was understood by the participants and also treated the rights of the respondents with utmost care. Again, the researcher sought the permission of participants to use the tape recorder during the interview session in order to capture detailed data while concentrating on listening and prompting participants. The participants were promised that they could have access to the findings of the study and that they could contact the researcher if they had problems concerning this study.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS OF FINDINGS

4.0 Introduction

This chapter provides the analysis and discussion of findings of the study. It has two main sections; the first section provides the analysis of the data while the second section presents the discussion of the findings. In this chapter, the data was analysed to reflect the various themes. These themes were embedded in the research questions.

4.2 Analysis of data collected from Research Question One

What approaches do teachers use to teach daily living skills to students with visual impairments at Akropong School for the Blind?

The first research question of the study was geared towards finding from respondents the approaches teachers use to teach daily living skills to pupils with visual impairments. As part of this, teachers and pupils were asked to express their views on issues. The data gathered from the interviews were as follows:

Hand over hand method

Concerning the technique of Hand over hand method, below are the comments both teachers and pupils made in terms of the approaches teachers use to teach daily living skills;

When I use the hand-over-hand technique to teach my pupils an activity, what I do is that I place my hands over the pupil's hands and guide the pupil to activity for learning to take place. (A verbatim expression by one teacher 1)

There is a method called Hand-over-hand method. Hand-over-hand a method in which a teacher or other adult places his or her hands on the hands of a child and moves the child's hands through the activity that is being taught. I mostly use this method to teach my pupils. (A verbatim expression by one teacher 2)

One pupil stated this:

Our teacher uses her hand on top of my hand then I touch the object.

(A verbatim expression by a pupil from group 1)

Another pupil added this:

The teacher will put her hand on top of my hand to help me identify one or two things. (A verbatim expression by another pupil from group 1)

One pupil mentioned that:

She will hold your hand and put her hand on top and direct you on what to do. (A verbatim expression by a pupil from group 2)

One pupil noted:

She has been holding my hand and will place mine under and her own on top. (A verbatim expression by a pupil from group 2)

From the interviews the hand-over-hand approach was identified as one of the key approaches teachers use to teach daily living skills to students with visual impairments at Akropong School for the Blind. The teachers and pupils agreed that when the hand-over-hand technique is used to help a pupil to perform an activity, the teacher places her hands over the pupil's hands. Here, the pupil touches the materials while the teacher uses her hands to guide the pupil as he or she manipulates the materials to complete the activity.

The teachers indicated that as pupils are able to do small parts of the activity, they lessen the support their hands are providing by either pulling their hands away or moving them to their wrist or arm. This way, their hands are ready to come back and lend support if the pupil needs assistance. They indicated that they usually use the hand-over-hand approach. This findings support Coonts (2005) who propounded that hand-over-hand approach was commonly used to teach skills and routines to children with visual impairments by teachers and parents.

Treffry, (1982) and Walker (2104) maintained that hand-over-hand guidance is the easiest technique in which an adult puts his or her hand over a student with visual impairment hand to assist that particular teacher to teach daily living skills to student with visual impairment at school and at home.

Hand under hand method

Analysis of the data further indicated that the hand-under-hand method was another approach teachers use to teach DLS to pupils with visual impairments at Akropong School for the Blind.

For example two teacher said this:

My favorite approach is the Hand-under-hand method, this method involves placing the pupil's hand on top of the teacher's hand for the teacher to hold an object. After that the teacher will slowly rotates his or her hand so that the pupil get to know the object in question.it is a very effective approach that most pupils who are visual impaired like.

(A verbatim expression by a teacher 1).

Teacher 2 had this to say:

I simply pull my hand further back and allow the student's hand to touch more and more of the surface being examined. When I use this technique with a child who is learning to grasp an object, I gradually reduce the presence of my hand on the tool and increase the amount of work for which my student is responsible. What I usually do is that I put my hand slightly under the pupil's and then we discover objects or items together. (A verbatim expression by another teacher)

A Pupil said this:

My teacher put her hand under my hand and I touch the thing (A verbatim expression by a pupil from group 1)

One pupil said this:

The teacher sometimes will place her hand underneath then lead me to the work (A verbatim expression by another pupil from group 1)

One pupil mentioned this:

When the teacher is teaching she will come to you hold your hands and put it under yours to help identify the things Pupils (A verbatim expression by a pupil from group 2)

One pupil noted this:

My teacher always tells me to put my hand on her hand when she is teaching me to how to wash my bowl after eating. This helps me to learn to be faster. (A verbatim expression by another pupil from group 2)

The teachers intimated that when they use the hand-under-hand technique, their hands perform the activity while the pupil's hands rest on top of theirs in this way, the pupil can feel what the teachers hands are doing. According to the teachers if the activity is new to pupils, they sometimes feel hesitant to try it, the pupils feel more secure touching your hands rather than the unknown object or activity. Also, because the pupil's palms are on the teacher's hands, they are able to focus their energy on feeling the movements of your hands.

The pupils feel more comfortable and in control because they can freely remove their hands if they want to. The teachers said as they perform the activity, they verbally describe what they are doing with their hands. The findings above are in consonance with Dote-Kwan and Chen (1999) and Miles (1998) who stated that in using hand-under-hand method, the teacher places his or her hand slightly under the child's as they explore objects together. These teachers can rest a hand underneath the child's and wait for the child to initiate an interaction.

Peer tutoring

The third approach adopted by the teachers was peer tutoring; the comments below were gathered from two teacher participants:

I have noticed the children themselves have been assisting each other to learn some daily living skills and I always encourage them to do so in order to build supportive relationships. (A verbatim expression by a teacher 1)

Sometimes you see these children demonstrating to each other about how they learn certain skills for their colleagues to learn from it. It is really interesting to watch them do so because it helps them to maintain good friendships and build on their confidence (A verbatim expression by another teacher 2)

One pupil stated:

We help each other to learn things like writing, washing, reading, dressing, walking etc (A verbatim expression by a pupil in group 1)

Another pupil commented this way:

We learn from ourselves, we teach each other how to move around without getting hurt (A verbatim expression by another pupil in group 1)

One pupil again noted this:

My friends teach me and I teach them as well, we like ourselves so we support each other to learn every day (A verbatim expression by a pupil in group 2)

One pupil also stated:

Sometimes my teachers tell my friends to assist me when I am finding it difficult to understand something (A verbatim expression by another pupil in group 2)

Another pupil also noted:

When I am taught by my friends I understand everything well, this helps me to do so many on my own. (A verbatim expression by a pupil in group 2)

According to the teachers they have noticed the pupils themselves have been assisting each other to learn some DLS and they always encourage them to do so in order to build supportive relationships. The data is in agreement with Coonts (2005) who observed that not only would pupils with visual impairments master DLS their mates taught them, but developed friendships which assisted children in forming strong values, attitudes, and social skills necessary for becoming successful, contributing members of society.

The pupils also stated that their teachers sometimes asked them to assist their friends who may not understand certain concepts. These activities help pupils to build on their confidants and they are able to do so many things on their own and build on their confidence as stated by the teachers. Bobroff and Sax (2010), explained that peer tutoring provide opportunity for teachers to support other children in acquisition of skills such as daily living skills and vocational skills. They further added that, peer tutoring enhances personal growth by giving children with visual impairment greater

self-confidence and increased independence. Goodland and Hurst, (1989); Constatini, (2015) suggest that peer teaching as a method for teaching has been adopted and used for different purposes for teaching DLS to children with visual impairment all throughout the world .

4.1 Research Question Two

What areas of daily living skills do teachers teach pupils with visual impairments in the Akropong School for the Blind?

The research question 2 had the primary intent of knowing from respondents the areas of daily living skills teachers use to teach pupils with visual impairments at Akropong School for the Blind. The themes that emerged from the responses of the respondents were personal care, housekeeping skills and home management skills.

The following comments were captured under this research question.

