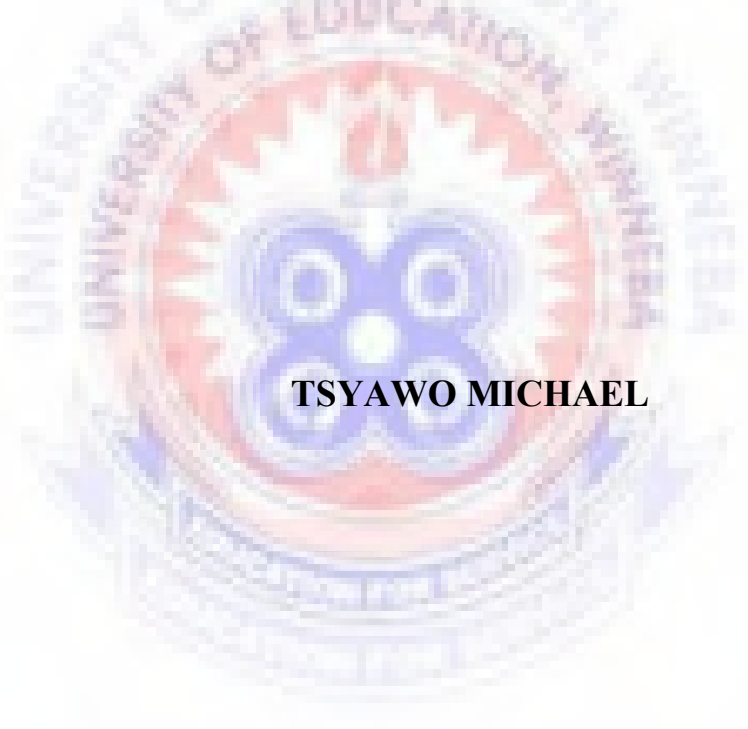
UNIVERSITY OF EDUCATION, WINNEBA

TEACHERS' STRATGIES FOR ENHANCING PARTICIPATION OF PUPILS WITH DISABILITIES IN SELECTED INCLUSIVE BASIC SCHOOLS IN SOUTH TONGU DISTRICT, GHANA.



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A thesis in the Department of SPECIAL EDUCATION, Faculty of EDUCATIONAL STUDIES submitted to the School of Graduate Studies, University of Education, Winneba in partial fulfillment of the requirement for the award of degree of MASTER OF PHILOSOPHY DEGREE IN SPECIAL EDUCATION.

NOVEMBER, 2015

DECLARATION

STUDENT'S DECLARATION

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

…….. ……..

Michael Tsyawo Date

SUPERVISOR'S DECLARATION

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

…… …….

Doctor Samuel Hayford Date

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DEDICATION

This work is dedicated to my lovely daughters: Elikem and Etornam; my wife, Patricia, my father, Simon (Deceased), Lawrence and my loving mother, Madam Aba Faba.

I love you all.

The two years journey of Master of Philosophy has not been easy or smooth but thanks be to GOD ALMIGHTY that HE has taken me to the end. I pray that this work will be an inspiration to my family, especially my daughters Elikem and Etonam, to pursue their dreams.

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ABSTRACT

The purpose of this study was to examine teachers‟ strategies for enhancing the participation of pupils with disabilities in selected inclusive basic schools in the South Tongu District. The design employed was descriptive survey. Purposive sampling technique was used to select ten head teachers, while simple random sampling technique was used to select one-hundred forty teachers from ten selected pilot inclusive schools. Questionnaire was used to gather data. Data from the questionnaire were analyzed using frequencies and percentages. Analysis of the data revealed that majority of pupils have mild and moderate disabilities for example reading and calculation difficulties hence making it challenging for pupils with such conditions to cope with academic work. It was also realized that high percentage of teachers did not use the appropriate methodology in teaching pupils with mild and moderate disabilities in the pilot inclusive schools. It was recommended that, teachers must use the appropriate pedagogy in teaching pupils with mild and moderate disabilities, teachers must offer one-on-one instruction to pupils and the District Education Office must employ more sign language instructors and Braille readers to help the hearing and visually impaired pupils during teaching and learning.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The population of learners in every classroom and learning setting encompasses learners with divers learning needs. Diversity as a term means differences; it encompasses abilities, disabilities and difficulties (Hayford 2013). Learners are divers as a result of their gender, ethnic or socio-economic backgrounds, special talents and abilities as well as disabilities. Besides, in every classroom situation in Ghana some individuals may learn easily whilst others cannot learn easily.

According to Hayford (2013) learners differ in the ways they learn and the circumstances under which they can learn successfully. Some individuals are visual learners; others are auditory or kinesthetic learners while some are both visual and auditory learners. Although, any of these differences can potentially inhibit development and learning some of these characteristics can exert more devastating consequences on an individual‟s development and learning if they are not identified by teachers and supported to participate successfully in learning.

Also, a research carried out by Patton (2011) suggested that all pupils can learn and benefit from education and that school should adapt to the physical, social, and cultural needs of pupils. Proponents believe that individual differences between pupils are a source of richness and diversity, which should be supported through teachers strategies

that will enhance the participation of pupils with diverse learning needs in inclusive classrooms.

Although general education teachers typically support the concept of inclusive education, they often find themselves unsupported and ill-equipped to provide effective instruction and support for pupils with diverse needs in the inclusive classroom (Bender, 2008; Mastropieri& Scruggs, 2000). Teachers are often "hungry" for strategies to support pupils with disabilities in the general education classroom (Bender, 2008). Even when teachers have a positive attitude toward inclusion, knowledge of how to adapt instruction and the desire to make instructional changes, they still do not significantly alter their traditional whole group instructional approaches (Friend &Bursuck, 2002).

Currently, the demands on schools and teachers are becoming more complex as society now expects schools to deal effectively with disadvantaged pupils due to the inclusive policy. Teachers therefore, need to develop good strategies that will build their confidence and knowledge as well as skills in teaching to meet the challenges that they may encounter in the present school climate (Carroll, Forlin and Jobling, 2003).

In Ghana, the Educational Strategic Plan 2010-2020 directs that all pupils with mild and moderate disabilities will be enrolled into the regular schools by 2015 whilst those with severe and profound will be enrolled by 2020. Meanwhile, those that are already found in the pilot inclusive schools now are not well catered for in terms of teaching and learning (Annual District Performance Report 2013-2014, GES South Tongu). However, the

findings of a research conducted by Hockings, Cooke, and Bowl (2010) on participation of pupils with disabilities in inclusive classroom indicate that, pupils value teaching that recognizes their individual academic and social identities and that addresses their particular learning needs and interests. Teachers need to adopt pedagogical practices and curricula to take account of the diverse interests and needs of pupils in each class.

The South Tongu District was chosen to pilot inclusive education among five other districts in Ghana, and there are a lot of suspected cases of disabilities found in the district. In addition, there are series of reports from headteachers from the various schools in the district complaining about teachers inability to teach pupils with mild and moderate disabilities in the mainstream schools, even some of the headteachers suggested that pupils with mild and moderate disabilities should be sent to special school for their education (Report from circuit supervisors, 2012).

1.2 Statement of the problem

The researcher is working at the Sogakope District Education Office as a special needs officer. During work inspection and supervision as part of his schedules, he had observed that pupils with mild and moderate disabilities were not coping with teaching and learning during instructional periods in spite of the efforts of teachers.

It is critical to add that suspected cases of disabilities keep on increasing in the South Tongu District. During identification and screening exercise conducted in the district, in 2010 there were 316 suspected cases of disabilities, in 2011, 392 pupils were suspected

and in 2012, 420 pupils suspected to have various forms of disabilities. Out of the above data provided 62 of the suspected cases has been assessed and referred to Special Schools across the country while the rest of the suspected cases remained in the mainstream classrooms where they are taught by general education teachers. Meanwhile, the participation of pupils with mild and moderate disabilities in inclusive classrooms is vital for their academic success. The question one may ask is whether the general education teachers have the background and knowledge in terms of pedagogy to teach pupils with mild and moderate disabilities to achieve success in their classrooms.

If teachers are not able to enhance pupils‟ participation in a lessons, they will not succeed in learning hence become discourage which may lead to absenteeism. Finally, pupils with mild and moderate disabilities may drop out of school due to the challenges they face as a result of inappropriate pedagogy to enhance their participation in class.

Since the participation of pupil‟s with disabilities is vital in inclusive classroom for their success, it is imperative to examine the teachers‟ strategies for enhancing the participation of pupils with disabilities in selected pilot inclusive schools in South Tongu District.

1.3 Aim of the study

The study examined strategies teachers use to enhance the participation of pupils with disabilities in teaching and learning in selected pilot inclusive schools at South Tongu District.

1.4 Objective of the study

The study sought to:

1. Identify the type of children with disabilities that are found in the selected pilot inclusive schools in South Tongu District.
2. Ascertain the methods that teachers use in teaching pupils with disabilities in their classrooms.
3. Describe the teaching and learning materials that are available for teaching pupils‟ with disabilities in the selected pilot schools.
4. Challenges teachers face in teaching pupils with disabilities in the selected pilot schools.

1.5 Research Questions.

The following research questions were raised to guide the study:

1. What types of disabilities are found among pupils in the selected pilot inclusive schools in South Tongu District?
2. What teaching methods do teachers in the selected pilot inclusive schools use to teach pupils with disabilities in their classroom?
3. What teaching and learning materials do teachers use to teach pupils with disabilities in the selected pilot inclusive schools?
4. What challenges do teachers encounter in teaching pupils with disabilities in the selected pilot inclusive schools?

1.6 Significance of the study

The study would be of significance to policy makers at South Tongu District Education Directorate because the data obtained from the study could provide valuable information for enhancing policy guidelines and procedures on good pedagogy for pupils with disabilities in the inclusive schools in the district.

The results of the study, which the researcher hopes to disseminate across the South Tongu education directorate will explain whether teachers are successful in supporting pupils with disabilities to participate in learning.

It would also be use to plan future intervention for pupils with disabilities in the mainstream schools in the South Tongu district in terms of instructional methods teachers need to use in teaching in the mainstream schools.

1.7 Limitations

This study deployed descriptive survey method. Additionally, a self developed questionnaire was used for data collection. The exclusive use of the questionnaire did not give in-depth information since follow-up could not be made. The limited use of the close ended questionnaire did not give respondents opportunity to share their experiences with pupils with disabilities in the school. In addition, due to time limitations, the study covered only ten (10) mainstream schools in the district though there might be pupils with disabilities in all the thirty (30) mainstream schools.

1.8 Delimitation

Even though there are other issues affecting teaching in the selected pilot inclusive school, this study was limited to teachers‟ strategies for enhancing the participation of pupils with disabilities in the selected pilot inclusive basic schools. Since it was impossible to include all the pilot inclusive basic schools in the district, focus was on ten pilot inclusive basic schools in the South Tongu District of the Volta Region. Other variables like facilities, access roads, and support services were not considered.

1.9 Definition of terms

The following are the contextual definition of terms for the study.

Disabilities: is the outcome of the interaction between persons with impairment and the environmental and attitudinal barriers that hinder their full and effective participation in society on an equal basis.

Strategies: a plan or method for achieving a specific goal.

Participation: the act of taking part or sharing in something.

Facilities/resources: all services and assets in the school environment that support teaching and learning.

Support: any form of help or assistance given to teachers or students to enable either the teachers teach or the students learn.

Knowledge: the fact, skills and understanding that you may have gained through learning or experience.

Skills: an ability to do something well, especially because you have learned and practiced it: reading and writing are two different skills.

Learning difficulty: problem with learning which result from a range of mental and physical problems.

1.10 Organization of the study

The research report has been divided into five chapters. Chapter one contains the background to the study, statement of the problem, aim of the study, objectives, research questions, significance of the study, delimitation and definition of terms.

Chapter two includes a review of relevant literature in the research area. The review included the theoretical framework and some teachers‟ strategies that enhance the participation of pupils in inclusive schools.

Chapter three covers the research methodology which includes the population, research design, historical background of South Tongu District, sample, sampling technique, instrumentation, validity and reliability, access and procedures for data collection, description and distribution of instruments.

In chapter four, data presentation, analysis and discussion of findings have been done; qualitative data was thematically presented, analyzed and discussed. However, quantitative data was also presented as descriptive statistics, analyzed and discussed. Finally, in chapter five, the major findings have been summarized, conclusion drawn and recommendations made.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The chapter provides a review of related literature. The review is presented under the following sub-headings:

- Theoretical framework
- Models of pilot inclusive education in Ghana
- Categories of pupils with mild and moderate disabilities in the mainstream classrooms
- Methods teachers adopt to teach pupils with mild and moderate disabilities in mainstream classroom
- Teaching and learning materials teachers use to enhance learning among pupils with mild and moderate disabilities in mainstream classrooms
- Challenges teachers encounter in teaching pupils with mild and moderate disabilities in mainstream classroom

2.2 Theoretical framework

A theory is an idea or a set of ideas to explain something. Neale and Liebert (1980) noted that a theory is a coherent group of general propositions to explain a class of phenomena. They explained that the goal of any science is to advance theories to explain the phenomena it deals with. Gay (2009) also defined theory as a set of formal preposition or axioms that explains how some part of the world operates. In the field of education, for

example, well-known theories include Kohlberg‟ theory of moral development and Piaget‟s theory of child development. However, theory can also be characterized as a general set of ideas that guide action. Researchers therefore use theories to guide them in their studies to observe and generate new ideas. This study would be guided by the cognitive, constructive theory.

2.3 The Cognitive, Constructivist Theories

According to Gifford & O‟Conner (1992), Torrence& Pryor (2002); cited by Hayford (2013) cognitive learning theory implies that different processes concerning learning can be explained by analyzing the mental processes first. It posits that with effective cognitive processes, learning is easier and the new information can be stored in the memory of pupils for a long time.

Hayford (2013) opines that cognition is about the internal processes of learning, understanding, motivation and retention. Whereas the mind is broad and complex into which event-responses are absorbed. The brain and the mind is the center of an organism changing and being changed by the environment in a reciprocal manner (Curson, 1997).

