LEARNING DIFFICULTIES AMONG PRIMARY PUPILS:

(A CASE STUDY IN KNUST PRIMARY, KUMASI.)

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By

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DECLARATION

I hereby declare that this submission is my own work towards the Master of Philosophy in Art Education and that, to the best of my knowledge it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text

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ABSTRACT

A keen look at ways in identifying and dealing with pupils with learning difficulties so as to give pupils with or without difficulties equal rights and also experiencing the same or similar training has the potency of ensuring the achievement of universal primary education for all children. This research adopted the qualitative research method to study with the focus on the KNUST primary as a case study. The school is located in the Oforikrom sub metro of Ghana. Basically the research sort to help teachers identify pupils with learning difficulties and also how to handle them by using adaptive instructions to meet their needs.

The purposive sampling method was adopted for the study. Data gathered revealed that teachers were aware of pupils with learning difficulties but not the specific type of learning difficulties and also teachers were not really equipped to use adaptive instructions to meet their needs. Some children from Knust Primary School exhibited writing, reading and spelling challenges, and at that level pupil should have been able to overcome these challenges but they still had the difficulties. Data collected and analyzed concluded that there was a gap as far as teachers and their learners are concerned and this needs to be checked. Nonetheless most of the pupils after the teacher used the document on how to use adaptive instructions to meet their needs, almost 25 which forms 63% of the sample started responding positively. It is recommended that further research be conducted in other Primary school to verify the findings of this research.

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CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter one provides a background to the study, statement of the problem that necessitated the research, the objectives and research questions that guided the research. The chapter further captures the delimitations; limitations that affected the research procedure and its output, the definitions given to the technical terms used in the report, and the importance of the study itself. It finally provides information on how the other chapters of the thesis were organized.

1.1 Background to the Study

Undoubtedly, early childhood education (ECE) can have significant impact on development as ECE provides children with the basic skills, attitudes and competences they need for personal development, while it also lays the foundation for basic, secondary and higher education for human capital required for national development (Bar-On, 2004). For this reason, teachers of young children must know the different ways of approaching instruction for children, putting into consideration their special needs for attention. Many teachers, parents, health experts and other people are not aware of the nature of learning disorders and how to plan interventions or treatment to mitigate their effects on children's learning. In the classroom, pupils who consistently fail to score high marks on tests are considered not intelligent or not good enough

(Yeple, 2010). This perception of children's learning ability can negatively affect their progression through education particularly at the early stages of children's lives as they grow.

Failure to consider learning difficulties in the ECE curriculum for pre-schools can make it difficult for Ghana to achieve the goal of developing quality human resource capital for national development. Ghana's National Education Strategic Plan (2003-2015) envisages that pupils with mild disabilities would attend ordinary schools with other learners who do not have disabilities (Yekple, 2010) as the US, UK, Australia, Norway, Spain, France, Uganda and Kenya are doing. This kind of education, which gives equal opportunities for children with and those without disabilities to attend school together, is termed 'inclusive education'. Inclusive education has also been an agenda on the international level since UNESCO launched inclusive education as its target in 1994.

As a signatory to the Millennium Declaration, Ghana has adopted the Millennium Development Goals (MDGs) as the long-term minimum set of socio-economic development objectives which have influenced the determination of the country's strategic priorities for national development and eradication of poverty and hunger. Article 22 of the United Nations' Convention on the Rights of Persons with Disabilities Report (2006) for example, mentions that children with disabilities have equal rights to education

as other children who have no such challenges. This underscores the fact that throughout the world, children with disabilities have been marginalized to the extent of having difficulty accessing education mainly because community schools even bar children who have disabilities from attending school. To counteract this problem, Ghana's National Education Strategic Plan 2003- 2015 provides opportunity for learners with mild disabilities to attend regular schools together with "normal" learners (Ghana MDG Report, 2006). This development makes imperative for teachers to be equipped with skills and practical knowledge about learning difficulties that they may encounter in their classrooms, especially teachers who teach young children because that is where the problem begins.