Personal care

The teachers argued that pupils who are blind or visually impaired, particularly those with addition disabilities or those who are younger, are thought intensive personal care skills since it helps live independently.

Teacher 1 state that:

Personal care is one of the main areas of concentration when I am teaching them to live independent lives. (Verbatim expression by teacher 1)

Teacher 2 said that:

Here we mostly take pupils through personal care activities such grooming, hygiene, table manners and toilet activities (Verbatim expression by teacher 2)

A Pupils noted:

I can do most of lot of things on my own; I don't wait for people to do everything for me. Our teachers teach us home keeping activities such combing of the hair, dressing and undressing and to seat on a chair especially as a girl (A verbatim expression by a pupil in group 1).

Another again added:

Our teachers take us through a lot of daily living skills. These skills help us to live independent live. The personal care for example is very compulsory in this schools. Everybody go through these activities. Sometimes it is very difficult in the beginning but as time goes on we become used to it. (A verbatim expression by another pupil in group 1)

Another Pupil Added:

As my friends have already mentioned, our teachers take us through daily activities such as bathing, care of hands and feet, cleaning of ears, nail cutting brushing of the teeth etc. I remember that last term our teachers taught us how to even start a convention with people we are not familiar with. I remember this very much because it allowed me to be able to socialize with other friends that I am not so close with (A verbatim expression by another pupil in group 2)

One pupil added:

Teacher has taught us personal hygiene and it helps us to keep our bodies clean and healthy. One of the benefits of teaching daily living skills to students with visual impairments is that it enables them to learn personal hygiene and grooming. It helps them to keep themselves clean though it takes time for pupils to learn. (A verbatim expression by another pupil in group 2)

Almost all the respondents opined that personal care under daily living skills gives pupils with visual impairments a sense of independent living. Both teachers and pupils made mention of grooming, hygiene, table manners and toilet activities as some of the personal care activities which included some of the personal care activities mentioned by Punani and Rawal (2000). Two of the pupils mentioned that, the personal care help them to socialize with their peers because their teachers introduce them to how to socialize with their colleagues. Unlike the finding from the

study conducted by Khorrami-Nejad, Sarabandi, Mohammad-Reza, & Askarizadeh, (2016) which revealed that the absence of mobility and personal care were known to lead to difficulties in social integration and social isolation. This findings revealed that the pupils are able to social after going through personal care.

House Keeping Skills

Another theme that emerged during the interviews has to do with housekeeping skills. Teachers and pupils were asked questions based on some of the house keeping skills pupils with visual impairments go through below are some of their responses.

Housekeeping skills is one of the areas of daily living skills that we teach the pupils. These skills which include washing of bowls, sweeping, and bed making are some of the house keeping skills persons with visual impairments need to learn in order to take part in daily living skills.(verbatim expression by a teacher 1)

Oooh just like the personal care skills, the house keeping skills are very compulsory and are learnt by every pupil in this. We take the pupils through most of the activities under home keeping activities such ironing, moping, scrubbing (verbatim expression by another teacher 2)

One pupil said that:

My teacher teaches me how to wash, sweep scrub and iron my dresses. My mother didn't teach these things at home, I learnt everything in this school. (A verbatim expression by one of the pupil in group 1)

Another pupil also added:

Ooh yes, our teachers teach use activities such as how to spread bed sheet and put pillows on the bed, positioning of pillows and fold bed sheets and our cloths. (A verbatim expression by another of the pupil in group 1)

One pupil again stated:

For me when I go home my mother doesn't teach me anything. So it is when I come to school that I learn thing like this. Like ironing, washing my utensils after eating and washing my cloths (A verbatim expression by one of the pupil in group 2).

Another pupil added:

Because I iron my own dress, wash my dresses and other things, I don't wait for anyone to do all these things for me. I don't rely on anyone when it comes to things like this (A verbatim expression by one of the pupil in group 2)

Both teachers and pupils reported that; pupils with visual impairments are taken through housekeeping skills such as ironing, dressing, washing, spread bed sheet, and mopping. This findings is in agreement with Punani and Rawal (2000) who mentioned that, cleaning, care of furniture, laundry, washing of utensils, and bed making were some of the house keeping skills persons with visual impairments need to learn in order to take part in daily living skills. According to some of the pupils, because of the house keeping skills they go through they are able to do many activities on their own without the help of anyone as revealed from a study conducted by Moyo (2015), which stated that housekeeping skills are very necessary in training pupils with visual impairments to be able to live independent life.

Home management skill

Lastly the teachers pointed out that all pupils need to learn how to management their home and time, because they are important skills for pupils with visual impairments and particularly for pupils who are blind.

Two teachers commented as follows:

I teach my pupils to have home management skills such as order to anticipate events and know for the identify currency, putting pictures and other items at the right place, and positioning of wall clock and alarm clock. (Verbatim expression by a teacher).

Home management activities are very essential in the lives of pupils with visual impairments (verbatim expression by a teacher)

One Pupil indicated:

Our teachers teach us things about how to keep things well in our homes. Some of these things are knowing more about money that is knowing how much you have and are holding and how to buy things with our money. Again, they teach us how to tell time with our clocks and watches. (A verbatim expression by one of the pupil in group 1)

Another pupil stated that:

I know every time whether it is day time or night. (Verbatim expression by a pupil group 2)

Some of the respondents admitted that they now find it easy to count money, are able to mop the floor, arrange the room and manage time. The finding from a study conducted by Mupfumira (2013) revealed that skills and competences gained from learning home management, made pupils with visual impairments self-confident and able to effectively run their households. The respondents also made mention of some activities that involve home management skills that pupils are being taken through. These may include money management, time energy management, Furnishing the home, shopping techniques, using appliances and care of the home as mentioned by (Punani & Rawal, 2000).

4.3 Research Question Three

What adaptations do teachers make to learning materials in teach daily living skills to students with visual impairment at Akropong School for the Blind?

Pupils who are blind or visually impaired will typically need adaptations to teaching and learning materials that will allow them to access all areas of the curriculum. It is the role of the Teacher of pupils with Visual Impairments (TVI) to determine the teaching and learning materials adaptations that the pupils need.

The teacher use tactile learning materials, auditory learning materials and visual learning materials in teaching the pupils. The interview identified the following teaching and learning materials adaptations:

The teacher indicated that the use of tactile materials is very useful for students who are visually impaired.

Use of Tactile learning materials

The teachers underscore that the use of braille to assist reading and improve literacy for pupils who are blind and for some pupils with low vision. Braille helps in assessing reading abilities and other task.

Teacher 1 stated:

One of the main mode of writing we use here is done through braille. For example I use the braille to assist my pupils to read quickly. Again most of the materials used in teaching are labelled with braille notations (verbatim expression by one teacher)

Teacher 2 added:

The braille is one way of helping visually impaired pupils access to textual materials. I often use it to assist the pupils. We also adapt our materials through labelling. We emboss the name of the materials on the materials used in teaching them the daily living skills. This makes learning easy. Immediately they touch them they know what it is.
(Verbatim expression by another teacher)

One pupil noted:

Our teacher has taught us how to read by using our fingers on the braille. So most of the materials have writings in braille on them. So it is very easy know what material you are using. (Verbatim expression by a pupil in group 1)

Another pupil said:

When our teacher was teaching us time management we used a clock and the clock had everything written on it in braille. And it was also big so I was able to touch every to identify the second, minute and hour hands. (Verbatim expression by another pupil in group 1).

One pupil again emphasized:

Most of us here learn by touching so all the materials we use in learning daily ling skills are not harmful at all. We ca touch and carry them to even know how heavy they are. (Verbatim expression by another pupil in group 1).

Another pupil also said:

In order to know the boundaries of some of the materials, our teachers use rope around them so that we can identify the boundaries.
(Verbatim expression by another pupil in group 1).

One pupil stated:

I can identify items with the help of the braille (Verbatim expression by a pupil in group 2).

One pupil again added:

Most of the materials are easy to identify because they all have their names written on them in braille. (Verbatim expression by another pupil in group 2).