Also, Piaget (1968) explained that cognitivist teaching methods aim to assist students in assimilating new information to existing knowledge, and enable them to make the appropriate modifications to their existing intellectual framework to accommodate that information. Thus, cognitivists allow for the use of “skill and drill” exercises in the memorization of facts, formulae, and lists, they place greater importance on strategies that help pupils to actively assimilate and accommodate new material. For instance, asking pupils to explain new material in their own words can assist them in assimilating it

by forcing them to re-express the new ideas in their existing vocabulary. Likewise, providing pupils with sets of questions to structure their reading makes it easier for them to relate it to previous material by highlighting certain parts and to accommodate the new material by providing a clear organizational structure (Wadsworth, 1971). Because learning is largely self-motivated in the cognitivist framework, without teachers‟ strategies to enhance pupil‟s participation it will be difficult for pupils to assimilate and accommodate new materials learnt. Cognitivists such as A. L. Brown and J. D. Ferrara have also suggested methods which require pupils to monitor their own learning. For instance, the use of ungraded tests and study questions enables students to monitor their own understanding of the material. Other methods that have been suggested include the use of learning journals by students to monitor progress and highlight any recurring difficulties and to analyze study habits. The above strategies will enhance the participation of pupils in inclusive classrooms and understanding of materials learned for easy application and recall (Strommen& Lincoln, 1992).

Social constructivism, strongly influenced by Vygotsky's (1978) work, suggests that knowledge is first constructed in a social context and is then appropriated by individuals (Cole, 1991; Eggan&Kauchak, 2004). According to social constructivists, the process of sharing individual perspectives called collaborative elaboration (Meter & Stevens, 2000) results in learners constructing understanding together that would not be possible alone (Cole, 1996)

Social constructivist scholars view learning as an active process where learners should learn to discover principles, concepts and facts for themselves, hence the importance of

encouraging guesswork and intuitive thinking in learners (Brown et al.1989; Ackerman 1996). In fact, for the social constructivist, reality is not something that we can discover because it does not pre-exist prior to our social invention of it. Kukla (2000) argued that reality is constructed by our own activities and that people, together as members of a society, invent the properties of the world. Therefore when teachers develop strategies that enhance pupil‟s participation, it will help them to discover things by themselves which will motivate them in inclusive classrooms to achieve success and encourage them to continue to enjoy schooling which is in line with Kukla‟s arguments.

Other constructivist scholars agree with this and emphasize that individuals make meanings through the interactions with each other and with the environment they live in. Knowledge is thus a product of humans and is socially and culturally constructed (Ernest, 1991; Prawat & Floden, 1994).

McMahon (1997) argued that learning is a social process. He further states that learning is not a process that only takes place inside our minds, nor is it a passive development of our behaviors that is shaped by external forces and that meaningful learning occurs when individuals are engaged in social activities. Hence as one of the teachers‟ strategy for enhancing the participation of pupils with disabilities in pilot inclusive schools, when pupils are allowed to interact with one another, it helps them share knowledge with one another making learning easy and fun.

Vygotsky (1978) also highlighted the convergence of the social and practical elements in learning by saying that the most significant moment in the course of intellectual development occurs when speech and practical activity, two previously completely

independent lines of development, converge. Through practical activity a child constructs meaning on an intra-personal level, while speech connects this meaning with the interpersonal world shared by the child and her or his culture.

Various approaches in pedagogy are derived from constructivist theory. They usually suggest that learning is accomplished best using a hands-on approach. Learners learn by experimentation and not by being told what will happen and are left to make their own inferences, discoveries and conclusions.

This study draws on the cognitive; constructivist theory to explain teachers‟ strategies to enhance the participation of pupils with disabilities in selected pilot inclusive classroom, in that the theory has highlighted the need for learners to actively construct knowledge for themselves, engage in cooperative problem solving and acquire skills in the context of real problems. The implications for teachers are that they must facilitate this process by providing learners with skills and learning environments which are more conducive for learners to construct their own knowledge for learning to take place(Benaim, 1995).

Since the constructivists see learning as interactive, the quality of teaching and learning depends on communication based on mutual understanding (Lambert & Lines, 2000). Teachers working with this framework try to find out what the pupils can achieve with help. In pedagogies based on constructivism, the teachers‟ role is not only to observe and assess but also, to engage with pupils for promotion of reasoning. Teachers also intervene when pupils face barriers; however, they simply facilitate the pupils‟

resolutions and self-regulation, with an emphasis on the barriers for corrections to enable pupils to actively participate during teaching and learning.

2.4 Models of Pilot Inclusive Education in Ghana

There are different models in which pupils with mild and moderate disabilities learn in the inclusive or mainstream school. Peters (2004) indicated that one cost effective approach in reaching larger numbers of pupils with mild and moderate disabilities would be the systematic expansion of the inclusive programmes where pupils are enrolled into mainstream classes with additional support. The Ministry of Education Science and Sports (MOESS) is committed to the introduction of an inclusive education policy, which gradually mainstreams pupils with mild and moderate disabilities and limits access to special schools only to the severely disabled. The Education Strategic Plan (ESP) 2003-2015 of the MOESS has adopted inclusive education as the main policy which will inform the future direction for special educational provision in the country and which will constitute a way of achieving Education For All.

In Ghana currently, there are six pilot initiatives or models of implementation of Inclusive Education. These are: Integrated Education Programme (IEP) for Children with Low Vision and Blindness; Special School as Home for Pupils with Blindness; Units for the Intellectually Disabled; Inclusive Schools with Special Education Resource Teacher Support; Inclusive Schools without Special Education Resource Teacher Support and finally, Hostel Support (Hayford, 2013, p. 117).

Furthermore, in discussing the models in detail, model 1 is called the Integrated Education Programme (IEP) for Children with Low Vision and Blindness. This model focuses on only pupils with low vision and blindness in mainstreams schools. The models involve the recruitment of special education teachers to work with the District Directorates to support both general education teachers and pupils with mild and moderate disabilities in schools. The detail includes:Itinerant teacher supports teachers and pupils, 12 basic schools would be under the supervision of an itinerant teacher, where pupils would be withdrawn from the schools for remedial teaching.Volunteer teachers appointed for remedial teaching, whileitinerant teachers are mobile with motor-bike.Itinerant teacher and volunteer teachers are given allowances; pupils live with families at home. In addition the head of the mainstream schools assumes responsibility for all children disabled and non-disabled and co-ordinate and monitors activities of the itinerant teachers (Hayford, 2013, p. 117).

Model 2, Special School as Home for Pupils with Blindness.Pupils with blindness are admitted to a special school for the Deaf, which provide them accommodation for lodging.Pupils are found in separate unit classrooms to acquire skills in Braille writing and reading; orientation and mobility; acquire basic skills in literacy and numeracy as transition to formal basic schooling; all for two years in the maximum. Special Education teachers are appointed for the unit with a unit head,and after mastery of skills pupils are admitted to mainstream basic schools near special school, wherespecial education teachers are attached to the mainstream to support pupils and teachers.Pupils go home to join families on vacation. The head of the mainstream schools assumes responsibility for

all the children-disabled and non-disabled and ensure that pupils with disability have full access to curriculum (Hayford 3013, p. 117).

In addition, model 3, is Units for Pupils with Intellectually Disabled. The detail includes:Two unit classrooms built within the premises of mainstream school forspecial education teachers for the intellectually disabled staff of the unit.Pupils with intellectual disability are admitted to the unit as day students and stay with their families at home and go to and fro the unit for their education. Furthermore, Pupils with intellectual disability are taught on separate curriculum drawn for them but interact with their counter-parts for social integration during subjects or activities like dancing, games and sports (Hayford 2013, p.118).

Model 4, explain Inclusive Schools with Special Education Resource Teacher Support, and the highlights are:A special education teacher is appointed as a resource teacher where she/he is attached to 2 primary schools (mainstream).He/she automatically becomes a member of the staff of the school andhe/she works to identify all pupils experiencing difficulties in classroom and plan strategies for intervention.Again,he/she supports pupils and teachers for quality teaching and learning while the headteacher assumes responsibility for all pupils‟ disabled children with special needs. The resource teacher collaborates with parents, staff of health services and social welfare and the district special education officer supervises and monitors activities of resource teachers (Hayford, 2013, p.118).

Furthermore, model 5 also includes Inclusive Schools without Special Education Resource Teacher Support.In a district a number of primary schools selected for inclusive

education (no criteria used).Special Education Division (Sped) built capacity for inclusive education in the district through; Training of trainers (TOT) workshop, master trainers train classroom teachers (of 70 schools), master trainer manual and teacher trainer manual are the main training materials for the Training of trainers (TOT) and training of teachers respectively, UNESCO teacher education resource pack is also used.The District Special Education Officer Co-ordinates all activities and monitor the implementation of inclusive education (IE) in the district.Focus is on all children facing difficulties in learning and classroom teacher teaches all children and encourage their participation but no Special Education Resource teacher is attached to school or classroom (Hayford, 2013, p.118).

Lastly, model 6 is Hostel Support which includes:A structure built to provide hostel facilities for pupils from far places.Focus is basically on pupils with low vision and blindness,no payment of fees for boarding and lodging facilities except parent teacher association dues (PTA).Pupils are given admission to hostel and Special Education Resource Teachers for the visually impaired are recruited to help teach pupils with visual impairment(Hayford, 2013, p.118).

Pupils are taught skills in Braille writing and reading; Orientation and mobility; Basics in literacy and numeracy as transition to formal basic schooling; all for two (2) years at the maximum,they are later admitted to a nearby mainstream basic schools. Also,special education resource teachers are recruited and attached to the basic school to support pupils and teachers and the head teacher assumes responsibility for all pupils. TheClassroom teacher teaches all children (Hayford, 2013, p.118).

The South Tongu District has started piloting Inclusive Education in some schools in the districts. These areLolito basic, Sogakope PCG, Tefle PCG, Agave basic, Adutor R/C basic school and others. The district has adopted Model 4 and 5 in the above schools where pupils with mild and moderate disabilities are schooling alongside the regular ones. They learn to associate with each other, appreciating each other‟s strengths and weaknesses.

2.5 Categories of pupils with disabilities to be included by 2015

Some pupils with disabilities in our mainstream classrooms include children with the following; mild and moderate intellectual disability, pupils with low vision, mild and moderate hearing impairments or hard of hearing, pupil with mild and moderate physical disabilities and speech and language disorders (IDEA, 2001).

2.5.1 Mild and moderateintellectual disabilities

Mild and moderate intellectual disability is one of the categories of disabilities found in the pilot inclusive schools in the South Tongu district. Avoke (2008) opines that intellectual disability, as a condition has been known in virtually all Ghanaian communities. It is a state of complete mental development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his peers in such a way as to maintain existence independently of supervision, control and external support.

In addition, the definition of intellectual disability in the 2002 AAMR manual includes three criteria: it is "a disability characterized by significant limitations both in intellectual functioning and in adaptive behaviour as expressed in conceptual

(reading, writing, money concepts, language and self-determination), social (interpersonal, self-esteem, responsibility, follows rules and avoids victimization) and practical (daily living skills such as cooking, cleaning, hygiene) adaptive skills. This disability originates before age 18" (Luckasson, Borthwick-Duffy, Buntinx, Coulter, Craig, Reeve, 2002, p. 8).

The signs and symptoms of intellectual disability are all behavioral. The so called typical appearance ascribed to pupils with intellectual disability is only present in a minority of cases, all of which are syndromic (Ansberry& Clare, 2010). Other health impairments which affect pupils educational performance include having limited strength vitality or alertness including heighten alertness to environmental stimuli that result in limited alertness with respect to educational environment, thus is due to chronic or acute health problem, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, heart condition, haemophilia, lead poisoning, leukemia, romantic fever and sickle cell anemia adversely affect pupils active participation in terms of their educational performance(Hayford 2013, p. 40)

Pupils with mild and moderate intellectual disability in inclusive schools learn more slowly than a typical child. Pupils may take longer to learn language, develop social skills and take care of their personal needs, such as dressing or eating. Learning will take them longer, require more repetition and skills may need to be adapted to their learning levels.

Nevertheless, virtually every child is able to learn, develop and become a participating member of the community (American Psychiatric Association, 2013).

2.5.2 Pupils with low vision or partially sighted

Low vision or partially sighted condition is another disability found in the pilot inclusive schools in the South Tongu district.

According to Good, Jan, Burden, Skoczenski and Candy (2001) low vision, is vision loss of a person to such a degree as to qualify for an additional support need through a significant limitation of visual capability resulting from disease, trauma, or congenital or degenerative conditions that cannot be corrected by conventional means, such as refractive correction or medication. This functional loss of vision is typically defined to manifest with best corrected visual acuity of less than 20/60, or significant central field defect, significant peripheral field defect including homonymous or heteronymous bilateral visual, field defect or generalized contraction or constriction of field, or reduced peak contrast sensitivity with either of the above conditions (Hoyt & Eye, 2007).

Furthermore, eye disorders which can lead to low vision can include retinal degeneration, albinism, cataract and glaucoma, muscular problems that result in visual disturbances, corneal disorders, diabetic retinopathy, congenital disorders and infection. Low vision can also be caused by brain and nerve disorders, in which case it is usually termed Cortical Visual Impairment (Colenbrander, 2005).

Cortical visual impairment (CVI) is a neurological disorder, which results in unique visual responses to pupil‟s educational materials and to the environment. When pupils

with these visual behavioral characteristics are shown to have loss of acuity or judged by their performance to be partially sighted, they are considered to have cortical visual impairment (CVI) (Dutton, 2005).

The American Foundation for the Blind (2011) indicates that pupils with low vision can certainly learn and do learn well, but they lack the easy access to visual learning that sighted pupils have. The enormous amount of learning that takes place via vision must now be achieved using other senses and methods. They continue to say handsare a primary information gathering tool for pupils with low vision. So are the senses of smell, touch, taste and hearing. Until the child holds the "thing" to be learned and explores its dimensions let us say, a stuffed animal, a dog, a salt shaker, or a CD player he or she cannot grasp its details.

However, low vision according to Avoke (2008) is one whose vision is limited to such an extent that it may require educational modification an adaptation. Avoke (2008) cited from Haward and Orlansky (1980) suggest that the educational definition of low vision or partially sighted primarily considers the extents to which a child"s visual impairment affect learning and make special methods or materials necessary. However to help pupils with low vision to achieve success in pilot inclusive classroom, teachers needs to adopt good methodologies and appropriate materials during teaching and learning process for easy understanding.