Another pupil stated:

Our teachers use different kind materials with different textures to teach us. Some are very smooth and others are rough. Some are hard and others soft. I can even differentiate between a cotton materials from any other material. (Verbatim expression by another pupil in group 2).

One pupil said:

Sometime when the materials we are going to use are not plenty our teachers draw them on a paper and use glue and small, small stones the draw on the paper for us to touch and feel how the materials are like. And it makes learning easy. (Verbatim expression by another pupil in group 2).

According to both teachers and pupils the materials with embossed braille notations is very easy to identify. The teachers made it clear that they made some adaptations to the materials the pupils used in learning the DLS which make learning very easy. The pupils also confirmed this by stating that most of the materials they used in learning daily living skills have been labelled with braille notations which make learning very easy to understand. They also noted that even if there are not enough materials their teachers draw a touchable one on a piece of paper for them to at least have the idea of what they want to show them. One pupil confirmed the statement made by (Klatzy & Lederman, 1988) that teachers put ropes around materials for the pupil to be able to identify. Again it was revealed through the learning of daily living activities pupils are able to differentiate between textures of materials.

Using Visual learning materials

Apart of tactile materials, teachers used visual learning materials to improve on pupils understanding. The teachers and pupils responded that these kinds of materials in the teaching and learning of daily living activities. Below are the statements made by the teachers and pupils during the interview.

Teacher 1 stated:

We are very selective when choosing the material for teaching daily living skills to the students in this school. As you know not all the pupils here are totally blind some have low vision we can't depend on only brailled materials. We have to consider them by making use of bright coloured materials. So most of the materials we use have bright colours (Verbatim expression by a teacher)

Teacher 2 also noted:

One other thing we consider when labelling the materials for the used by the pupils for daily living activities is the font size. We mostly use bigger font size do that they those who can use the sight a little can also have access to them. (Verbatim expression by another teacher)

One pupil stated:

Our teacher use only braille to help us identify materials but also things are written boldly on the items. (Verbatim expression by a pupil in group 1)

One pupil again stated:

The things our teachers use to teach us are very colourful. Me I can't see them but my friends who can see them me that our teachers use bright coloured materials. (Verbatim expression by a pupil in group 1)

A pupil noted:

Sometime when my teachers are teaching and materials are not bright, our teachers paint them themselves with bright colours. (Verbatim expression by a pupil in group 1)

One pupil added:

Another way by which teachers make changes in the teaching and learning materials for us is by trying to use correct font that gives clear text and images during daily living activities. (Verbatim expression by a pupil in group 2)

Another pupil also noted:

With materials that have bright colours we are able to differentiate between the materials used in teaching us. (Verbatim expression by a pupil in group 2)

According to the teachers, they make careful selection of the appropriate materials in teaching daily living activities to those with low vision the teachers said that most of their materials for teaching daily living skills to pupil with visual impairments have large prints on them. They further stated that because some of the pupils have low vision, the best thing they could do was to use materials with bright colour to make lessons easier to be learnt. Therefore most of the materials available have bright colours. Pupils also confirmed these statement my noting that their teachers label most off their teaching and learning materials with large print during daily living activities. This findings is in line with Barraga and Erin (1992) which stated that large print materials are used to help pupils with low vision to access materials easily in the regular classrooms.

Using of Auditory learning materials

Auditory learning materials are other forms of adapted teaching and learning materials used in teaching daily living skills to pupils in this school. Below are the verbatim comments from the respondents:

Teacher 1 said:

Though the use of auditory material are very necessary in the teaching and learning among pupils with visual impairments. Not all the materials available have that characteristics. (Verbatim expression by a teacher)

Teacher 2 added:

Oooh most of the materials are not audible that is why we mostly depends on the tactile and visual learning materials during daily living skills. (Verbatim expression by another teachers)

One pupil noted:

Yes some of the materials make noise but some do not make noise. (Verbatim expression by a pupil in group 1)

One pupil again stated:

No, the materials we use do not make noise. (Verbatim expression by a pupil in group 1)

Another pupil added:

We don't also use tape to record to record whatever we are taught when we are learning daily living skills. (Verbatim expression by a pupil in group 1)

One pupil added again:

When these kinds of materials are used, it tells me what the things really look like. But these kinds of materials are not used to teach us daily living skills. (Verbatim expression by a pupil in group 2)

Another pupil noted:

Few of the materials we use in teaching us have some things that make noise. (Verbatim expression by a pupil in group 2)

One pupil stated:

Our teacher don't use such materials here when teaching us these activities
(Verbatim expression by a pupil group 2)

The above comments from the respondents show that teachers did use a lot of auditory teaching and learning materials in teaching daily living skills to pupils with visual impairments. The respondent mentions that though these kinds of materials are very necessary in the teaching and learning of daily living skills. Due to these, the teachers prefer using tactile and visual learning materials to the auditory learning materials. Further, though the use of auditory devices such as tape recorders are very necessary to pupils with visual impairments, one of the respondents stated that they did not use such a material during teaching and learning of daily living skills activities. According to Barraga and Erin (1992), auditory language triggers the creation of mental images that correspond with words. Images are recalled to assist students in comprehending verbal language. This statement was confirmed by one of the pupils who noted that when auditory teaching and learning materials are used, they help her to have a mental image of what the things really looked like however, their teacher's didn't use such materials in teaching them daily living skills.

4.4 Research Question Four

What inherent challenges do teachers and pupils encounter in the teaching and learning of daily living skills among pupils with visual impairment at Akropong School for the Blind?

This question sought to find out from respondents their general views on challenges teachers encounter in teaching daily living skills to pupils with visual impairment. The data gathered from the interviews were categorized under the following themes:

Inadequate provision of teaching and learning materials

The teachers stated that availability of materials resources such as snellen and E charts, braille papers, CCTV and machines are textbooks, teachers' guides, wall pictures, maps, atlases and other learning aids videotapes and pictures to the Internet are inadequate in supply.

Teacher 1 said:

We lack teaching and learning materials, we have written to the district education office, we want government to come to our aid.

(Verbatim expression by a teacher)

Teacher 2 mentioned:

There are not enough teaching and learning materials for us to use to teach the pupils, it's a big challenge to us (Verbatim expression by another teacher)

One pupil stated:

Most of the materials in this school that are used to teach us some daily living skills are not good. They have been used over a long period of time. (Verbatim expression by a pupil in group 1)

One pupil also said:

Because we don't have enough money we are not able to buy new materials that we have been asked to buy and bring to school for daily living school (Verbatim expression by another pupil in group 1)

One pupil also said:

The materials for teaching us daily living skills are very few, due to this most of us find it difficult to understand the activities without the use of the correct materials. (Verbatim expression by another pupil in group 1)

Another pupil also said:

We have very few materials that are used in teaching us. (Verbatim expression by a pupil in group 2)

One pupil further noted:

Last time my teacher wanted to teach use something but he said the material he wanted to use to teach us were small so she didn't teach us again. (Verbatim expression by a pupil in group 2)

One pupil again added:

Madam we have some materials that are used in teaching us ooh just that they are old. (Verbatim expression by a pupil in group 2)

Teachers rely heavily on a diverse range of materials to support their teaching and pupils learning. These are essential to effective instruction, as they assist to reinforce and supplement the instructor's communication during the presentation of the lesson. The TLMs enhances teaching and learning because pupils are able to see and often feel what the teacher teaches and this go a long way to stimulate pupils' interest and increase understanding and retention. These are essential to effective instruction as they assist to reinforce and supplement the instructor's communication during the presentation of the lesson. The use of teaching and learning materials enhance the acquisition of knowledge and skills of all students. They become more importance in teaching daily living skills which are practical skill to students with

visual impairments. Teachers who believe in student-centred instruction, prefer to teaching using teaching and learning materials and rely heavily on hands-on activities among others to encourage active participation of learners in class (Garrett, 2008). Inadequate provision of teaching and learning materials poses significant challenge to teachers in teaching daily living skills to pupils with visual impairment at Akropong School for the Blind.

The findings collaborates Udoba (2014) who identified that some of the challenges special educators face in teaching pupils with special needs was inadequate teaching material, lack of enough class space to practice activities and lack of teacher trained in special needs education. Findings from Bam (2012) and Kearney (2009) also revealed that lack of teaching learning materials was one of the numerous factors that hinder the learning of daily living skills by children with disabilities. Pupils with visual impairment could learned daily living skills from teachers if they are provided with appropriate teaching and learning materials.

Lack of fine motor skills development of children with visual impairments

These was another theme that emerged from the interview that was carried out on pupils and teachers. From the interviews it was clear that the pupils' lack of fine motor development skills sometimes prevent the pupils from grasping objects use for performing DLS.

Below were the statements made by the teachers and pupils in the school.

Teacher 1 noted:

You know, most of these children were born blind making their motor development very poor. This is one the main challenges we face. Both we the teachers and the pupils (Verbatim expression by a teacher)
Teacher 2 also mentioned:

Motor skills are very important in the teaching and learning among pupils with visual impairments. However poor motor skills are some of the main challenges the pupil face when learning daily activities.
(Verbatim expression by another teacher)

One pupil said:

I am able to move and use my hands to do the daily activities I am taught in school. I am able to move all my body part so that is not a challenge at all. (Verbatim expression by a pupil in group 1)

One pupil again noted:

I find it difficult to hold things in my hands and I also find it difficult to move my arms especially when I am doing activities like, sweeping, washing and bathing. (Verbatim expression by a pupil in group 1)

Another pupil also stated:

I think if I am able to move any part of my body without any difficulties I will be able to do anything successfully without the help of anyone.
(Verbatim expression by a pupil in group 2)

One pupil also added:

Me I was born blind. And when I am in the house my mother does not allow me to do anything so I become very afraid to do activities like combing my hair sometimes my teacher or friends have to help me polish my own shoes. (Verbatim expression by another pupil in group 2)

From the above comment apart from one pupil who noted that he did not find it difficult to do activities that demand the use of the fine motor skills, all the other respondents, both pupils and teachers stated that one of the main challenges pupils faced in learning the daily living skills lack of fine motor skills. This findings is in agreement with a statement made by Eliasson and Burtner (2008) who stipulated that poor fine motor skills may have effects in the degree of participation in DLS and the overall quality of life of children with visual impairments again, Axle, Levent, Clapot, Ines and, Sebesta (2017) stated that, teaching DLS concepts such as dressing

skills and personal hygiene required the used of the motor skills such as manipulative skills and eye-hand manipulation co-ordination further a study conducted by Reimer, Cox, Boonstra, & Nijhuis-van der Sanden, (2015) which revealed that children with visual impairment have slower and more prolonged motor learning than normal sight children.

Poor teacher-pupil ratio

Poor teacher-pupil ratio was another theme that emerged from interview that was conducted from both pupils and teachers. Here teachers and pupils stated that poor teacher ratio was one challenges the pupils face during daily living activities.

The following were some of the statements made by the teachers and pupils.

Teacher 1 noted:

Teacher pupil ratio is one of the main challenges we face as teachers when teaching daily living skills to pupils in this school. (Verbatim expression by a teacher)

Teacher 2 added:

Only two teachers are assigned to teach daily living skills to all the pupils in this school. And I don't think it is good enough for the pupils. (Verbatim expression by a teacher)

One pupil said:

The teachers who teach us are very small. We are many but always it is two teachers who teach us. (Verbatim expression by a pupil in group 1)

Another pupil added:

Because our teachers are few they mostly don't have time for all of us. So I sometimes don't understand everything I am taught. (Verbatim expression by another a pupil in group 1)

A third pupil also stated:

From KG to p6 we have only two teachers who teach these things.

(Verbatim expression by another a pupil in group 1)

One pupil noted:

Yes, madam we are far more than the teachers. This makes learning very difficult (Verbatim expression by a pupil in group 2)

One pupil also said:

We are more than 100 but our teachers are only two and it is not good at all. I think we need more teachers. (Verbatim expression by another a pupil in group 2)

Another pupil also stated:

Sometimes when our teachers are teachers use daily living skills we don't concentrate because we are more than them. And my friends always disturb when our teachers are teaching us because we are more them. (Verbatim expression by another a pupil in group 2)

From the comments by teachers and pupils it is clear that teacher face challenges during the teaching and learning of daily living activities. The teachers made it clear that out of all the teachers in the school only two of them have assigned to teach these activities to the pupils making it very challenging. This findings is in line with the study conducted by Igune (2013) which revealed that teachers faced challenges with large pupil-teacher ratio in the schools in the school the data was gather. The study conducted by Chacha and Zaani (n.d) revealed similar finding which showed that twenty-six percent (26%) of the schools sampled had large-pupil teacher ratio between fifty pupils to one teacher (51: 1) to fifty-five pupils to one teacher (55:1) in the year 2012. Additionally, sixteen percent (16%) schools had large pupil-teacher ratio of between fifty-six pupils to one teacher (56:1) and sixty-one pupils to one teacher (61:1).

Further, the pupils also noted that due to them being more than the teachers, teachers find it difficult to concentrate on all of them. The pupils also lose concentration in class which make them not understand some of the daily living activities they are taught in class. This findings was also in line with a studies conducted by Waita (2012) and Renatu (2013) which revealed that large pupil-teacher ratio which affected the achievements of pupils in the schools the data were being gathered.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter present with the summary of the major findings, conclusion drawn on the bases of the findings and recommendations which are assumed to be useful to enhance approaches teachers used to teach daily living skills to pupils with visual impairment at Akropong school for the blind.

5.1 Summary of findings

The summary of findings is presented based on the specific objectives of the study because the research questions that were used to guide data collection were formulated from the specific objectives. Consequently, the major findings are stated to reflect the objectives of the study.

The first objective revealed the approaches teachers used in teaching daily living skills to pupils with visual impairments in the school. The approaches that emerged from these study included hand –over-hand method, which has to do the pupil touching the materials while the teacher uses her hands to guide the pupil as he or she manipulates the materials to complete the activity. The other technique that showed up from this study was hand –under- hand which is the opposite of the hand over hand technique. Here it was revealed that the teachers uses her hand for activity while the pupils“ hands rest on top. The pupils feel more comfortable with technique because they are able to feel the movement of the teacher and are able to concentrate. The third and last approach that emerged from this study was the use of peer tutors. It was revealed that teachers sometimes ask pupils to tutor each other and other times the pupils assist their peers freely without being asked ask by teachers.

The findings from this study revealed some of the areas under daily living skills that are taught to pupils with visual impairments in Akropong School for the blind. The areas considered such as personal care, housekeeping skills and home management skills. For an area like personal care, it was revealed that pupils were taught grooming, hygiene such as bathing, care of hands and feet, cleaning of ears, nail cutting brushing of the teeth, table manners and toilet activities. Again, the housekeeping skills that are taught to pupils include, ironing, dressing, washing, spread bed sheet, and mopping. Home management skills that were revealed to be learnt by these pupils include count money, mop the floor, arrange the room and manage time. All these activities helped pupils to be independent and have confidence in themselves.

The third objective was on the adaptations teachers make to teaching and learning materials teachers use in teaching daily living skills to the pupils. The result from this study showed that teachers make use of teaching and learning materials such as tactile learning materials, auditory learning materials and visual learning materials in teaching. For the tactile learning materials it was revealed that teachers label most of the materials used in teaching daily living skills with braille notations which help pupils to identify items easily. It was further revealed that through the learning of daily living activities pupils are able to differentiate between textures of materials. The use of visual learning materials were also revealed by respondents be used by teachers to help teachers during the teaching of daily living skills. The result showed that teachers made use of bright colored materials when teaching the pupils. Further teachers made changes in the teaching and learning materials by using correct font that gives clear text and images during the learning daily living activities were some of the house keeping skills persons with visual impairments need to learn in order to take part in daily living skills. For the use of auditory teaching and learning materials

it was revealed that teachers did not really consider that when teaching the pupils. Very few of the materials were audible materials.