Ocloo (2011) demonstrated that most things that pupils learn are facilitated by vision and research has shown that more than 80% of human perception abilities come through the use of the eyes. Ocloo (2011) cited from Lowenfield (1983) stated that vision serves as

the stabilizer, co-coordinator and integrator of the activities of all the other senses. According to Ocloo (2011) pupils with low vision will be able to use the vision for many school learning activities, a few for visual reading, while others may need to use tactual materials. Therefore, to encourage performance of pupils with low vision, teachers need to use appropriate pedagogy and materials to enhance pupil‟s participation during teaching and learning process.

2.5.3 Mild and moderatehearing impairment or hard of hearing

Another disability found in the pilot inclusive schools in the South Tongu district is the hearing impairment. According to Avoke (2008) the definition of hearing impairment is always dictated by a number of variables. The degree of the severity of the loss and physiological site of the loss is key factors to be taken into consideration.

Also, Ocloo, Mottey and Boison (2005) explain that mild and moderate hearing loss is a condition of partial hearing loss. A person describe as hearing impaired is the one who has some problems hearing well or using his ears to hear speech and sound. Such a condition is also found in the inclusive classroom where pupils try to locate sources of sound in the classroom during instructional periods sometimes making it difficult for them to cope with learning. However, Avoke (2008) asserted that for pupils with mild and moderate hearing loss participate actively in the mainstream classrooms, they need intervention from teachers.

2.5.4 Mild and moderatephysical disabilities

Apart from those with severe physical disabilities, the majority of pupils with mild and moderate physical disabilities can cope considerably well in inclusive education. The nature and type of condition dictate to a large extent the educational provisions to be made. A number of these pupils have relatively mild and moderate type of physical disability that would not need any adapted teaching or learning materials. They can therefore cope perfectly without significant help (Avoke, 2008).

Taub, Elaine and Kimberly (1999) also explained mild and moderate physical disability as a limitation on a person's physical functioning, mobility, dexterity or stamina.Other physical disabilities include impairments which limit other facets of daily living, such as respiratory disorders, blindness and epilepsy.

However, the Physical Disability Council define mild and moderate physical disability as pertaining topartial loss of a person‟s bodily functions (e.g. walking, gross motor skills, bladder control etc) and partial lossof a part of the body for example, a person with an amputation (Downing, &MacFarland, 2010).

Furthermore, the Collins English Dictionary (2009) gave examples of mild and moderate physical disability to include; amputation, arthritis, cerebral palsy, upper limbs, multiple sclerosis, muscular dystrophy, acquired spinal injury (paraplegia or quadriplegia), post polio syndrome, spina bifida and loss of or failure to develop a specific bodily function or functions, whether of movement, sensation, coordination, or speech, but excluding mental impairments or disabilities.

The condition affects a pupil‟s educational performances and includes conditions such as congenital anomaly. Other health impaired is used in this context and defined as limited strength, vitality, or alertness due to chronic or acute health diabetics, which all affect a pupil‟s educational performance and can be found in the inclusive classrooms (Hosken, 2008).

According to Yeboah and Yekple (2011) pupils with mild and moderate physical disabilities can be of average or above average in intelligence. The major difficulty they may face is environmental barriers, to participate in some complicated physical activities, and irregular attendance at school due to attendance at hospital.

The following are some classroom management strategies suggested by Yeboah and Yekple (2011) teachers‟ concern should be how to prevail on other pupils not to imitate the walking for fun the classroom sitting arrangement should be such that it avoids further injury to the pupil, consider the pupil fine and gross motor defects and provide writing materials to suit, create room for easy movement (traffic zones) and consider other environmental considerations. These can be change in location of materials, work surface, change in attitude teachers should be patient and never order the pupil to hurry up with an activity when you know he or she cannot “run”, emphasize cooperation rather than competition in activities that involve physical exertion and teachers should encourage pupils to participate during lesson and help one another.

2.5.5 Mild and moderatespeech and language disorders

Mild and moderate speech and language disorders have been a problem for many school going pupils in this country. Many children have been withdrawn, and some are also

experiencing social problems as a result of their inability to communicate effectively in class and outside of class. Speech and language problems are leading to learning and emotional behaviour problems among school children (Avoke, 2008).

According to Avoke (2008) speech is generally initiated by a complex and complicated process involves the use of the motor acts as well as respiration, phonation and articulation mechanisms.Conner, Morrison, and Katch (1983) offered an operational definition of speech which suggests that speech is a complex motor act which requires precise coordination of respiration, phonatory and articulators system and mediated largely by the central nervous system.

The Individuals with Disabilities Education Act,(IDEA) defines the term speech or language impairment as stuttering, impaired articulation, language impairment or a voice impairment that adversely affects a pupil‟s educational performance (IDEA, 2001).

Batshaw and Mark (2002) state that speech impairment is characterized by difficulty in articulation of words. Examples include stuttering or problems producing particular sounds. Articulation which refers to the sounds, syllables and phonology produced by the individual. Whilst, voice, may refer to the characteristics of the sounds produced specifically, the pitch, quality and intensity of the sound. Often, fluency will also be considered a category under speech, encompassing the characteristics of rhythm, rate and emphasis of the sound produced. However, some pupils have the above problems in the pilot inclusive classrooms in the South Tongu district which affect their participation during instructional periods and the social environment. Similarly, language impairment is a specific impairment in understanding and sharing thoughts and ideas that is a disorder

that involves the processing of linguistic information. Problems that may be experienced can involve the form of language, including grammar, morphology, syntax and the functional aspects of language, including semantics and pragmatics (Gadagbui, 2007).

According to the U.S. Department of Education, office of special education programs (OSEP) (2010) there are many kinds of speech and language disorders that can affect pupil‟s participation in inclusive classrooms. However, speech and language disorders occur in four major areas. Firstly, articulation where the child produces sounds incorrectly (for example lisp, difficulty articulating certain sounds, such as “l” or “r”) (p.45).

Secondly, fluency speech impairments where a child‟s flow of speech is disrupted by sounds, syllables and words that are repeated, prolonged or avoided and where there may be silent blocks or inappropriate inhalation, exhalation or phonation patterns during classroom participation (Boyse, 2008).

Thirdly, voice speech impairments where the child‟s voice has an abnormal quality to its pitch, resonance or loudness and finally, languageimpairments where the child has problems expressing needs, ideas or information and in understanding what others say. The conditions prevent pupils from having good interaction between teachers and their fellow mates during teaching and learning, hence appropriate pedagogical skills should be used by teachers and instructors for better participation of pupils in inclusive classrooms during teaching and learning periods for easy understanding of lessons (Minnesota Department of Education, 2010).

2.6.Methods teachers adapt to teach pupils with mild and moderate disabilities in mainstream classrooms

The methodology use by teachers during teaching in the mainstream schools is important factor for pupils participation during teaching and learning process, especially those with mild and moderate disabilities (Pelech and Pieper, 2010). Vygotsky‟s cognitive development insists upon giving assistance and help to pupils in the classroom to enable them achieve success. It is believed that if pupils with mild and moderate disabilities are given assistance they could perform through participation better in mainstream classrooms. Pupil‟s level of understanding differs from one another, so it is important for teachers to use different environments apart from classes to develop a better understanding during teaching and learning process for their easy participation (Rogoff, 2003).

One of the methodsteachers adapts to enhance the participation of pupils with mild and moderate disabilities in mainstream classroom are differentiated instruction. Gartin, Murdick, Imbeau and Perner (2002) defined differentiated instruction as, “the planning of curriculum and instruction using strategies that address pupil‟s strengths, interests, skills and readiness in flexible learning environments” (p.12).

Differentiated instruction provides multiple opportunities to support diverse pupils in mainstream settings. It requires teachers to identify the strengths and needs of their pupils and possess a repertoire of strategies to support pupils with and without disabilities (Gartin, Murdick, Imbeau & Perner, 2002). It challenges teachers to study and think

about the learning process as they find avenues to engage and motivate diverse pupils. It takes into account individuals‟ nœds, readiness, interests, and learning profiles. It focuses on instruction that appeals to and engages each pupil (King-Shaver & Hunter, 2003).

According to Tomlinson (2001) differentiation allows the teacher to plan and carry out varied approaches to content (what student learns); process (how the student learns and how you teach); and product (how the student demonstrates what they have learned) in anticipation of and in response to pupil differences in readiness (prior mastery of knowledge, understandings, and skills); interest (the student‟s curiosity and passion); and learning profile (how the student learns best).

Shaddock, Neill, van Limbeek, and Hoffman-Raap (2007) stated that in terms of differentiating instruction in heterogeneous classrooms, there is a complex instruction tasks which require pupils to work together in small groups, designed to draw upon the intellectual strengths of each pupil in the group, are open-ended, intrinsically interesting to pupils involve real objects, provide materials and instructions in modified English if needed, integrate reading and writing in ways that make pupils important means to accomplishing a desirable goal, draw upon multiple intelligences in a real-world way and use multimedia which require many different talents from pupils in order to participate and complete task adequately (Shaddock, Neill, van Limbeek& Hoffman-Raap, 2007).

To encourage pupils with mild and moderate disabilities to actively participate in mainstream classroom, Loreman, Deppeler, and Harvey (2005) opine that teachers can put pupils in flexible grouping. This is a strategy for differentiating instruction that provides for pupils to be part of many different groups based on the match of the task to

pupil readiness, interest, or learning profile. Teachers must ensure that all pupils have opportunities to work with pupils who are like themselves and dissimilar from themselves. All pupils should have rules for working cooperatively and independently and groups can be selected by the teacher, or at times by the pupils.

Shaddock, Neill, van Limbeek and Hoffman-Raap (2007) indicated that group investigation is another strategy for differentiating instruction that puts pupils with mild and moderate disabilities in inclusive school to play active role of solving problems through participation. Present pupils with a complex problem for which they must seek additional information, define the problem, locate and appropriately use valid resources, make decisions about solutions, pose a solution, communicate that solution to others and assess the solution‟s effectiveness. This strategy offers an opportunity to address readiness, interest, and learning profile of pupils with mild and moderate disabilities in mainstream schools.

Additionally, Westwood (2003) argued that, another way to differentiate instruction to pupils with mild and moderate disabilities in inclusive schools, that provides the support needed for pupils to succeed in participation in classroom work is scaffolding. It also means that teachers must plan pupils work and present materials from simple to complex in such a layered way as to build pupils mastery and thus, confidence. If teacher‟s task is scaffolded and provided in a non-labeling way, pupils respond positively in participating and engaging in learning in increasingly independent ways.

Furthermore, some differentiated strategies which teachers find helpful in keeping work challenging and success attainable for pupils with mild and moderate disabilities in inclusive classrooms are finding entry points and cubing (McChesney, 2002). Finding entry point according to McChesney (2002) is a method that allows pupils to explore a given topic through as many as five avenues or entry points such as narrational (presenting a story or narrative about the topic or concept in question), logical-quantitative (using numbers or deductive/scientific approaches to the topic or question), foundational (examining the philosophy and vocabulary that under gird the topic or concept), aesthetic (focusing on the sensory features of the topic or concept), experiential (using a hands-on approach where the pupils deals directly with materials that represent the topic or concept). Teachers can make each entry point a valid one for learning, exploring and asking pupils to share acquired insights to the same topic. (p. 23)

Also, cubing is a versatile strategy which allows the teacher to plan different activities for different pupils or groups of pupils with mild and moderate disabilities based on pupils‟ readiness, learning style and interests. Teachers can create a cube for different groups of pupils. On each of its six faces, you describe a different task related to the subject and the concept being learned (McChesney, 2002, p.16).

Another method teachers use in teaching pupils with mild and moderate disabilities in the mainstream setting is frequently providing additional teaching to the whole class, followed by additional teaching to particular pupils and in fewer cases, to certain subgroups in the class. Whole-class additional teaching was provided exclusively on

languages and mathematics which was practiced during instructional hours (Avramidis, Bayliss& Burden, 2000).

However, Ainscow (2007) stated that whole-class additional teaching involved lesson repetition or repetition of specific sections or concepts of a lesson. It was rarely carried out through the application of alternative, modified instructional ways for supporting pupils to gain access to new information and knowledge and it was mainly based on provision of extra tuition to pupils (p.83).

Additional teaching to particular pupil involved unsystematic, sporadic support and advice to individual pupils mainly during break hours, while additional teaching to certain subgroups in the class was considered difficult and in some cases, not feasible in its applicability. Furthermore, additional teaching to particular pupils and to certain subgroups in the class was not practiced often and in some cases, was not even perceived to be desirable (Parker, 2006).

Furthermore, activity adjustment is another pedagogy teachers use to teach pupils with mild and moderate disabilities in mainstream schools for easy participation. Subban (2006) believed that teachers in the mainstream schools give more time to particular pupils for completing a classroom assignment followed by breaking down activities, using alternative material for some pupils, implementing activities at various levels of difficulty, using computers for supporting learning, forwarding diverse activities during the same instructional hour and using specific resources such as perforated boards or

resource room settings. A research conducted on instructional adaptation by Cardona-Molto (2003) indicated that the initial two minimally adaptive strategies, give more time and break down activities were used mainly in the area of Language and Math. Breaking down activities was considered part of the guided practices used by teachers for supporting pupils learning and participation, while providing extra time to some pupils was perceived as an absolute necessity.

The Department of Education, South Africa (2005) states that in applying teaching methods, teachers should bear in mind that there is no single classroom in which all learners will be exactly the same or learn in the same way and at the same pace. As a result, Bornman and Rose (2010) explain that teachers were required to be creative in the use of a variety of teaching methods to teach all pupils. Some teaching methods identified by Bornman& Rose (2010) in mainstream classrooms were storytelling, songs, rhymes, dramatization, learning through play as well as questions and answers.

According to Bothma, Gravett and Swart (2000) some teachers also use storytelling, whereby a teacher tells a story, using pictures and a big book for that matter and also allow the pupils to retell the story and dramatize it. Some pupils learn best through songs; others like rhymes; and others can understand and cope by listening while the teacher is teaching. Some can even formulate a game from an activity, especially in numeracy, when they count. The pupils with mild and moderate disabilities grasp a lot as they play. It is learning by participation through play.

Teaching through songs, rhymes, dance, poems and acting is much fun. For teachers this means that, in planning lessons they need to use visual materials (such as posters,

pictures, drawings); to use tasks that involve discussion (listening and speaking); and to provide opportunities for movement of some form (e.g. drama and dance) (Bothma, Gravett& Swart, 2000). Therefore, teachers needs to use songs, rhymes, colourful pictures and real objects when teaching. Teachers usually used gesture, body and facial expression when teaching so that pupils would better understands and participate actively (Lewis &Doorlag, 2006).