The final objective has to do with the challenges teachers and pupils face during the teaching and learning of daily living skills. Some of the challenges that emerged were, inadequate provision of teaching and learning materials, lack of fine motor skills and poor teacher-pupil ratio. For lack of teaching and learning materials, it was revealed that materials available for the daily living skills to the pupils are not enough. More so some of the materials are worn out. For lack of fine motor skills, it was revealed that this was one of their main challenges. Some of the pupils stated that they found it difficult to move some part of their bodies easily. Last but not least, poor teacher –pupil ratio was revealed to be another challenge both pupils and teachers face during the teaching and learning of daily living skills. The results showed that only 2 teachers were assigned for teaching daily skills to all the pupils in the school.

5.2 Conclusion

The study concluded that, hand- over- hand, hand- under- hand and peer tutors were also revealed to be some of the approaches teachers used in teaching daily living skills to pupils.

Secondly, the pupils with visual impairments in the school take part in daily living skills such as personal care, housekeeping skills and home management skills. Again, apart from auditory learning materials which were not mostly used for teaching the pupil, the teachers made use of tactile and visual learning materials as some adaptations in teaching daily living skills to the pupils. Finally both teachers and pupils faced challenges such as, lack of inadequate teaching and learning materials, lack of fine motor skills and poor teacher-pupil ratio.

5.3 Recommendations

The following recommendations are made based on the findings of the study:

1. Teachers should make use of other approaches such as one-on-one teaching, Direct Instruction/Teacher-Directed Approach and group learning.
2. The school must include the areas of the daily living skills in the school curriculum in order to be learnt in the classroom as a lesson.
3. Teachers should make more intensive adaptations to the daily living skills. The school administration must consider adapting the environment and the few materials available must also be adapted.
4. The school administration should give intensive training to teachers in the area of daily living skills in order to reduce the challenges the teachers and pupils face in the school.

5.4 Suggestions for Further Research

1. An investigation on approaches teachers used to teach daily living skills to children with visual impairment in Ghana involving a larger sample of over 80% of the target population for the betterment of the generalization of the findings can also be conducted.
2. A study on attitudes of Teachers of students with visual impairments (TVIs) towards inclusive education can be conducted.
3. Further investigation can be conducted into the challenges faced Teachers of students with visual impairments (TVIs) in assessment of student's level of performance.

REFERENCES

- American Foundation for the Blind. (2012). Expanding possibilities for people with vision loss. Retrieved from: <http://www.afb.org/section.aspx? Document, 1362> on 13/02/18.
- American Foundation for the Blind. (1991). *A Journal of Visual Impairment and Blindness*, 103(3).
- Ary, D., Jacobs, L. & Sorensen, C. (2010). *Introduction to research in education*. Washington DC: Wadsworth, Cengage Learning.
- Avoke, M. (2005). *Introduction to special education for universities and colleges*. Accra: The City Publishers.
- Axel, E., Levent, N., Clapot, M., Ines, C. & Sebesta, R. (2017). Dressing for success. Multimodal modules for teaching dressing skills, understanding of fashion and self-expression through fashion.
- Baker, B. L. & Brightman, A. J. (1997). *Steps to independence: Teaching everyday skills to children with special needs* (3rd Ed.). Baltimore, MO: Paul H. Brookes.
- Bambring, M. (2007). Divergent development of manual skills in children who are blind or sighted. *Journal of Visual Impairment and Blindness*, 4(7), 19-31.
- Bandura, A., Ross, D. & Ross, S. (1961). *Transmission of Aggressive through the Imitation of Aggressive Models*. *Journal of Abnormal and Social Psychology*, 63, 575 – 582
- Barraga, N. C. & Erin, J. N. (1992). *Visual handicaps and learning*. Austin, TX: PRO ED.
- Bishop, V. E. (1996). *Teaching visually impaired children* (2nd ed.). Springfield, IL: Charles C Thomas.
- Bobroff, S. & Sax, C. L. (2010). The effect of peer tutoring interview skills training with transition - age. *Journal of Vocational Rehabilitation*, 33(10), 143-154
- Branch, L., Allan, G., Meyers, A. & Meyers, R. (1987). Assessing physical function in the elderly. *Clinics in Geriatric Medicine*, 3, 29-51.
- Brian, J., Bryson, S. E., Garon, N., Roberts, W., Smith, I. M, et al. (2008). Clinical assessment of autism in high-risk 18-month-olds. *Autism*, 12, 433-456.

- Brown, C. G. (2010). Improving fine motor skills in young children: an intervention study. *Educational Psychology in Practice*, 26(3), 269-278.
- Bryman, A. (2008). *Social research methods*. New York: Oxford University Press.
- Cameto, R., Camille M., Cadwallader, T. W. & Wagner, M. (2002). *The daily living and social skills of youth with disabilities*.
- Chacha, B. & Zani, A. P. (2015). The impact of free primary education on pupil-teacher ratio in Kuria East constituency. *IOSR Journal of humanities and Social Science*, 20(5), 01-12.
- Chen, R. & Gil, E. (2001). Tactile learning strategies for student who are deaf blind retrieved on 11th August, 2017 on Friday 11: 30pm from <http://www.projectsalute.net/Learned/Learnedhtml/TactileLearningStrategies.html>
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research method in education*. New York: Routledge.
- Coonts, T. (2005). *Teaching strategies specific to children who are deaf-blind teaching strategies specific to children who are deaf-blind*. Nebraska Deaf-Blind Project Fact Sheet #4,
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approach* (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2012). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). London: Sage.
- Descomber, M., (2009). *Item non-response rates: A comparison of on line paper questionnaire*. *International Journal of Social Research*, 12(4), 281-91
- Dowing, J. & Eichinger, J. (2014). Instructional strategies for learners with dual sensory impairments in integrated settings. *Research and Practice for persons with Severe Disabilities (RPSD)*, 36(3), 150-157.
- Downing, J. (2010). *Academic instruction for students with moderate and severe intellectual disabilities in inclusive classrooms*. Thousand Oaks, CA: SAGE
- Eliasson, A-C. & Burtner, P. A. (2008). *Improving hand function in children with cerebral palsy: Theory, evidence, and intervention*. London: Mac Keith Press.
- Erin, J. N. (2003). *Educating students with visual impairments*. (ERIC EC Digest E653). Council for Exceptional Children, Information Center on Disabilities and Gifted Education. Retrieved August 6, 2014, from www.ericcec.org/digests/e653.

- Fillenbaum, G. G. (1987). Activities of Daily Living. In George L. Maddox (Ed.), *The Encyclopedia of Aging*. New York: Springer.
- Fillenbaum, G. G., Dellinger, D., Maddox, M. & Pfeiffer, E. P. (1978). Assessment of individual functional status in a program evaluation and resource allocation model. In *Multidimensional functional assessment: The OARS methodology*, (2nd ed.). Durham, NC: Duke University, Center for the Study of Aging and Human Development.
- Fraiberg, S. (1977). *Insights from the blind: Comparative studies of blind and sighted infants*. New York: New American Library.
- Freitag, C. M., Kleser, C., Schneider, M. & Von Gontard, A. (2007). Quantitative assessment of neuromotor function in adolescents with high functioning autism and Asperger Syndrome. *J Autism Dev Disord.*, 37, 948-959.
- Gall, M. D., Gall, J. P. & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Boston: Pearson International Edition.
- Gay, L. R. (1992). *Educational research competence for analysis and application*. Ohio: Millan Publish Company.
- George, A. L. & Duquette, C. (2006). The psychosocial experience of a student with low vision. *Journal of Visual impairment & Blindness*, 100, 152-163
- Goodland, A. & Hurst, B. (1989). *Peer tutoring: A Guide to learning by teaching*. London: Nieholas Publishing.
- Haegele, B. & Goodway, M. (2015). Fundamental motor skills and school -aged individual with visual impairment
<https://link.springer.com/article/10.1007/s40489-015-0055-8> 22ND
SEPTEMBER, 2017.
- Hancock, B. (2002). *An introduction to qualitative research*. Noltingham, UK: Trente Focus Group. Hand -Over-Hand Assistance. Retrieved ON 3RD AUGUST 2017 ON THURRSDAY <http://iseeability.com/hand-over-hand-assistance/>
- Hatlen, P. H. & Curry, S. A. (1987). In support of specialized programs for blind and visually impaired children: The impact of vision loss on learning. *Journal of Visual Impairment and Blindness*, 81, 7-13.
- Haywood, K. M. & Getchell, N. (2001). *Life span motor development* (3rd ed.). Champaign, IL: Human Kinetics.
- Hellendoorn, A., Wijnroks, L., Van Daalen, E., Dietz, C., Buitelaar, J. K. (2015). Motor functioning, exploration, visuospatial cognition and language development in preschool children with autism. *Res Dev Disabil.*, 39, 32-42.

- Hendricks, D. R. & Wehman, P. (2009). Transition from school to adulthood for youth with Autism Spectrum Disorders: Review and recommendations. *Focus on Autism and Other Developmental Disabilities*, 24(2), 77-88.
- Heward, W. L. & Orlansky, M. D. (1992). *Exceptional children: An introductory survey of special education*. N. Y. Merrill.
- Holiday, J. (2013). A study of curriculum development and reform in residential schools for the blind in the United States: Three case studies. (Order No. 3606229, The University of Wisconsin - Madison). Pro Quest Dissertations and Theses, 166. Retrieved from:
<http://search.proquest.com/docview/1492329280?accountid=14648>.
- Houwen, S., Hartman, E., Jonker, L. & Visscher, C. (2010). Reliability and validity of the TGMD-2 in primary school-aged children with visual impairments. *Adapted Physical Activity Quarterly*, 27(2), 149–159.
- Houwen, S., Visscher, C., Hartman, E. & Lemmink, K. (2007). Gross motor skills and sport participation of children with visual impairment. *Research Quarterly for Exercise and Sport*, 78(1), 16–23.
- Hus Bal, V., Kim, S. H., Cheong, D. & Lord, C. (2015). Daily living skills in individuals with Autism Spectrum Disorder from Two to Twenty One Years of Age. *Autism*, 1-11.
- Ibrahim, T. I. (2009). A study of the effects of an inclusion model on students with specific learning disabilities. *Journal of Learning Disabilities*, 28(8), 511-522.
- Itunga, A. (2011). The threat to free primary education in Kenya. Retrieved from <http://www.build-africa.org/news.php/69/the-threat-to-free-primary-education-in-Kenya,2011>.
- Ivy S. E. (2014). An analysis of graduated guidance children with multiple disabilities. (Published Master Thesis) Vander Beilt University.
- Kane, R. A. & Rosalie L. Kane. (1981). *Assessing the elderly: A practical guide to measurement*. Lexington, MA: D.C. Health and Company.
- Kanne, S. M., Gerber, A. J., Quirnbach, L. M., Sparrow, S. S., Cicchetti, D. V. & Saulnier, C. A. (2011). The role of adaptive behaviour in Autism Spectrum Disorders: Implications for functional outcome. *Journal of Autism and Developmental Disorders*, 41, 1007–1018.
- Katz, S. & Amechi Akpom, C. (1976). A measure of primary sociobiological Functions. *International Journal of Health Services*, 6, 493-507.

- Katz, S., Amasa, B., Ford, R. W., Moskowitz, B., Jackson, A. & Marjorie, W. J. (1963). Studies of illness in the aged. *Journal of the American Medical Association*, 185, 94-99
- Katz, Sidney. (1983). Assessing self-maintenance: Activities of daily living, mobility, and instrumental activities of daily living. *Journal of the American Geriatrics Association*, 31, 721-727.
- Kimmel, A. J. (1996). *Ethical issues in behavioural research*. Cambridge: Blackwell.
- Kirk & Gallagher (2008). *Exceptional children*. Houghton Mifflin.
- Kirk, S. A. & Gallagher, J. J. (1989). *Educating exceptional children*. (4th ed.). Boston Houghton: Mifflin Company.
- Koenig, A. J. (1992). *A framework for understanding the literacy of individuals with visual impairments & blindness* (pp 86, 227-284).
- Kombo, K. & Tromp, D. (2006). *Proposal and thesis writing: An introduction*. Nairobi: Paulines Publications Africa.
- Kusi, H. (2012). *Doing qualitative research: A guide for researcher*. Accra Newtown: Emmpong Press.
- Laarhoven, T. V., Kraus, E., Karpman, K., Nizzi, R. & Valentino, J. (2010). A comparison of picture and video prompts to teach daily living skills to individuals with Autism. *Focus on Autism and Other Developmental Disabilities*, 25(4), 195–208.
- Landsberg, E. (2005). Visual impairment. In E. Landsberg., D. Kruger. & D. Nel. (eds.), *Addressing Barriers to learning*. (329-346). Hatfield, Pretoria: Van Schaik.
- Lawton, M. (1969). Powell and Elaine Brody. Self-Maintaining and instrumental activities of Daily Living. *The Gerontologist*, 9, 179-186.
- Levtzion-Korach, O., Tennenbaum, A., Schnitzer, R. & Ornot, A. (2000). Early motor development of blind children. *Journal of Paediatrics and Child Health*, 36(3), 226–229.
- Lewis, V. & Doorlag, R. (1995). The consequences of visual impairment for children's symbolic and functional play. *British Journal of Developmental Psychology*, 18, 449-464.
- Lieberman, L. J. & Drummer, V. (2005). *Physical education and sports for people with visual impairment and Deaf-blindness*. USA: American Foundation for the Blind.

- Liebrand-Schurink, J., Cox, R. F. A., van Rens, G. H. M. B., Cillessen, A. H., Meulenbroek, R. G. & Boonstra, F. N. (2015). Infantile Nystagmus Syndrome is associated with inefficiency of Goal-directed Hand Movements. *Investigative Ophthalmology & Visual Science*, 56(1).
- Loprinzi, P. D., Cardinal, B. J., Loprinzi, K. L. & Lee, H. (2012). Benefits and environmental determinants of physical activity in children and adolescents. *Obes. Facts.*, 5(4), 597–610. [PubMed]
- Lourniet, R. & Levack, N. (1993). Independent living: A curriculum with adaptations for students with visual impairments. Austin, USA: Texas School for the Blind and Visually Impaired. *American Foundation for the Blind*.
- Lowenfeld, V. (1975). *Creative and mental growth* (6th ed.). New York: MacMillan Publishing Co., Inc.
- MacCuspie, P. A. (1992). The social acceptance and interaction of visually impaired children in integrated settings. In S. Z. Sacks, L. Kekelis, & R. J. Gaylord-Ross (Eds.), *The development of social skills by blind and visually impaired students: Exploratory studies and strategies*, 83-102. New York: American Foundation for the Blind.
- MacCuspie, P. A. (1996). *Promoting acceptance of children with visual disabilities: From tolerance to inclusion*. Halifax, Nova Scotia: Atlantic Provinces Special Education Authority.
- Macmillan, J. H. & Schumacher, S. (2001). *Research in education*. New York: Harper Publishers.
- Maguga, A. S. (2013). *Secondary school teachers' self-assessment of knowledge and skills in teaching students with disabilities in Ilala municipality Tanzania*. Masters thesis.
- Mastroperi, M. A, & Marshak, L. (2012). Peer-mediated instruction in inclusive secondary social studies learning: Direct and Indirect learning effects. *Learning Disabilities Research & Practice*, 27(1), 12-20.
- McConnell, S. & Odom, S. (1999). A multi-measure performance-based assessment of social competence in young children with disabilities. *Topic in Early Childhood Special Education*, 19(2), 67-74.
- McDowell, I. & Claire, N. (1987). *Measuring health: A guide to rating scales and questionnaires*. New York: Oxford University Press.
- Mcmillan, J. H. & Schumacher, S. (2001). *Research in education* (5th ed.). London: Addison Wesley Longman.