Another teaching method used by teachers in mainstream schools for pupils with mild and moderate disabilities is co-operative learning. Shaddock, Giorcelli and Smith (2007) explain that co-operative learning is a process whereby learners work together, especially in solving problems, in making projects and in reading. Teachers include pupils who are good in each group so that they can assist those who experience barriers or difficulty during learning. Pupils are free to share ideas and to interact with each other in the mainstream classroom. Co-operative learning occurs when pupils share responsibility and resources, as well as when they work towards common goals. Teachers walk around to guide pupils, facilitate and also to control discipline. Teachers provide the right environment and opportunity for all to learn actively (Mastropieri& Scruggs, 2007).

According to Avoke, Hayford and Ocloo (1999) the classroom is basically a place of learning and as a result should be organized in a way to enhance learning. In the general classroom setting in the regular school system, material organization could be done using the consent and learning characteristics of the learners. We need to remember that the instructional environment of the classroom includes the methods we use to impart

knowledge to the learners, the instructional strategies and materials that are used to help pupils to learn independently and with enthusiasm.

Rainforth and Kugelmass (2003) opine that methods that are used in organizing the classroom and learning experiences of the pupils depend on the learning characteristics of the pupils. The teachers need to know what equipment and learning materials are available in the schools. A newly assigned teacher to class would need a class inventory to up-date his or her knowledge of all the instructional materials that are available for the class. He or she should be able to distinguish between projected materials and non-projected materials, commercially made materials and teacher-made materials or locally improvised materials. Projected materials which usually use energy in the form of electricity to perform need to be fixed or installed near a socket which is accessible to the learner, as well as the teacher. Other commercially made materials should be carefully assessed to ensure suitability. The teacher can modify or adapt any material which falls short of his or her expectation in terms of quality and detail for teaching pupils with mild and moderate disabilities. The challenge of most inclusive environments is in meeting the needs of all pupils according to their strengths, ability levels, and needs, without separating students homogeneously (Avoke et al., 1999).

According to Salend (2001) differentiated instruction is one method that allows teachers address this situation while maintaining the intent of inclusion. Teachers are able to create lesson plans based on educational objectives for the entire class, while modifying the delivery, product or assessment for classroom learners. By providing instruction in this forum, classroom learners recognize that they are all learning the same material;

however, it is presented in the way that meets their unique needs. Differentiated instruction has been identified as an effective teaching method that can address this issue for a variety of pupils (Tomlinson 1999). This educational method is based on the premise that all learners are different, that learning requires a connection of a pupil‟s own abilities and interests and that lesson planning requires providing pupils with the type of instruction that can address their needs and the educational objectives simultaneously.

Zepke and Leach‟s analysis of the teaching strategies used to accommodate pupil‟s diversity correspond to the inclusive teaching strategies identified in other studies (Hockings, Cooke, and Bowl, 2010). These include building groups, establishing rapport, drawing on pupils‟ and teachers‟ own stories and examples to make theory as real as possible, making connections with pupils and creating an environment in which pupils can participate and learn from their mistakes and feel that they belong. This study highlights the importance of including materials, resources, references and images that reflect the social and cultural diversity of the pupils. Teachers in this study also found that using a variety of innovative teaching methods and approaches enabled pupils to learn in their own preferred ways.

Meanwhile, pupil centered pedagogies, with emphasis on collaborative learning, are generally accepted as effective in encouraging pupils from different backgrounds to participate in learning in mainstream schools (Bamber & Tett 2001, Haggis 2006, Haggis &Pouget 2002, Thomas, 2002) not all pupils‟ feel comfortable learning in these ways. For example, De Vita (2000) argues that the fear of not being understood and in the extreme, of being subject to ridicule, are the most common barriers to participation in

classroom discussion experienced by pupils with disabilities in inclusive classrooms. His study suggests a range of strategies to help pupils with disabilities overcome this fear. Madriaga, Goodley, Hodge and Martin (2007) found that group working could cause increased anxiety in pupils with mild and moderate intellectual disabilities. This was possibly due to their „communication differences" (Martin, 2006). These studies suggest that situations involving discussion and dialogue can compound difficulties in social interaction for some pupils and act as a barrier to learning.

However, connecting with pupils" interests, aspirations and future identities has been identified as a key factor in enhancing the participation of pupils with disabilities in mainstream classrooms during teaching and learning (Hockings, et al.,2010, Williams, Black, Davis, Hernandez-Martinez, Hutcheson, Nicholson, Pampaka, and Wake, 2010, Zepke& Leach, 2007).

2.7 Systematic Instruction

Once the teacher decide on what to teach, he or she then think of how to teach, or some of the good ways to present his or her lessons to enhance pupils participation.

A carefully planned sequence for instruction, similar to a builder"s blueprint for a house characterizes systematic instruction. A blueprint is carefully thought out and designed before building materials are gathered and construction begins (Adams 2001, p. 74). The goal of systematic instruction is one of maximizing the likelihood that whenever pupils are asked to learn something new, they already possess the appropriate prior knowledge and understandings to see its value and to learn it efficiently. The plan for instruction that

is systematic is carefully thought out, builds upon prior learning, is strategic building from simple to complex and is designed before activities and lessons are planned.

According to Gibbs (2001) systematic instruction is clearly linked within, as well as across the five major areas of reading instruction (phonemic awareness, phonics, fluency, vocabulary and comprehension) which is a challenge for pupils in mainstream classrooms. For systematic instruction, lessons build on previously taught information, from simple to complex, with clear, concise pupil‟s objectives that are driven by ongoing assessment. Pupils are provided appropriate practice opportunities which directly reflect instruction.

The "Report of the National Reading Panel" (NICHD, 2000, p.36) provides equally compelling evidence forexplicit, systematic instruction for each of the five essential components of literacy (phonemic awareness, phonics, fluency, vocabulary and comprehension). “Explicit instruction in reading makes a difference in pupil outcomes, especially for mild and moderate intellectually challenge and those who are low achieving.” (Denton,Vaughn, Fletcher,2003, p. 202) “Explicitness has been a component of instruction in studies documenting improved outcomes in phonological awareness, decoding and the application of comprehension strategies for the understanding of text.” (Denton,et al., 2003, p. 202)

Preventing reading difficulties requires skill development in the components of reading by “targeting such skills explicitly and directly” (Walpole, & Meyer,2004, p. 265). Explicit teaching means that nothing is left to chance. Wong (1998) identifies the three

characteristics of successful teachers, all of which include elements of explicit and systematic instruction resulting in effective teaching, which results in increased pupil‟s with mild and moderate with disabilities participation and achievement.

Reading instruction should be systematic building skills gradually and introducing skills first in isolation and then by integrating them with other skills to provide pupils practice and to build generalization (Gunn, Smolkowski, Biglan, & Black,2002; Vadasy, Sanders,& Peyton, 2005; Vaughn, Mathes, Linan-Thompson, Cirino, Carlson, Pollard-Durodola, Cardenas-Hagan,& Francis, 2006;Mathes, Denton, Fletcher, Anthony, Francis, & Schatschneider 2005;McMaster, Fuchs, Fuchs,& Compton, 2005).

Pupils should be given clear, corrective feedback and cumulative review to ensure understanding and mastery. For example, in phonics, a critical area in grade 1 term 2 interventions, a systematic curriculum might begin by introducing a few of the most frequently used consonants sounds (m, s, t, b) followed by a vowel, usually the short a. This allows pupils to integrate these newly learned sounds by blending sounds into words (Ebaugh, 2000, p. 213).

Reading instruction should also be explicit. Explicit instruction involves a high level of teacher-pupil interaction that includes frequent opportunities for pupils to practice the skill and clear, specific corrective feedback. It begins with overt and unambiguous explanations and models. An important feature of explicit instruction is making the thinking process public. Thinking aloud should occur during all instructional components of term 2 interventions ranging from systematic skill building in phonics to teaching more complex and intricate comprehension strategies (such as summarizing or making

inferences). When thinking aloud, teachers should stop, reflect and formulate an explanation of their thinking processes (Ehri, Dreyer, Flugman, & Gross, 2007).

Avoke, Hayford and Ocloo (1999) postulated that, there are so many strategies a teacher can adopt in managing children with mild and moderate disabilities and all other children to benefit from teaching and learning. Some of the teaching strategies provided as a guide for children includes: improving reading skills, overcoming motivational problems, managing attention deficits, managing poor abstraction and managing memory deficits. In managing attention deficits as one of the teaching strategies, Lane and Pullen (2004) stated that attention deficit is a characteristic often associated with learning by some of these children with mild and moderate intellectual disability in which they do not pay attention to the task or the correct features of a task to learn and to perform it well. In managing attention deficit teachers should:

- Organize the introductory component well enough to attract the pupil‟s attention. This can be done by using meaningful objects, songs that relate to the lesson and the use of questions that relate to the lesson. Begin a lesson by asking a question that stimulates interest in the topic.
- Break instruction into small steps and provide short activities.
- Ensure all distracters are removed if possible.
- Use real or concrete materials in teaching.
- Prompt the children about the new task.
- Keep a level of difficulty that guarantees high rate of success etc. (p.21).

Some pupils with mild and moderate disabilities in mainstream classrooms have difficulty to learn. According to Hallahan, Kauffman & Pullen (2009) poor metacognition is difficulties in identifying how to learn, evaluate, monitor and adapt the learning process to meet one‟s learning needs. Therefore teachers need to develop enough strategies to enable pupils participate during teaching and learning. To manage poor metacognition, teachers should:

- Reduce amount of work to learn.
- Highlight key concept.
- Provide instruction in self questioning.
- Provide opportunities for feedback.
- Teach pupils to summarize materials.
- Focus on meaning, not memorization etc. (p.56).

Hayford (2011) opines that a wide variety of instructional options are required to effectively teach children with mild and moderate intellectual disabilities in the mainstream schools. The following are classroom strategies: Specific strategies must be directed to inappropriate behaviors exhibited or needs to compensate for their uneven skills development, focus attention on the pupil‟s specific needs such as functional communication skills, social skills and self protective skills. Be creative, innovative and positive in teaching, mild and moderate pupils with intellectual disabilities often are generally very dependent on routines, incorporate this into your teaching and learning process.

They would like to learn in an environment that is simple and uncomplicated and they are easily stimulated; an area free from distraction, loud noise and bright lights are what teachers‟ need to be aiming at.

2.8 Teaching and learning materials teachers use to enhance learning among pupils with mild and moderate disabilities in mainstream classrooms.

Teaching is a complicated practice that requires an interweaving of many kinds of specialized knowledge. In this way, teaching is an example of ill-structured discipline, requiring teachers to apply complex knowledge structures across different cases and contexts (Mishra and Koehler, 2006). Koehler and Mishra (2009) observed that teachers practice their craft in highly complex, dynamic classroom contexts that require them to constantly shift and evolve their understanding. Thus, knowledge from different domains including knowledge of pupil‟s thinking and learning, knowledge of subject matter, and knowledge of the use of teaching and learning materials (educational technology) are critical.

Koehler and Mishra (2008) opined that teaching and learning materials are one of the components of educational technology. From the general didactic aspect, teaching and learning materials can be defined as the didactically adapted materials that the teacher can use during the teaching process to help the pupil in the understanding of the content and enhances pupil‟s active participation. Teaching and learning materials are sometimes referred to as teaching aids, learning materials, learning resources and educational

materials. They are all the specially prepared technological materials intended to be used in the teaching and learning process. These consist of both electronic (computers, digital media or online) and non-electronic materials (printed materials and non-printed objects). Both electronic and non-electronic materials are indispensable in the teaching process, since they are, in addition to the teacher‟s direct explanation and other learning activities; serve as an important source for pupils‟ participation during teaching and learning (Koehler and Mishra 2008 p.86).

In a mainstream classroom setting, a crucial factor for a successful integration of educational technology into teaching is the teacher because she/he directly determines the best instructional practices for the pupils (Hite, 2005). Given that teachers are the instructional drivers in the classroom, it is important to help prepare teachers in acquiring technological expertise to better facilitate the learning of the diverse pupils in the mainstream classroom (Pan and Carroll, 2008).

According to O‟Bannon and Judge (2004) and Hite, (2005) the use of teaching and learning materials for instructional purposes can improve pupils‟ participation during learning and create robust method of content delivery for teachers. In the current digital age, it is astonishing that the use of technology in the mainstream schools appears to be so limited, despite increasing investment by education authorities in the acquisition of teaching and learning materials, including laptop computers for schools that will enhance pupil‟s participation during lesson delivery.

One possible reason for the lack of enthusiasm towards the use of teaching and learning materials to enhance pupil-centered pedagogy could be due to the view point teachers

hold (Neiderhauser & Stoddart, 2001). For example, Chen (2008) stated that teachers refer to their pre-existing beliefs, and experiences, when trying to integrate educational technology into their instructional practices. These pre-existing beliefs can influence the development of additional beliefs regarding the use of teaching and learning materials in the instructional practices. Hernández-Ramos (2005) further states that pupils exposed to technology use in inclusive schools are knowledgeable in the use of teaching and learning materials which finally enhance their participation during teaching and learning in inclusive schools.

Cox (2008) believed that good pedagogical processes must involve presenting the pupils with enabling teaching and learning materials. These materials in which pupils experience in the broadest sense of term, try things out to see what happens, manipulate symbols, pose questions and seek their own answers. A good classroom teacher needs to help pupils to develop the spirit of enquiry through various simulative teaching and learning materials, is out of this that their participation is enhance in the mainstream classroom.

However, according to Bontoux (2002) the types of instructional materials teachers use can have a major impact on the academic success of pupils with mild and moderate disabilities. Although many teachers are choosing to develop or collect their own materials, published textbooks are most commonly used. Published textbooks include basic skills texts called basals, often used in reading and mathematics, and texts that stress academic content in areas such as history and science. Other materials commonly

used by teachers include concrete representational items such as manipulative and technological devices, including audiovisual aids, telecommunication systems, and computers. Roberta‟s use of large-print materials to assist her in seeing her work and Carmen‟s use of a study guide to help her identify important information in her history text are both examples of adaptations in instructional materials in mainstream classrooms (Arends, 2004).

Fuchs and Fuchs (2000) found that pupils with academic difficulty are more productive when working collaboratively on complex tasks in pairs using instructional materials as opposed to small groups. Working in pairs, pupils with disabilities had a higher level of participation, helpfulness, and collaboration and cooperation whiles problem solving tasks was also superior.

2.8.1 Manipulatives and Models

Smith (2004) opines that manipulatives and models can help pupils make connections between the abstractions often presented in the classroom and the real-life products and situations these abstractions represent. Manipulatives are concrete objects or representational items, such as blocks and counters (for example, base-10 blocks for math), used as part of instruction in the classrooms, whiles models are tangible objects; they provide a physical representation of an abstraction (for example, a scale model of the solar system). These materials have great potential benefit for pupils with mild and moderate disabilities, who may lack the background knowledge and reasoning skills to understand abstractions (Cass, Cates, Smith, & Jackson, 2003; Smith, 2004). However,

manipulatives and models should be used carefully, because their use with pupils with mild and moderate disabilities has not been heavily researched (Stein, Silbert, &Carnine, 1997; Cass et al., 2003).

2.8.2 Technology

Teachers today have available to them a broad array of technology to enhance the presentation of material to their pupils with disabilities and their participation. One common use of computers in mainstream classrooms is to provide instruction to pupils with disabilities through drill-and-practice programs, tutorials, and simulations. In general, drill-and-practice programs are used most often with pupils with mild and moderate disabilities. Drill-and-practice programs have been shown to be effective for pupils with mild and moderate disabilities largely because they allow pupils to learn in small steps, provide systematic feedback and allow for lots of practice to mastery. Meanwhile, not all drill-and-practice programs are created equal (Arends, 2004; Okolo, 1993).

Computers can also provide initial, sequenced instruction for pupils with disabilities using tutorials in problem solving, decision making, risk taking, and using simulations (Roblyer, Edwards, &Havriluk, 2004). For example, teachers can present tutorials instruction to mastery in small, sequential steps, an instructional approach shown to be effective with pupils with mild and moderate disabilities. Tutorials can also provide one-to-one instruction at varying levels of difficulty, something teachers usually do not have time to do. Still, teachers need to check to be sure that pupils with mild and moderate

disabilities have the necessary prerequisite skills to benefit from the tutorials. In addition, tutorials may not provide sufficient review for pupils with disabilities and pupils with disabilities may not be motivated enough to work through them independently (Roblyer, Edwards, & Havriluk, 2004).

Simulations are of great potential benefit in teaching pupils to be active learners by confronting real-life situations. However, simulations may be difficult to integrate with academic curriculum, may require much teacher assistance, and can be time-consuming (Roblyer et al., 2004).

2.9 Challenges teachers encounter in teaching pupils with mild and moderate disabilities in mainstream classrooms.

Teachers encounter different challenges during the process of imparting knowledge to pupils with mild and moderate disabilities in the mainstream schools. Some of the challenges include: teacher knowledge, Larger Class Sizes, marking of pupils work, circuit supervisors‟ expectation, in-service training, teaching and learning materials in mainstream schools and commitment among teachers.

2.9.1 Teacher knowledge

It is often argued that lack of knowledge on the part of classroom teachers, attributed to lack of training, is one of the main challenges teachers encounter in mainstream schools (Forlin, 2001). However, attempts to identify the actual nature of the required knowledge are often meagre. Florian (2007) suggested that teachers need knowledge about pupils with mild and moderate disabilities in the mainstream classrooms and that they need to be skilled in using specific instructional methods in teaching them. Evidence on teaching

pedagogy in mainstream education suggests that the teaching strategies used in mainstream education can be adapted to assist pupils who have been identified as having mild and moderate disabilities. According to Lewis and Norwich (2005) mainstream classroom teachers do not recognize or know how to implement effective teaching for participation of pupils with mild and moderate disabilities.

Secondly, teachers need to be disabused of the notion that they are not qualified to teach disabled pupils or pupils with mild and moderate disabilities. Davis & Florian (2004) argue that teachers have much of the knowledge and many of the skills required to teach all pupils, but they may not have the confidence to put this knowledge into action in helping pupils who are experiencing difficulties in learning.

From the above discussion, one may conclude that the teachers‟ lack of competency in managing their mainstream classrooms is a serious problem as it makes them feel stressed and less confident. Other researchers (Broderick 2005, Ainscow 2009, and Landsburg 2011), have highlighted that it is not practically possible to make specialists of all teachers on all the diverse needs in overcoming challenges to learning, but there may be a way of assisting all pupils to benefit from mainstream classes, that is, by empowering teachers with basic skills so that they may become competent teachers.

2.9.2 Larger Class Sizes

Large class size impinges on teachers‟ classroom practices in terms of teaching and learning process, particularly creating additional time to work with pupils with mild and moderate disabilities who manifest special educational needs.

According to Hayford (2013) many basic school teachers manage classes with 35 or more pupils. In practice, the direct consequence of this phenomenon is work overload and difficulty in marking. Furthermore, larger classes are usually more noisy and difficult to control. Local commentators on educational reforms have spoken about the adverse consequence of larger classes on teachers‟ classroom practices (Amedahe, 2000; Asamoah-Gyimah, 2002) and learning. In terms of pupils participation, Asamoah-Gyimah (2002) suggests that larger classes prevents teachers from developing close relationship with pupils thus progress is hindered as they are unable to assist pupils who need more attention, affect the number of objectives stated by teachers as well as the variety of tasks teachers give to pupils in the classroom, because teachers consider the time for supervising while pupils work, marking, processing and filling of records of pupils. Asamoah-Gyimah (2002) and Angbing (2001) reported that teachers felt larger classes impinged on teaching and learning process.

Also, Avoke, Hayford and Ocloo (1999) noted that larger classes were noisier and presented formidable challenges to mainstream teachers. Writing in the context of England, Pollard, Collins, Maddock, Simco, Swaffield, Warin and Warwick (2005) explain that the number of pupils inevitably effects the time teachers can spend in teaching especially pupils with mild and moderate disabilities in mainstream classrooms.

Larger classes make it impossible for teachers to work with all pupils including those with mild and moderate disabilities in the classrooms. According to UNESCO (2006) larger classes show that the teaching staff has become overstretched.

2.9.3 Marking of pupils work

Teachers complained about marking of pupils work in the mainstream classroom due to larger classes which increases teachers‟ workload as indicated earlier. It is the direct effect of the number of subjects teachers teach in the mainstream schools where pupils with mild and moderate disabilities are found. In reality, Pollard, Collins, Maddock, Simco, Swaffield, Warin, and Warwick, (2005) point out that when teachers spend so much time marking pupils exercise books they are not able to do analytical marking, whereby they identify specific mistake of individual pupils especially pupils with mild and moderate disabilities in their class for further intervention. They indicated further that pupils work is an important source of evidence of their participation during teaching and learning in the mainstream classrooms, therefore marking pupils work is critical form of teachers‟ enquiry into the progress, or otherwise of each pupils active participation in the mainstream schools (Pollard et al. 2005).

2.9.4 Circuit Supervisors' Expectation

Another challenge teacher‟s encounter in their classroom practices in relation to supporting all pupils, and in particular mild and moderate pupils with disabilities in the mainstream classroom is expectation of Circuit Supervisors. Circuit Supervisors are officials from Education Offices who play supervisory role in the education system

(Ministry of Education, Youth and Sports 2004). Teachers complain that circuit supervisors are not supportive; they are rather harsh and vindictive. Teachers have realized that Circuit Supervisors focus largely on the quantity of work done with the pupils, rather than the quality of work done through pupil‟s participation and learning (Hayford, 2013). Circuit Supervisors take critical action against teachers who do fewer exercises with their pupils. Hayford (2013) further indicated that there is evidence that; a teacher was removed from B6 to lower primary for failing to give the pupils „sufficient‟ exercises. This dampens the spirit of teachers, lost of control and ownership of their classroom practice which goes against active participation in mainstream schools where mild and moderate pupils with disabilities are found.

2.9.5 In-Service training

According to Hayford (2013) teachers‟ professional development can be identified as a factor which impinges upon mainstream classroom practices in relation to pupils with mild and moderate disabilities participating actively during teaching and learning process. Teachers are not trained in the use of correct pedagogy to support and enhance pupil‟s participation in mainstream schools that experience difficulties in learning. This information is vitally important; it reveals a major gap in the professional development programmes organized for teachers in Ghana. In fact, theMinistry of Education, Youth and Sports (2004) acknowledge that the fundamental challenges facing the government in its pursuits of inclusive practices are mainstream education teachers‟ lack of competence to respond to the needs of all pupils including pupils with disabilities in classrooms and lack of resources for pre- and post- service training of teachers.

2.9.6 Teaching and learning materials in mainstream schools

Inadequate teaching and learning material is another challenge in mainstream schools. The cost of buying teaching and learning materials is high. For example, Braille machines and textbooks are costly; hence, it becomes a problem in teaching pupils with mild and moderate disabilities in mainstream schools. Mmbaga (2002: 175) argues that, "schools are not making necessary purchases of teaching and learning materials, equipment for making teaching aids and materials for building and completing the required number of classrooms and furniture to avoid overcrowding and having pupils sit on the floor. Therefore this makes it difficult for the mainstream schools to plan effectively for their development and hence, teachers face problems in teaching pupils in the mainstream schools. She emphasizes that teachers should make sure that each pupil benefits from the teaching regardless of his or her learning difficulties.

Furthermore, Mmbaga (2002) mentions that most of the mainstream school teachers are not aware that they can use their local environment in teaching pupils with mild and moderate disabilities. She gave an example that teachers were not keen to use real objects in the environment that were available free of charge and most of the teachers teach without appropriate teaching aids.

She again indicated that, at the mainstream school where she did her research she observed that, in the classroom a textbook was being shared by nine pupils. Pupils with low vision or partially sighted had no writing equipment such as Perkins Braille, and hand frames and styluses were not available for all pupils needing them.

2.9.7 Teacher's commitment.

Report from circuit supervisors from the South Tongu District indicated that teaching in mainstream schools is stressful to most teachers. Teachers do not have commitment in teaching because they are being given low salaries and they are not respected by the society. This makes them not to play a good role for their responsibility. This becomes a big challenge when it comes to teaching pupils with mild and moderate disabilities in the mainstream schools (Landsberg, Kruger, Nel, 2006).Senge (2000:281) indicated that teachers should be involved in creating and sustaining school wide change. To him "involvement means teachers seeing the educational dynamics in all classrooms across responsibility". However, Mmbaga (2002) argues that teachers lack commitment because their salary is low and therefore most of them prefer to be committed to private tuition than normal class teaching because tuition gives them an extra income.

2.10 Summary of literature review

Literature was reviewed under five sub-heading which include theoretical framework. The study uses social cognitive, constructivist theories as the basis of theoretical framework. Under models of pilot inclusive education in Ghana, the six pilot initiatives or models of implementation of Inclusive Education was looked at with emphasis on model 4 and 5 being practice in the South Tongu District. For categories of pupils with mild and moderate disabilities in the mainstream classrooms for example, mild and moderate intellectual disabilities, hard of hearing, low vision, mild and moderate physical disabilities and mild and moderate speech and language disorders with some causes and characteristic were also found to be in mainstream schools. Relevant teaching methods

that will enhance pupils‟ participation for example, differentiated instruction; systematic instruction and co-operative teaching were also discussed. In the case of teaching and learning materials teachers use to enhance learning among pupils with disabilities in mainstream classrooms were also identify under the literature review with examples like manipulatives, computers models etc. In addition, challenges teachers encounter in teaching pupils with disabilities in mainstream classrooms for example teacher knowledge, large class size, teacher commitment was also mentioned.

In conclusion, it is clear that participation of pupil‟s with mild and moderate disabilities is important for their success in the mainstream schools. However it is the responsibility of teachers to teach pupils with mild and moderate disabilities employing the appropriate methodologies to enable them fully participate to achieve success, but in practice it is not been done.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section discusses data collection techniques, specific methods and procedure and how the data would be analyzed. These include population, research design, sample, sampling technique, procedure for data collection, instrumentation to be used for data collection and data analysis.

3.2 Population

According to Neale and Liebert (1980) a population is the total collection of people, things, or event under consideration; it is whatever group the investigator wishes to make inferences about. Also, population according to Gay, Mills and Airasian (2009) is a general term for the larger group from which a sample is selected or the group to which the researcher would like to generalize the results of the study. The population for the study was all teachers teaching in the pilot basic inclusive schools including the headteachers in the South Tongu District of the Volta Region of Ghana. The estimated population was about three hundred and twenty (320) teachers (Annual District Performance Report 2013-2014, GES South Tongu).

3.3 The Research Design

The study employed the descriptive survey method in which views and opinions were sampled from headteachers and teachers on teachers‟ strategies for enhancing

participation of pupils with disabilities in selected pilot inclusive schools in South Tongu District. This method focused on systematic description or exposure of the salient aspects of a situation with a focus on the patterns that emerge. The study was analytic (qualitative) in that the researchers focused on the relationships between variables and further interpreted the relationships. Gall, Borg, and Gall (2007) reported that "descriptive research is a type of quantitative research that involves making careful descriptions of educational phenomena" (p.72).

The main aim of descriptive research is to provide an accurate and valid representation of (encapsulate) the factors or variables that are relevant to the research question. A descriptive survey, by contrast, typically seeks to ascertain respondents' perspectives or experiences on a specified subject in a predetermined structured manner. For example, a "citation analysis" represents a variation of the descriptive survey method. One of the goals of science is description (other goals include prediction and explanation). Descriptive research methods are pretty much as they sound they describe situations. They do not make accurate predictions, and they do not determine cause and effect (Gall, Borg, and Gall, 2007).

There are three main types of descriptive methods: observational methods, case-study methods and survey methods. However this research employed the survey method.

In survey method research, participants answer questions administered through interviews or questionnaires. After participants answer the questions, researchers describe the responses given. In order for the survey to be both reliable and valid it is

important that the questions are constructed properly. Questions should be written so they are clear and easy to comprehend (Jackson, 2009, p. 89).

Jackson (2009) further emphasizes that descriptive research methods can only describea set of observations or the data collected. It cannot draw conclusions from that data about which way the relationship goes. Does A cause B, or does B cause A?

According to Jackson, in many studies published today, researchers forget this fundamental limitation of their research and suggest their data can actually demonstrate or "suggest" causal relationships. The current strategies, attitudes and opinions of head teachers and teachers were therefore sampled to answer questions guiding the study.