- Merriam, S.B. (2009). *Qualitative case study research qualitative research: A guide to design and implementation* (2nd ed.). San Francis, CA: Jossey- Bass.
- MikiaShvilli, M. (2011). *Strategies for solving tasks by blind*. Published Master's Thesis: University of Oslo, Norway.
- Miles, B. & Lane, H. (2003). Talking the language of the hands to the hands. *The National In-formation Clearing House on Children Who Are Deaf – Blind*, 1-12.
- Mugambi, M. K. (2015). *Challenges facing teachers in teaching in an integrated School. Moi Girls School*. Published Masters Thesis, University of Kenyatta.
- Muraton, L. M., Lamberg, E. M., Quinn, L. & Duff, S. V. (2013). *Applying principles of motor learning and control to upper extremity rehabilitation*. Stony of Health Technology and management, Department of physical therapy, Stony Brook, N. Y, USA.
- Naideo, B. (20014). *The exclusion of children with visual impairment from early childhood development provision* . Published Master's Thesis. Kwia Zulu-Natal.
- Nicolosi, L., Harryman, E. & Kresheckm, J. (1996). *Terminology of communication disorders* (4th ed.). Baltimore, MD: Williams & Wilkins.
- Nyberg, L., Henricsson, L. & Rydell, A. (2008). Low social inclusion in childhood: Adjustment and early predictors. *Infant and Child Development*, 17, 639-656.
- Ocloo, M. A. (2001). Perception of basic education school teachers towards inclusive education in the Hohoe District of Ghana. *International Journal of Inclusive Education*, 12, 5-6.
- Odera S. O., Makoriomoke, C. & Odongo, C. B. (2016). Teaching role in the implementation of daily living skills curriculum for learners with Mental Challenge: A case of Special Units. In Rarieda Sub-Country Siaya country, Kenya. *The international Journal of social sciences and Humanities Invention*, 3(5), 2349-2031.
- Ophir-Cohen, M., Ashkenazy, E., Cohen, A. & Tirush, E. (2005). Emotional status and development in children who are visually impaired. *American Foundation for the Blind (AFB)*, 99(8).
- Orodho, A. (2009). *Elements of education & social science research methods* (2nd ed.) Maseno, Kenya: Kenezja publisher.
- Orodho, J. A. (2009). *Techniques of writing research proposals and reports in education and social Sciences*. Bureau of Education Research Kenyatta University. Nairobi: Reata Printers.

- Osei, E. & Mensah, D. K. D. (2018). The prevalence of negative teacher-related factors in a Ghanaian Municipality's Basic Schools. *Advances in Social Sciences Research Journal*, 5(6), 590-601.
- Ozmete, Z. (2011). *Building life skills for empowerment of young people: A conceptual analysis*. Hazettepe University: E-Journal of Sociological Research.
- Patrick, O. J. (2016). *Effect of teachers, use of communication technique on activities of daily living skills for learners with deaf blindness in selected primary school*. Uganda, University of Kenyatta.
- Pless, E. & Carisson, F. (2000). The effect of motor skills intervention on developmental coordination disorder and visual impairment.
- Provost, B., Lopez, B. R. & Heimerl, S. (2007). A comparison of motor delays in young children: Autism spectrum disorder, developmental delay, and developmental concerns. *Journal of Autism and Developmental Disorders*, 37, 321-328. doi: 10.1007/s10803-006-0170-6.
- Reimer, A. M., Cox R. F, Banstia, N. F. & Smit-Engelsman, B. C, (2008). Effect of visual impairment on goal - directed aiming movement in children . *Developmental Medicine and Child Neurology*, 50(10), 778-783.
- Reimer, A., Barsingerhorn, A. D., Overvelde, A., Nijhuis-van der Sanden, M. W. G., Boonstra, F. N. & Cox, R. F. A. (in press). Fine motor skills assessment in children with visual impairment and normal vision: development of the Manu Vis age band for three-years-olds. *Physical & Occupational Therapy in Pediatrics*, 4(2), 33-51..
- Reiner, A. M., Cox, R. F. A. & Nijhuis- Vander Sanden, M. W. G (2011). *Improvement of fine motor skills in Children with Visual impairment*, 32(5), 1924-1933.
- Renatus, N. (2013). The influence of class size on pupils achievement out comes in Primary schools. Masters Thesis, University of Mzumbe.
- Rodgers, J. (1999). Trying to get it right: Understanding research involving people learning difficulties. *Disability and Society*, 14 (4), 421-433.
- Rodney, P. (2003). The psychological aspect of visual impairment as a central understanding in the development of inclusion. *British Journal of Visual Impairment*, 21(1), 22-23.
- Roe, J. (2008). Social inclusion: Meeting the socio-emotional needs of children with vision needs. *British Journal of Visual Impairment*, 26(2), 147.

- Rooth, E. (1997). *Introduction to life skills: Hands-on approaches to life skills education*. Hartfield: Via Africa.
- Ruteere R. K. (2009). *Effectiveness of teaching methods for daily living skills to learners with mental retardation in special Units in primary Schools*. Published Master's Thesis: University of Kenyatta.
- Ruteers, R. K., Mutia, J. M., Mwoma, T. & Runo, M. (2015). Challenges experienced in teaching daily living skills to learners with mental retardation. *Journal of Education and Practice*, 6(18), 222-288.
- Sacks, S. K., Kekelis, L. S. & Gaylord-Ross, R. J. (Eds.). (1992). *The development of social skills by blind and visually impaired students: Exploratory studies and strategies*. New York: American Foundation for the Blind.
- Sallis, J. F. & Saelens, B. E. (2000). Assessment of physical activity by self-report: status, limitations, and future directions. *Res. Q. Exerc. Sport.*, 71(2 Suppl), S1. [PubMed].
- Sandra, R. (2000). *Academics are not enough: Incorporating life skills in the curriculum for children and youth with visual impairment*. San Francisco: State University.
- Seesurrun, S. (2015). The development of a self-help skills education programme for a Group of visually impaired children. Master's Thesis: University of South Africa.
- Shinali, M. C., Mnjokava, C. & Thinguri, R. (2014). *Adaptation of the curriculum to Suit children with visual impairment in integrated ECD Centres in Kenya: A case in Narok Sub-country*.
- Simon, C., Echeita, G., Sandoval, M. & Lopez, M. (2010). *The inclusive educational process of students with visual impairments in Spain: An Analysis from the Perspective of Organization*.
- Simon, M. K. & Goes, J. (2011). Scope, limitations, and delimitations. Retrieved from <http://www.dissertationrecipes.com/wpcontent/uploads/2011/04/limitationscopeedelimitation1.pdf> 22/06/ 2015.
- Smith, L. E., Maenner, M. J. & Seltzer, M. M. (2012). Developmental trajectories in adolescents and adults with autism: The case of Daily Living Skills. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(6), 622-631
- Special Issues (2004). *Hand over-hand guidance and Guidance: What lessons do we teach*.
- Stake, R. E. (2008). *Qualitative case studies: Strategies of qualitative inquiry*. Thousand Oaks, CA, US: Sage Publication, Inc.