3.4 Study Area

South Tongu District was carved from the Tongu District. Sogakope was the headquarters until the Legislative Instrument LI 1466 of 1989 which further divided the District into South and North Tongu. South Tongu as it were was designated to the old administrative structure and as such holds Sogakope as its capital.

The District is located in the southern part of the Lower Volta Basin and bounded to the north by Central and North Tongu Districts, to the east by Akatsi South District, to the west by Dangme East and West Districts of the Greater Accra Region and to the south by Keta Municipal and the Gulf of Guinea. (Figure 1.1 presents the location of South Tongu District on map).

Sogakofe, the district capital is almost midway between Accra, the capital of Ghana and Lome the capital of Togo. Sogakofe is thus quite accessible to Accra, the national capital.

Also, significant is the Lower Volta Bridge which starts from Sogakofe at the eastern bank of the River Volta to Sokpoe at the western bank. Sogakofe is also located southwards to Ho, the regional capital just about 84 km.

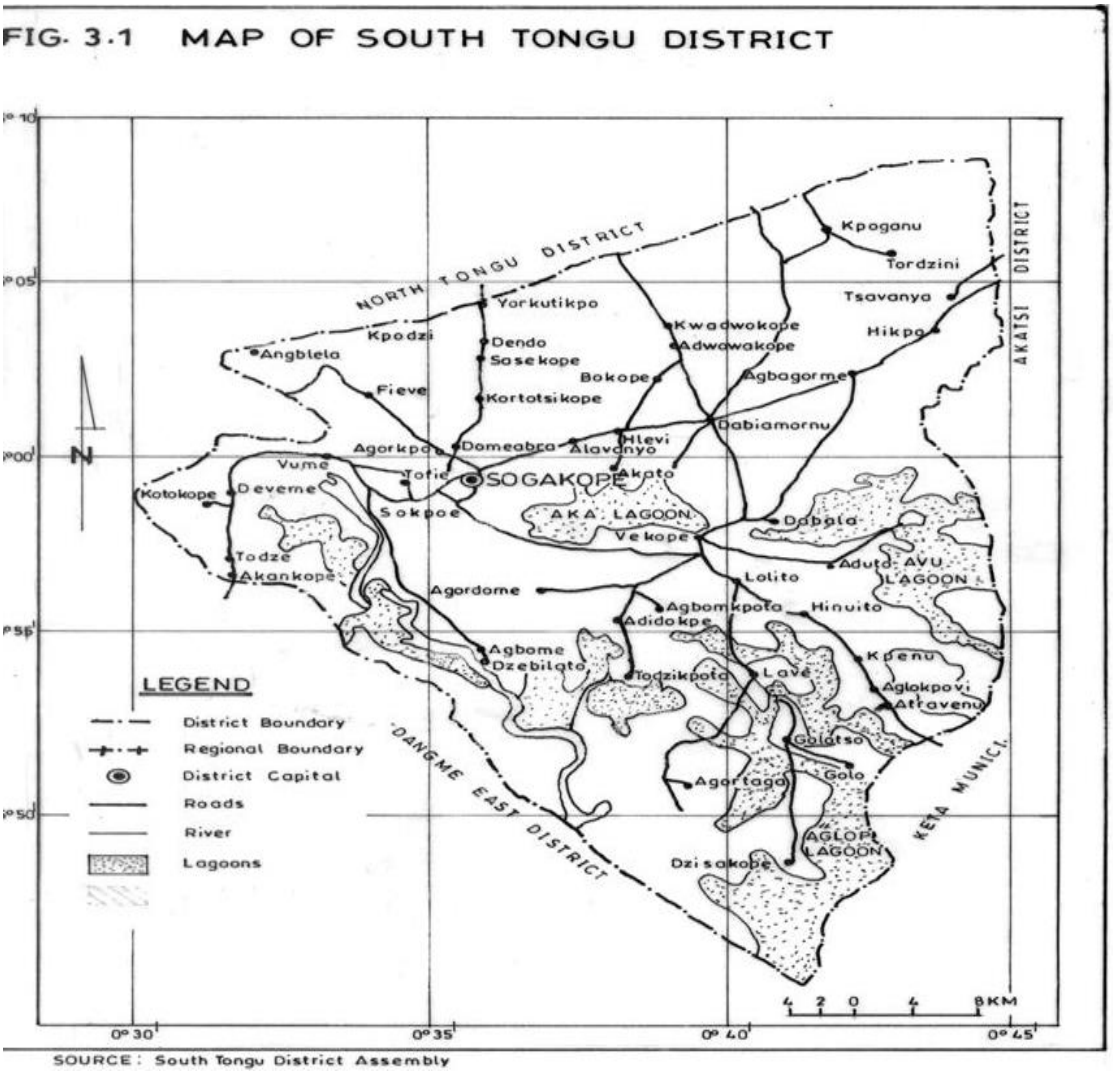

Figure 1.1: South Tongu District

Source: **www.ghanadistricts.com/voltaregion**

The South Tongu District contributes only 4.1 per cent of the size of Volta region.

The District is generally low lying by virtue of its location within the Coastal Plain, but rises gradually to a height of 75 metres above sea level. It has a total land area of 594.75 sq. km and lies between latitudes 6°10‟N, 5°45‟N and longitudes 30°30‟W, 0°45‟W. (See Figure 1.1)

The Communities in the District fall under five traditional areas namely Agave, Fievie, Tefle, Sokpoe and Vume. Each of the traditional areas is autonomous with their own paramount chief. These traditional areas have their own unique festivals. The people of Agave celebrate the Dzawuwuza during the month of August. Tortsogbeza meaning the „historic river crossing‟ by the people of Sokpoe. The celebration of these festivals apart from promoting unity amongst the people of the same traditional area also engenders tourism and development projects in the respective communities. There are generally three religious groups in the District, Traditionalist, Christians and Moslems.

According to 2010 Population and Housing Census Report, the District has a population of 87,950 of which 45.5% are males and 54.5% females. However the population is sparse in North Eastern and South Eastern parts of the District. The District is largely rural with a majority of its population (87.1%) living in the rural localities.

There is one Government District Hospital and one Catholic Mission. The District also has two Alternative Health Treatment Facilities namely the Holy Trinity SPA and Lord‟ J‟ Medical Centre located at Villa Cisneros Hotel. There are a number of traditional herbalists and healers operating in the rural areas.

The District has a total of 293 educational institutions which are public and privately owned. There are 114 Kindergartens, 111 Primary, 63 Junior High Schools, three (3) Senior High Schools, one Technical/Vocation Institute and one World Class Soccer

Academy Institute in the District. Under the decentralization process the district director of education oversees all these institution. The Director by the virtue of her position is member of District Education Oversight Committee (DEOC) and Social Services Sub-Committee (www.ghanadistricts.com/voltaregion, 2014).

3.5 Sample and sampling technique

According to Gay, Mills and Airasian (2009) a sample is a group of individuals, items, or events selected from a population for a study, preferably in such a way that they represents the larger group from which they were selected.

Sample distribution table

Name of school	No. of Hdtrs. selected.	No. of Teachers selected.	Total
Lolito Basic	1	14	15
Sogakope PCG	1	14	15
Tefle PCG	1	14	15
Agave Basic	1	14	15
Adutor R/C	1	14	15
Sogakope prim. „A“	1	14	15
Agorkpo Basic	1	14	15
Xikpo Basic	1	14	15
Sokpoe Basic	1	14	15
Tefle D/A Basic	1	14	15
GRAND TOTAL	**10**	**140**	**150**

Source field data 2015

From the sample distribution table above, ten (10) schools were randomly selected after considering the proximity of the schools to the researcher and by interacting with headteachers and teachers from 2010 to 2012 when pilot inclusive education programme started in the district.

For headteachers the researcher used purposive sampling to select them. According to Ranjit (2005) the primary consideration in purposive sampling is the judgment of the researcher as to who can provide the best information to achieve the objectives of the study. Considering the ten pilot inclusive schools selected for the study, each is superintendent by a headteacher, however for better information the ten headteachers were automatically chosen to form part of the sample. Also, as administrators of the schools, headteachers have information about teachers, pupils and parents activities in the school. Creswell (2002) stated that, in purposive sampling, researchers intentionally select individuals and sites to learn or understand phenomenon.

Additionally, some teachers were also sampled in the ten pilot inclusive schools using simple random sampling. Since teachers have a greater say in terms of methods they employed in teaching pupils in an inclusive setting, teachers from each of the schools were selected using simple random sampling to involve them in the study. Simple random sampling is the process of selecting a sample in such a way that all individuals in the defined population have an equal and independent chance of selection for the sample (Gay, Mills and Airasian, 2009). With the selected pilot inclusive schools the teachers in each school were thirty (30) because they were double stream schools. Therefore, the researcher designed 14 yes cards and 16 no cards, placed all in a container, reshuffled them and asked teachers to pick one after the other without replacement. Those who picked cards with yes responded to the questionnaires whilst those with no were rejected.

At the end of the sampling process, one hundred and forty (140) teachers were eventually selected, fourteen (14) from each school for the study.

A total of one-hundred and fifty (150) participants were involved in the study based on the fact that there are about three hundred (300) teachers in the ten selected pilot inclusive schools. A description of the sample according to Gay, Mills, and Airasian(2009) should include the number of participants and demographic information about the sample e.g. gender or racial group, ethnic background, age, geographical location and so on.

3.6 Instruments

The main instrument used for the study was questionnaire. Best and Kaln (1995) citing Marshall and Rossman (1989) noted that questionnaire can be used to gather quantitative or qualitative data. Best and Kahn (1995) also noted that a questionnaire is used when factual information is desired. As the researcher desired to collect factual information on teachers‟ strategies for enhancing participation of pupils with disabilities in selected pilot inclusiveschools, a forty eight item likert scale questionnaire each was designed to collect data from headteachers and teachers. The questionnaires were developed out of the four research questions raised. Therefore fifteen item likert scale questionnaire was designed for headteachers while thirty three item likert scale questionnaire was designed for teachers.

The researcher used questionnaire (Appendix A) and (Appendix B) for teachers and headteachers. A questionnaire, according to Creswell (2002) is a form used in a survey design that participants in a study complete and return to the researcher. He continued to

say that the participant makes choices to questions and supplies basic personal or demographic information. Burns (1999) alleged that questionnaires offer an alternative form of data collection to interviews. He noted that questionnaires have the advantage of being easier and less time consuming to administer than interviews and responses of larger number of informants can also be gathered. The researcher considering the number of headteachers and teachers in the ten pilot inclusive schools choose to administer questionnaire to headteachers and teachers so as to save some time. The designed questionnaires of the study were sent personally by the researcher to the schools on an appointed and accepted date. The questions were discussed with the headteachers and teachers and later distributed to them to be answered. To acquire high return rate, the researcher encouraged the teachers to responds to the questions and hand them over to their headteachers so that the researcher could return for them (answered questionnaire) after two weeks. This decision was taken due to the nature of the school in respect to distance and inability to get access to vehicle to the schools. The questionnaire were therefore responded to and handed over to the head teachers and then the researcher returned to collect them personally.

3.7 Validity and reliability

To ensure validity of the conclusions drawn from the research, the items of the questionnaire noted to be ambiguous were either deleted or reframed to bring about clarity while relevant suggestions to the study were added. Also enough items were developed to cover each research question raised. The items were then presented to the supervisor for further vetting.

In addition, to ensure reliability, the questionnaire constructed for headteachers and teachers for gathering data for the study was piloted on headteacher and teachers at Sogakope PCG Basic School. Sogakope PCG Basic School for some times past, that is, within the period 2010, a period of consideration in regards to the inception of pilot inclusive education program in the district. The pilot test was conducted on the 24th June, 2015. A few items were found to be ambiguous so they were deleted while some others were reconstructed for the respondents to respond to without much difficulty.

3.8 Access

To get access to the schools, the researcher collected a letter of introduction from the Department of Special Education, University of Education, Winneba, to the District Director of Education, South Tongu to introduce the researcher and the purpose of the research. A letter of permission and introduction to the selected schools was also collected from the District Director of Education, South Tongu to the schools. The letter of permission and introduction from the District Director of Education to the selected pilot inclusive schools was sent to the school prior to the days intended for the data collection. This was to prepare the mind of the respondents towards responding to the questionnaire, as Gall and Gall (1996) had noted contacting respondents before sending a questionnaire increases the rate of response.

The letters of introduction and permission enabled the researcher create rapport with the District Director, headteachers and teachers of the selected pilot inclusive schools to enable the researcher conduct the research. Creswell (2002) stated that researchers often need to seek and obtain permission from individuals and site levels. Creswell citing

Hammersleu and Atkinson (1995) noted that permission provides the researcher entrance to the site, helps researcher locate people, and assists in the identification of places to study. Permission also helps the researcher win support and trust to the sites. In addition, Gall and Gall (1996) noted that sending information to respondents before the day of responding to the questionnaire prepares the respondents psychologically and puts pressure on the respondent to respond to the questionnaire at arrival.

3.9 Period of Data Collection

The questionnaire for collecting data for the study was distributed to headteachers and teachers of the selected pilot inclusive schools to school from 15th June to 7th July, 2015. In view of selected schools being at different location from the Sogakope the district capital and also difficult to get to, the distribution of the questionnaire. However, answered questionnaire were collected from the schools after two week‟s interval from the distribution day.

3.10 Procedure for data analysis

The data collected from the questionnaire was analyzed using the descriptive statistics. The questionnaire data were coded and the computer software, Statistical Package for Social Science research (SPSS) version 16.0 was used in analyzing them. Creswell (2002) stated that the exploration and description of data helps to identify the distribution of scores and aids researchers in assessing the general trends in the data and more specifically, in answering descriptive research questions. The researcher used the descriptive statistics in assessing the general trends of the information gathered by representing the individual scores with numbers in the samples. These were used in

answering the research questions raised to guide the study. The questionnaire was analyzed using the computer. Numerical description of the data was calculated providing the frequency of occurrences and the percentages of every individual statement. This gave the direction for answering the research questions.

The options, occurrences and percentages of the various items were calculated for each of the likert-scale responses of „Yes", „No", „Not sure", „Agree", „Disagree" „Not sure" and „Always", Sometimes" „Not at all". The percentage response for each individual statement was indicated. Kahn and Best (1995) noted that „the simplest way to describe opinions is to indicate percentage responses for each individual statement (p 247)". Kahn and Best continued that for this type of analysis by item, three responses, that is „Yes", „No", „Not sure", „Agree", „Disagree" „Not sure" and „Always", Sometimes" „Not at all", individual percentages were indicated for the responses. The percentages of the respondents who chose each response for each statement was given. A summary of the findings was provided and supported with tables and related literature.

CHAPTER FOUR

PRESENTATION OF ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

The analysis was guided by the research questions that were formulated in chapter one: What types of disabilities are found among pupils in the selected pilot inclusive schools in South Tongu District, what teaching methods do teachers in the selected pilot inclusive schools use to teach pupils with mild and moderate disabilities in their classroom, what teaching and learning materials do teachers use to teach pupils with disabilities in the selected pilot inclusive schools and what challenges do teachers encounter in teaching pupils with disabilities in the selected pilot inclusive schools. First the demographic characteristics of respondents, followed by the research questions and discussion on the key findings.

4.1 Demographic Characteristics of Respondents

The background information of the selected pilot inclusive basic school teachers in the South Tongu District in Ghana includes gender, highest professional qualification, and number of years served in the school as shown in Table 4.0 and 4.1 below.

Table: 4.0: Gender and highest professional qualification of respondents

Variables	Male	Percentage	Female	Percentage	Total Percentage
Cert "A" 4-year	2	1.4	8	5.7	**7.1**
Diploma in Basic Education	20	14.3	16	11.4	**25.7**
2-year Specialist Course	9	6.4	7	5.0	**11.4**
B.Ed	30	21.4	25	17.9	**39.3**
Cert „A" 3-yr Post Sec.	7	5.0	16	11.4	**16.4**
Total	**68**	**48.6**	**72**	**51.4**	**100.0**

Source: Field Data, May 2015

Table 4.0 showed that 51.4% of the respondents were female and 48.6% were males, indicating that female constituted the majority of the teachers sampled for the research.

As depicted in Table 4.0, 39.3% of the respondents have Bachelor of Education (B.Ed) followed by 25.7% Diploma in Basic Education (DBE), Certificate „A" 3-yr Post Secondary (16.4%). Others include 2-yr Specialist course (11.4%) and finally, Certificate „A" 4-yr. (7.1%).

Table: 4.1. **Teaching Experience**

Years	Male	Female	Total
1-5 Yrs	29	24	**53**
6-10 Yrs	25	29	**54**
11-15 Yrs	12	12	**24**
16-20 Yrs	2	5	**7**
20 Plus	0	2	**2**
Total	**68**	**72**	**140**

Source: Field Data, May 2015

Considering gender against teaching experience at present school as illustrated in Table 4.1, 29% of males have served in their current school between 1 to 5 years while 24% of females also served within the same year. On the other hand more females 29% serve between 6 to 10 years against 25%. The high number of teachers, who served between 1 to 5 years and 6-10 years as indicated on the Table above, can be explained in view of the GES policy that, one should serve at least four years in a school before qualifying for transfer to another school. However, 12% both males and females have served between 11 to 15 years. Two percent male and 5% females have served between 16 to 20 years. Finally 2% females have done 21 years and above in their present schools.

4.2 Research Question 1

What types of disabilities are found among pupils in the selected pilot inclusive schools in South Tongu District?

Research question 1 was intended to find out the types of disabilities that are found in the ten (10) selected pilot inclusive schools in the South Tongu District.

Table: 4.2: Percentage distributions of disabilities in selected schools

Variable	Yes %	No %	Not Sure %	Total %
Physical Impairment	26.4	70.7	2.9	**100**
Hard of Hearing	44.3	39.3	16.4	**100**
Low Vision	54.1	38	7.9	**100**
Fine Motor Skill	40.7	55	4.3	**100**
Attention Deficit	43.6	35.7	20.7	**100**
Reading Difficulty	54.3	27.1	18.6	**100**
Calculation Difficulty	48.5	38.6	12.9	**100**
Multiple Disability	35	30.7	34.3	**100**

Source: Field Data, May 2015.

Table: 4.3. Summary of data on percentage distribution.

Variable	Minimum	Average	Maximum
Yes	26.4	43.225	54.3
No	38	42.05	70.7
Not Sure	4	20.625	48

Source: Field Data, May 2015

Analysis from the data collected reveals that, Physical impairments constitute the least disability recorded among our sample, that is, it is the least observed disability in our sample. Reading difficulty ordyslexia is the highest disability recorded in our sample; it is the most observed form of disability recorded in our sample.Pupils with dyslexia experience difficulties affecting the learning process in aspects of literacy and, sometimes, numeracy. This was supported by Baker and Zigmond (1995) who argue that for some pupils with reading difficulty or dyslexia, the regular education classroom may actually be more restrictive than a resource room or special class placement when the instructional needs of the pupils are considered.

In addition, placing pupils with reading difficulty in a pull-out programme or special class does not guarantee that he/she will receive the intensive, specialized instruction he/she needs. This is in line with a research conducted by Moody, Vaughn, Hughes and Fischer (2000) who found out that only three of the six resource room teachers they observed provided differentiated reading materials and instruction to match the individualized needs of their pupils. The collective message of research on outcomes for pupils with reading difficulty in inclusive classrooms and other settings is consistent with the findings for pupils with other disabilities: The location in which a pupil is taught is not as important as the quality of instruction that pupils receives.

On the general scale, an average of 43.225% was recorded across board, indicating that on the average, 43.225% of all the eight disabilities were observed in the sample. From the table, 4.4 it is clearly shown that hard of hearing, low vision, fine motor skills, attention deficit, reading difficulty (dyslexia) and calculation difficulty (dyscalculia) are disabilities that are evident in the selected schools, in the cases of physical impairments and multiple disability, cases of such disabilities are on the minimal. The findings agreed with Ysseldyke,Thurlow, Ruba, &Nania (1990) who also indicated that regular education teachers should adapt and modify the content of the syllabus to increase the success level of all categories of pupils with special needs in inclusive schools.

Pullen (2004), Ocloo, Mottey and Boison (2005) confirmed that a pupil described as having mild and moderate hearing impairment, is the one who has some problems hearing well or using his/her ears to hear speech and sound, or other disabilities like low vision. They continue to say that such conditions are found in the mainstream classroom where pupils try to locate sources of sound, struggling to see in the classroom during instructional periods sometimes making it difficult for pupils to cope with learning in the mainstream schools.

4.3 Research Question 2

What teaching methods do teachers in the selected pilot inclusive schools use to teach pupils with disabilities in their classroom?

Research question 2 was intended to find out the teaching methods teachers use in the ten (10) pilot inclusive schools to promote the participation of pupils during instructional periods.

Table: 4.4. Percentage distributions of teaching methods practiced in the selected inclusive schools

Variable	Always	Sometimes	Not At All	Total
Grouping Pupils	37.1	55	7.9	100
One-on-one Instruction	15	42.1	42.9	100
Teach from simple to complex	55.7	39.3	5	100
Individual Work	40	47.9	12.1	100
Hands-on-approach	21.4	72.9	5.7	100
Repeat lessons for pupils	44.3	48.6	7.1	100
Break down lesson activities	17.1	43.6	39.3	100
Teach using story telling	34.3	65.7	0	100
Teach using rhymes	25.7	74.3	0	100
Extra Time	15.7	51.4	32.9	100
Question and answer method	15	30.7	54.3	100
Teach using dramatization	30	52.1	17.9	100
Teach using play	37.1	48.6	14.3	100
Drill During Reading Lesson	40.7	46.4	12.9	100

Source: Field Data, May 2015

Table: 4.5. Summary of data on percentage distribution.

Variable	Minimum	Average	Maximum
AL	15	30.65	55.7
ST	30.7	51.328	74.3
NT	0	18.021	54.3

Source: Field Data, May 2015

AL→Always ST→ Sometimes NT→ Not At All

Table: 4.5 above captured the responses of teachers on teaching methods that they use in the mainstream schools to promote pupils participation during teaching and learning. The data analysis suggests that the teaching method one-on-one instruction is the least always used in our sample but to address the individual educational needs of pupil‟s, differentiated instruction has been identified as an effective teaching method that can address this issue for a variety of pupils (Tomlinson 1999). The method one-on-one instruction is based on the premise that all learners are different, that learning requires a connection of a pupil‟s own abilities and interests and that lesson planning requires providing pupils with the type of instruction that can address their needs and the educational objectives simultaneously.

The teaching method often used among our sample is simple to complex. This confirmed the study of Subban (2006) who found that teachers in the mainstream schools give more time to particular pupils for completing a classroom assignment followed by breaking down activities from complex to simple task, using alternative material for some pupils, implementing activities at various levels of difficulty, using computers for supporting learning, forwarding diverse activities during the same instructional hour and using

specific resources such as perforated boards or resource room settings. In addition Cardona-Molto (2003) indicated that teaching pupils from simple to complex were used mainly in the area of Language and Math as part of the methods used by teachers for supporting pupils learning and participation.

Questions and Answers is the least method used by the teachers in the sample because it has the least percentage from the data. This could be in agreement with De Vita (2000) who argues that the fear of pupils not being able to understood lessons and in the extreme, of being subject to ridicule, are the most common barriers to participation in classroom discussion experienced by pupils with mild and moderate disabilities in inclusive classrooms. Hodge and Martin (2007) found that group teaching using question and answer method could cause increased anxiety in pupils with mild and moderate intellectual disabilities. This was possibly due to their communication differences. Using question and answer which lead to discussion and dialogue can compound difficulties in social interaction for some pupils with mild and moderate disabilities and act as a barrier to learning (Martin, 2006).

Teaching using rhymes is the method most sometimes used by the teachers in the sample, Bothma, Gravett and Swart (2000) remarked that teaching through rhymes is much fun however; the method is not beneficial to mild and moderate hearing impaired pupils. From our summary of data on percentage distribution, table 4.6 all the teaching methods are used averagely at 51.328% during teaching in our selected schools.It can also be seen that questions and answers is the teaching method that is highly not used at all by the

sample.It suggests that 30.65% of all the teaching methods are always used by the teachers in our sample schools.

Table: 4.6. Bio-data of the Headteachers

Variable	Frequency	Percent
Male	6	60.0
Female	4	40.0
Total	10	100.0

Source: Field Data, May 2015

From table 4.7 above, the bio-data for Headteachers indicating that 60% of the respondents were males while 40% were females who took part in answering the questionnaire. It suggests from the table that males like to enjoy leadership position than females. That is why males dominate the headship.

4.4 Research Question 3

What teaching and learning materials do teachers use to enhance learning among pupils with disabilities in the selected mainstream classroom?

Research question 3 sought to find out from headteachers, the teaching and learning materials they provide for teachers to use during teaching and learning process for promoting participation of pupils with mild and moderate disabilities in the selected mainstream classrooms.

Below is Table 4.7 illustrating the responses on teaching and learning materials that were available for General Education Teachers to meet the learning needs of pupils in mainstream classrooms.

Table: 4.7: Teaching and learning materials teachers use to teach.

Variable	Always	Sometimes	Not at all	Total
Use computer in teaching	1	9	0	10
Use large print	0	2	8	10
Enough reading materials	2	8	0	10
Use study guide	2	0	8	10
Enough drawing materials	5	5	0	10
Sign language instructor	0	0	10	10
Braille readers	0	0	10	10
Counters	0	10	0	10
Visual aids	0	10	0	10
Bass-10-blocks	8	2	0	10
Models	0	10	0	10
Pictures	0	10	0	10
Diagrams	6	4	0	10
Realia	0	2	8	10
Enough writing material	8	1	1	10

Source: Field Data, May 2015

As shown in table 4.7 above 9 respondents out of 10 said their teachers sometimes use computer as a teaching and learning material in the mainstream classroom to teach pupils with mild and moderate disabilities, while 1 respondent provided and encouraged the use of computer always during teaching and learning which makes lessons practical and increases pupil‟s participation.

This corroboratesO‟Bannon and Judge (2004); Hite (2005) noted that many researchers agree that the use of computer for instructional purposes can improve pupils‟ participation during learning and create robust method of content delivery for teachers. But they further lamented that in this current digital age, it is astonishing that the use of technology in the mainstream schools appears to be so limited, despite increasing investment by education authorities in the acquisition of teaching and learning materials, including laptop computers for schools that will enhance pupil‟s participation during lesson delivery.

In finding out whether the headteachers in the mainstream schools supply large print, study guide and real materials or realia to teachers to help pupils with low vision or partially sighted and other disabilities participate actively in the mainstream classrooms, majority of the respondents (8) respectively as shown by table 4.8 did not have access to such materials, making it difficult for pupils with low vision and other disabilities to learn. However, study guide according to Arends (2004) helps pupils to identify important information in basals. For instance, Carmen‟s use of a study guide to help her identify important information in her history text is an example of adaptations in instructional materials in mainstream classrooms. Bothma, Gravett and Swart (2000) comment that although realia are less expensive material which teachers needs to use when teaching pupils in the mainstream school for absolute participation of pupils, in practice, it is not been done. Unfortunately majority of teachers do not gather local materials to support their teaching.

However, majority of the headteachers(8 and 2 respectively) said they sometimes and always provided reading materials and base-10-blocks during mathematics lessons. In addition, according to Armbruster and Anderson, 1988; King-Sears (2001) basal textbooks are example of teaching and learning material used for instruction in any subject area that contain all the key components of the curriculum being taught for that subject in inclusive classrooms. Carefully evaluating basals helps alert you to any adaptations teachers may need to make. Also Sabornie and de-Bettencourt (2004) and Mercer and Pullen (2005) indicated that many teachers are choosing to develop or collect their own materials rather than depending on published basal series. Also headteachers must try as much as possible to developed reading materials in Braille to encourage pupils who have low vision to read as well. In terms of providing base-10-blocks for teachers to use during teaching and learning, it is consistent with Smith (2004) who opines that manipulatives are concrete objects or representational items, such as blocks and counters (for example, base-10 blocks for math), used as part of instruction in the inclusive schools. However, Stein, Silbert and Carnine (1997); Cass, Cates, Smith,& Jackson,(2003) caution that manipulatives should be used carefully, because their use with pupils with mild and moderate disabilities has not been heavily researched.