- Stoddart, K. P., Burke, L. & King, R. (2012). *Asperger syndrome in adulthood: A comprehensive guide for clinicians*. New York, NY: Norton Publishers.
- Stoddart, K. P., Burke, L., Muskat, B., Manett, J., Duhaime, S., Accardi, C., Burnham
- Riosa, P. & Bradley, E. (2013). *Diversity in Ontario's youth and adults with Autism Spectrum Disorders: Complex Needs in Unprepared Systems*. Toronto, ON: The Redpath Centre.
- Strickling, C. (2010). Texas school for the blind and visually impaired. Retrieved from: www.tsbvi.edu on October, 2010
- Sudy F. N. (2013). *Evaluation of effectiveness of primary education development program on enhancement of inclusive education for children with hearing and visual disabilities in Tanzania*. Master's Thesis: Open university of Tanzania
- Thomson, K., Walters, K., Martin, G. L. & Yu, C. T. (2011). Teaching adaptive and social skills to individuals with Autism Spectrum Disorders. In J. L. Matson, P. Sturmey (eds.), *International handbook of autism and pervasive developmental disorders: Autism and child psychopathology series*. New York, NY: Springer.
- Turnbull, A., Turnbull, R., Shank, M., Smith, S. & Leal, D. (2002). *Exceptional lives: Special education in today's schools* (3rd ed.). Upper Saddle River, NJ: Merrill
- Udobah, A. (2014). *Challenges faced by teachers when teaching learners with developmental disability*. Master's thesis: University of Oslo.
- Vanderstoep, S. W. & Johnston, D. D. (2009). *Research methods for everyday life: Blending qualitative and quantitative approaches*. San Francisco: John Wiley & Sons, Inc.
- Vita, A. C. & Kataoka, V. Y. (2014). Blind students learners of probability through the use of tactile model. *Statistics Education Research Journal*, 1(3&2), 148-163.
- Wagner, M., Haibach, P. & Lieberman, L. (2013). Gross motor skill performance in children with and without visual impairments-research to practice. *Research in Developmental Disabilities*, 34(10), 3246–3252.
- Wanjiku, B. (2014). Teaching strategies used by teachers to enhance learning to learners with multiple disabilities in four selected counties in Kenya. Doctoral Thesis, University of Nairobi, Kenya.
- Wanzel, J. (2003). *Help your child go far in life daily living skills: Tips for parents of blind children*. Wisconsin: National Federation of the Blind.

- Warren, D. H. (1994). Blindness and children: An individual differences approach. *Journal of Visual Impairment & Blindness*, 2(1), 118-133.
- Weaver, L. L. (2015). Effectiveness of work, activities of daily living, education, and sleep interventions for people with autism spectrum disorder: A systematic review. *The American Journal of Occupational Therapy: Official Publication of the American Occupational Therapy Association*, 69(5),
- Webber A. L., Wood J. M., Gole G. A. & Brown B. (2008). The effect of amblyopia on fine motor skills in children. *Invest Ophthalmol Visual Science*, 49(2), 594-603.
- Webber, A. (2007). Effect of emblyopia
https://eprints.qut.edu.au/30211/1/Ann_Webber_Thesis.pdf
- Webber, A. L., Wood, J. M., Gole, G. A. & Brown, B. (2008). The effect of amblyopia on fine motor skills in children. *Optom Vissci*. 49(2), 594-603
- Webster, A. & Roe, J. (1998). *Children with visual impairments: Social interaction, language and learning*. London: Sage.
- Webster, A. & Roe, J. (1998). *Children with visual impairments*. London: Routledge.
- Whitfield, A. S. (2012). Describing the motor skills of young children with development delay before and after participating in an augmented or Non-augmented Language intervention. Published Master's Thesis: Georgia State University.
- Willings, C. (2013). *Teaching students with visual impairments*. Los Angeles: Routledge Falmer.
- World Health Organization (2017). *Blindness and Visual impairment*. Global Data on Visual impairment, 2010, 2012.
- Yieke, F. A. (2006). Free primary education (FPE) in Kenya: Examining the benefits, challenges and sustainability. Kef: *Commission for development studies at the Austria academy services*: MDG project database.

APPENDICES

APPENDIX A

INTERVIEW GUIDE FOR STUDENTS WITH VISUAL IMPAIRMENTS

Approaches teachers use in teaching daily living skills.

1. Describe how teachers teach you daily living skills?

Prompts:

- a. How do your teachers teach you activities of daily living such as self-care?
How do the teachers ensure that you learn skills in activities such as combing your hair?
- b. In what ways do teachers make use of your class mates in teaching you DLS?
- c. How do teachers hold your hands in teaching you the skills?
- d. How about the number of students taught at a time?

Adaptations teachers make to learning materials for students with visual impairments.

2. What materials do teachers use to teach or demonstrate DLS such as bathing to you? Describe it.

Prompts:

- a. How do your teachers modify learning materials for teaching you DLS?
- b. How adequate are the materials used to teach DLS to you?
- c. How do the learning materials help you in learning DLS?

Benefits of teaching daily living skills to students with visual impairments

3. What benefits do you gain when you are taught daily living skills by you teachers

APPENDIX B

INTERVIEW GUIDE FOR TEACHERS

Approaches teachers use in teaching daily living skills.

1. Describe the approaches you use to teach you daily living skills to students with visual impairments?

Prompts:

- a. How do you teach activities of daily living such as sweeping the room to the students?
- b. In what ways do you engage pupils in teaching DLS to one another?
- c. In what ways do you hold the hands of the students in teaching skills in sweeping to them?

Adaptations teachers make to learning materials for students with visual impairments.

2. What kind of adaptations do you make to materials used in teaching DLS to the students? Describe it.

Prompts:

- a. How do you modify learning materials to teach DLS to the students?

What more do you do to make materials accessible to the students?

- b. How adequate are materials use to teach DLS to students?
- c. How do the learning materials help you to teach DLS?

Benefits of teaching daily living skills to students with visual impairments

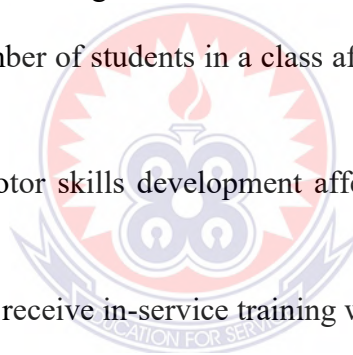
3. What are the benefits of teaching daily living skills to students with visual impairments

Challenges teachers face in teaching DLS to students with visual impairments.

4. Describe the challenges you face in teaching DLS to students with visual impairments.

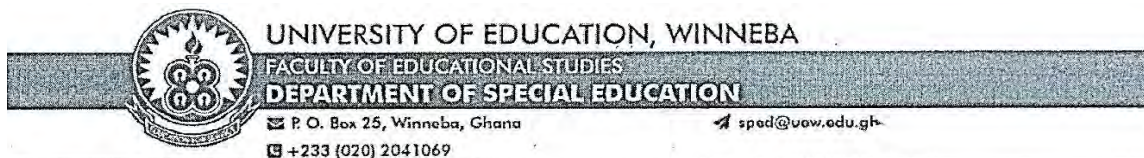
Prompts:

- a. What challenges do you face in teaching DLS such as brushing of teeth to students with visual impairments?
- b. What is your opinion about the available and adequacy of teaching and learning materials used for teaching DLS such as bathing?
- c. How does the number of students in a class affect how you teach skills in daily living?
- d. How does fine motor skills development affect the acquisition or learning of DLS?
- e. How often do you receive in-service training with regards to teaching DLS?



APPENDIX C

LETTER OF INTRODUCTION



9th April, 2018

THE HEADMISTRESS
AKROPONG SCHOOL
FOR THE BLIND.

Dear Sir/Madam,

LETTER OF INTRODUCTION

I write to introduce to you, Belinda Asamoah an M.Phil student of Department of Special Education of the University of Education, Winneba, with registration number 8160150013.

She is currently working on her thesis on the topic: *Approaches Teachers use to teach daily skills to children with visual impairment at Akropong school for the Blind.*

I should be grateful if you could give her the needed assistance to enable her carry out the studies.

Thank you.

Yours faithfully,

YAO E. YEKPLE (PH.D)

AG.HEAD OF DEPARTMENT