From table 4.8 it is clear that all heads (10) said they did not provide sign language instructors and Braille readers to teach pupils who have the condition of hard of hearing and low vision. Meanwhile, reports from the field data above showed that hard of hearing and low vision conditions were found in the mainstream classroom making it difficult for such pupils to cope with learning especially in terms of communicating with their teachers and peers. However, this situation could hinder the participation of pupils with

the condition hence; it will be difficult for pupils with the condition to learn. Additionally, Good, Jan, Burden, Skoczenski, and Candy (2001) stated that low vision or partially sighted is vision loss of a person to such a degree as to qualify for an additional support need like Braille instructors for easy communication and tactile materials to enhanced teaching and learning. Thus, the situation where (100%) of the mainstream schools inability to provide Braille and Sign language instructors to teach pupils with hard of hearing and low vision call for urgent attention and intervention from the educational policy makers.

All heads (10) provided counters, models, pictures and other visual aids sometimes to their teachers to use during teaching and learning. This is in support of Smith (2004) who remarked that models are tangible objects; they provide a physical representation of an abstraction for example, a scale model of the solar system use to teach integrated science in the basic schools. He further noted that, to teach pupils with mild and moderate disabilities in mainstream schools, teachers need to use models to support their teaching for easy understanding of a lesson. Also, Cass, Cates, Smith, and Jackson (2003) indicated that teaching and learning materials will have great potential benefit for pupils with mild and moderate disabilities, who may lack the background knowledge and reasoning skills to understand abstractions. Furthermore, with the pictures and the diagrams, pupils with mild and moderate disabilities are able to interact and participate actively in the inclusive classroom during teaching and learning periods.

4.5 Research question 4

What challenges do teachers encounter in teaching pupils with disabilities in the mainstream classrooms?

Research question 4 was intended to find out from teachers the challenges they face in teaching pupils with mild and moderate disabilities in the mainstream classrooms.

Table 4.8. Percentage distribution of challenges teachers face in teaching pupils with disabilities.

Variable	Agree	Disagree	Not at sure	Total
Teachers have confidence in teaching pupils with disabilities	0	78.6	21.4	100
Teachers have over loaded work in mainstream classrooms	63.6	32.1	4.3	100
Difficulty in marking work for large classes	87.1	12.9	0	100
Attitudes of District Education Officers	94.3	0	5.7	100
Teachers lack the competence of good methods of teaching	100	0	0	100
Teachers lack classroom furniture	35.7	54.3	10	100
Teachers give one-on-one attention despite large classes	0	85.7	14.3	100
Teachers use real object in teaching	94.3	12.9	2.9	100
Teachers use Perking Braille when teaching	0	100	0	100
Teachers use styluses when teaching	0	100	0	100
Teachers avoid additional responsibility due to low motivation	54.3	30.7	15	100

Source: Field Data, May 2015

Table: 4.9:Averagedistribution of challenges teachers face in teaching pupils with disabilities.

Variable	Minimum	Average	Maximum
Agree	0	48.1	100
Disagree	0	45.2	100
Not sure	0	6.7	21.41

Source: Field Data, May 2015

From the analysis, table 4.9 suggests that the biggest challenge that the selected teachers face is the lack of competence of good teaching methodology in the mainstream classroom. One hundred percent representing all the teachers agreed to the fact that they lack the competence of good teaching methodology in handling children with disabilities. This is a true reflection of what Ministry of Education Youth and Sports (2004) acknowledge, that the fundamental challenges facing the government in its pursuits of inclusive practices are mainstream education teachers" lack of competence to respond to the needs of all pupils including pupils with mild and moderate disabilities in mainstream classrooms and lack of resources for pre- and post- service training of teachers to gain knowledge and become competence in teaching pupils with mild and moderate disabilities in our mainstream schools.

On the other hand, from table 4.9 above, 78.6% of teachers disagreed with the fact that they have confidence in teaching children with disabilities. This is consistent with Davis and Florian (2004) assertion, that teachers have much of the knowledge and many of the

skills required to teach all pupils, but they may not have the confidence to put this knowledge into action in helping pupils who are experiencing difficulties in learning. Teachers‟ lack of competency in managing their mainstream classrooms is a serious problem which affectspupil‟s participation, hence makes teachers feel stressed and less confident when teaching in class (Broderick, 2005; Ainscow, 2009; Landsburg, 2011). Florian (2007) also suggested that teachers need knowledge about pupils with mild and moderate disabilities in the mainstream and that they need to be skilled in using specific instructional methods in teaching them for their easy participation and understanding of lessons.

Majority(100%) of the teachers selected for the research agreed to the fact that they do not use perking Braille‟s or styluses when teaching. This shows how challenging it becomes for pupils with low vision in the mainstream classroom during teaching and learning, due to the fact that teachers have not built their capacity on how to use the aids in helping pupils with low vision to participate actively in classroom when others are learning. Mmbaga (2002) gave a practical example stating that, at the mainstream school where she did her research she observed that in the classroom one textbooks was being shared by nine pupils. Pupils having low vision or partially sighted had no writing and reading equipment such as Perkins Braille, lenses, hand frames and styluses were not available for all pupils needing them to actively participate in class which turns to be a challenging situation for both teachers and pupils.

Also, all respondent (100%) attested to the fact that District Education Officers are harsh and non-supportive on classroom teachers. This is in agreement with a research carried out byHayford (2013)who postulated thatteachers complain that circuit supervisors are not supportive; they are rather harsh and vindictive. Teachers have realized that circuit supervisors focus largely on the quantity of work done in terms of output of work with the pupils, rather than the quality of work done through pupil‟s participation and learning. Meanwhile this could be the fact that, the officers from the District Education office do not have the competence in helping the regular teachers to teach pupils with disabilities in the mainstream schools therefore, making teaching difficult for teachers to cope with and finally it dampens the spirit of teaching pupils with disabilities in the mainstream classroom and hinder pupils participation.

Furthermore, 85.7% of teachers disagreed with the statement that they give one-on-one attention to pupils with disabilities despite large classes. Asamoah-Gyimah (2002) corroborated with the view that larger classes prevents teachers from developing close relationship with pupils while pupils progress is hindered as they are unable to assist pupils who needed more help and special attention, to enable them participate and complete task successfully.

On the average 48.1 agree to the statement that, they encounter problems in the mainstream classrooms while 45.2 disagree to the fact meanwhile, 6.7 of the respondents were not sure if they face any challenge in the mainstream schools.

CHAPTER FIVE

SUMMARY, CONCLUTION AND RECOMMENDATION

5.0 Introduction

Chapter five concludes this study. It begins with a brief description of the study and methodology. The final two sections provide the summary of the study, conclusions of the study and recommendations for further research.

5.1 Summary of the study

The study was to find out teachers‟ strategies for enhancing participation of pupils with disabilities in selected inclusive basic schools in South Tongu District in the Volta Region who from the year 2010 to 2012 have decided to pilot inclusive education in the district. The study targeted the types of disabilities found among pupils in the selected inclusive schools, teaching methods that teachers in the selected pilot inclusive schools used to teach pupils with disabilities in inclusive schools, teaching and learning materials teachers use to teach pupils with disabilities in the selected inclusive schools and the challenges teachers encounter in teaching pupils with disabilities in the selected pilot inclusive schools.

The design of the study was descriptive survey in which views were solicited from teachers and headteachers in answering research questions set to guide the study. The population of the study was all teachers and headteachers of the selected schools. Total estimated population was about three hundred (300). A sample size was made up of 150 participants who were involved in the study. The sample size was made up of ten (10) head teachers, one hundred forty (140) teachers who have been teaching in the schools.

The headteachers of the schools were purposively sampled while simple random sampling technique used in selecting the teachers. The study involved the use of questionnaire in gathering data. A forty three (43) and fourteen (14) separate item likert scale questionnaire was administered on the teachers and the headteachers of the schools. The data collected from the questionnaires were calculated given frequencies and percentages. The results from the questionnaires were used in deriving answers to the research questions raised to guide the study. Findings obtained from the questionnaires are presented below.

5.2 Summary of the findings

The findings of the research question on types of disabilities found in inclusive schools indicated that majority of pupils have hard of hearing (hearing impairment), after the pupils were identify and refer to assessment centerat Hohoe, low vision (visual impairment), attention deficit and learning disabilities for example reading and calculation difficulties hence making it challenging for pupils with such conditions to cope with academic work compared to their non-disabled peers.

Findings of the research question on teaching methods showed that high percentage of teachers did not put pupils in groups to learn, offer one-on-one instructions. Though majority of teachers asserted to the fact that, they always gave hands-on-approach and encouraged pupils to take active part during teaching and learning, it emerged that teachers did not use dramatization, rhymes and storytelling during teaching and learning process.

Also, teachers did not drilled pupils enough during reading lessons always. These attitudes of teacher‟s inability to engage pupils do the above teaching strategies were potential factors that adversely affected pupils with disabilities active participation in inclusive classroom.

Further, findings indicated that teaching and learning materials were not available for teachers to use in teaching pupils with mild and moderate disabilities whereas drawing materials, computers, large prints, reading materials and visual aids were not adequate to used by pupils within the inclusive schools. These factors affected the active participation of pupils adversely.

Finally, findings indicated that teachers encounter challenges when teaching in the pilot inclusive schools for example, teachers lack of competence of good and appropriate pedagogies, difficulty in marking work for large class size and District Education Officers been harsh and vindictive on teachers making teaching very stressful for the teachers.

5.3 Conclusion

In the light of the findings from the questionnaire, the following conclusions are imperative.

- There are pupils with mild and moderate disabilities found in the pilot inclusive schools.
- Teachers do not use the appropriate methodology in teaching pupils with mild and moderate disabilities in the pilot inclusive schools.

- Headteachers do not provide appropriate teaching and learning material for teachers to use in teaching pupils with mild and moderate disabilities in the pilot inclusive schools.
- Teachers encounter difficult situations in teaching pupils with mild and moderate disabilities in the pilot inclusive schools.

5.4 Recommendation

In view of the findings of the study it is being recommended that:

- teachers must group pupils according to their ability levels during teaching and learning.
- teachers must offer one-on-one instruction to pupils.
- the District Education Office must employ more sign language instructors and Braille readers to help the hearing and visually impaired pupils.
- during reading lessons teachers must plan and provide drill-and-practice program thoroughly to enhance pupils participation and easy understanding of lessons.

5.5 Area for further research

Further studies could be conducted to find out assistive devices and teaching and learning materials that teachers needs to teach pupils with disabilities in inclusive classrooms.

Since this study was limited to only ten pilot inclusive schools, a further study is therefore necessary to cover other schools in the district so as to established a holistic trend regarding teachers strategies for enhancing participation of pupils with disabilities in inclusive schools.

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APPENDIX 'A'

ACADEMIC PERFORMANCE SURVEY (QUESTIONNAIRE FOR TEACHERS)

I would kindly like you to respond to each of the items below to express your views about Inclusive Education. Please be honest and as objective as you can. Tick (√) the appropriate response as applicable to you and fill in the blank spaces where answers are not supplied. Confidentiality in respect of whatever information you give is fully assured. Thanks for your cooperation.

PART ONE: BIO-DATA

1. **Gender**: Male…… Female……...
2. **What is your highest professional qualification?**
   - i. Cert "A" 4-year
   - ii. Cert "A" ,3-year Post Sec.
   - iii. 2-year specialist
   - iv. Diploma in Basic Education(DBE)
   - v. B.Ed
3. **How long have you taught as a teacher in the school?**
   - i. 1-4 years
   - ii. 5-9 years
   - iii. 10-14 years
   - iv. 15-20 years
   - v. 21 years and above

PART TWO

Please tick (√) the response that applies to you most

Description	**Response Options**		
A: Types of disabilities found in the inclusive schools	**Yes**	**No**	**Not Sure**
Pupils with Physical Impairment are in my class			
Pupils with Hard of Hearing are in my class			
Pupils with Low Vision are in my class			
Pupils with Fine Motor Skill are in my class			
Pupils with Attention Deficit are in my class			
Reading Difficulty are in my class			
Pupils with Calculation Difficulty are in my class			
Pupils with conditions 2-3 (Multiple Disability) are in my class			
B: Methods teachers adopt to teach pupils with disabilities in the mainstream classrooms	**Always**	**Sometimes**	**Not At All**
I put pupils in small grouping to learn			
I provide One-on-one Instruction			
Teach from simple to complex			
I engage pupils to do individual work in my class			
I use hands-on-approach during teaching in my class			
I repeat lessons for pupils in my class			
I break down lesson activities for pupils in my class			
I teach using story telling in my class			
I teach using rhymes in my class			
I give extra time to pupils to complete their work in my class			
I use question and answer method to teach in my class			
I teach using dramatization in my class			
I teach using play in my class			
I drill pupils during reading lesson in my class			

C: Challenges teachers face in teaching pupils with disabilities in the mainstream classrooms	Agree	Disagree	Not sure
Teachers have confidence in teaching pupils with disabilities			
Teachers have over loaded work in mainstream classrooms			
Difficulty in marking work for large classes			
Attitudes of District Education Officers			
Teachers lack the competence of good methods of teaching			
Teachers lack classroom furniture			
Teachers give one-on-one attention despite large classes			
Teachers use real object in teaching			
Teachers use Perking Braille when teaching			
Teachers use styluses when teaching			
Teachers avoid additional responsibility due to low motivation			

APPENDIX 'B'

ACADEMIC PERFORMANCE SURVEYQUESTIONAIRE FOR HEADTEACHERS

I would kindly like you to respond to each of the items below to express your views about Inclusive Education. Please be honest and as objective as you can. Tick (√) the appropriate response as applicable to you and fill in the blank spaces where answers are not supplied. Confidentiality in respect of whatever information you give is fully assured. Thanks for your cooperation.

PART ONE: BIO-DATA

1. Gender: Male…… Female……...

Please tick (√) the response that applies to you most.

Description	Response Options		
Teaching and learning materials teachers use to teach pupils with disabilities in mainstream schools.	**Always**	**Sometimes**	**Not At All**
Teachers use computer in teaching pupils in class			
Teachers use large print when teaching pupils			
Teachers use enough reading materials when teaching in class.			
Teachers use study guide when teaching in class			
Teachers use enough drawing materials when teaching			
Teachers engage Sign language instructors			
Teachers engage Braille readers in my school			
Teachers use counters when teaching mathematics			
Teachers use visual aids when teaching in class.			
Teachers use bass-10-blocks when teaching maths			
Teachers use models when teaching and learning			
Teachers use Pictures when teaching and learning			
Teachers use diagrams during instructional times			
Teachers use realia during instructional periods			
Teachers use Enough writing material when teaching			