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1.2 Statement of the Problem

Early childhood education has the potential to affect the future of societies positively or negatively, depending on whether the inputs correlate with the output. The foundation of this social institution called 'school education' is early childhood education. The Government of Ghana has since 2003 worked through the Ministry of Education and the Ghana Education Service (GES) to enact the policy that will guide the implementation of inclusive education in the country by 2015. This is in response to Ghana's Disability Act 715 that makes it an offence for any school authority to refuse to admit any child with mild disabilities. Adopting inclusive education and making it widespread also makes it necessary for schools to be reformed and pedagogy to be improved in ways

that will enable schools to respond positively to differences among pupils, which implies "seeing individual differences not as a problem to be fixed but as opportunities for enriching learning" (UNESCO, 2005, p. 9).

This study therefore aimed at identifying how the Ghanaian school system identifies pupils with learning difficulties, how the pupils are helped to deal with their difficulties and the kind of help children with learning difficulties are given to help them to obtain equal access to educational opportunities as other pupils who are without learning difficulties. This was done using the Kwame Nkrumah University of Science and Technology (KNUST) Primary School in Kumasi as a case study.

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1.3 Objectives of the Study

1. To investigate and describe the conditions under which teaching and learning go on in the KNUST Primary school.

2a. To find out how knowledgeable Lower Primary School teachers are about Learning Difficulties.

2b. To find out whether there are pupils with Learning Difficulties in the school and to describe how the teachers identify and manage pupils who have learning difficulties.

3. To ascertain the strengths and weaknesses of the teaching strategies the Lower Primary teachers employ to address the needs of those pupils who have learning difficulties.

1.4 Justification of the Objectives

1. Investigating and describing the conditions under which the primary pupils learn will help the researcher address the appropriate conditions under which pupils with Learning Difficulties should learn

2. Finding out whether there are pupils with learning difficulties, how knowledgeable the teachers are about Learning Difficulties, how they identify and manage pupils with learning difficulties will also inform the researcher about the teacher's depth of knowledge of the Learning Difficulties and also as

to whether they are using the appropriate identification and management procedures.

3. Ascertaining the strengths and weaknesses of the teaching strategies used by the lower primary teachers will help the researcher come out with appropriate strategies and recommendation to meet the needs of the pupils with learning difficulties.

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1.5 Research Questions

1. Under what conditions do the pupils in the KNUST Primary school learn?

2a. How knowledgeable are the Lower Primary teachers in KNUST about Learning Difficulties?

2b. Are there pupils with Learning Difficulties in the school? How do their teachers identify and manage those lower primary pupils with learning difficulties?

3. What are the strengths and weaknesses of the teaching strategies used by the lower primary school teachers in managing children with learning difficulties?

1.6 Delimitation

The study was limited to KNUST Primary School in Kumasi, Ashanti Region. The study sought to investigate how learning difficulties are identified and managed by teachers in the KNUST Primary school.

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1.7 Definition of Terms

The following technical terms used in the report have been explained as follows:

Learning: The acquisition of knowledge and skills by a variety of means, including education, experience and memorization.

Learning Difficulty: A term used interchangeably with Learning Disability to describe challenges that young children encounter when learning what is taught. These include ability to comprehend, retain and also recall what one learns.

Adaptive Instructions: A way or form of responding to different learning needs of learners during instruction.

Auditory Comprehension: The way a pupil understands and interprets what he or she hears in class.

Orientation: How fast a pupil can familiarize him or herself with what is taught in class.

Personal Social Behaviour: The way in which a pupil behaves in class especially when tasked or given an assignment.

Motor Coordination: The way a pupil moves and controls his or her limbs in class and also outside of class.

Remediation: The extra help given to a pupil suspected to have learning difficulty in order for him or her improve upon his or her learning.

Pairing Learners: A way of learning where pupils with Learning Difficulty are paired with those without to help them when given assignments in class.

Breaking Task: This refers to breaking of very complex assignments given to pupils into very simple tasks for pupils with Learning Difficulties.

Peer Tutoring: This refers to the pairing of learners with more than two pupils so they help themselves when given as assignment in class.

Pupil Rating Scale: Standardizing Methods of Judging Human Character

1.8 Acronyms/Abbreviations

UNESCO: United Nations Educational, Scientific and Cultural Organization

fCUBE: Free Compulsory Universal Basic Education

MDG: Millennium Development Goal

LD: Learning Difficulties

GOG: Government of Ghana

NALAP: National Literacy Accelerated Programme

FCUBE: Free, Compulsory Universal Basic Education

SAP: Special Attention Project

NJCLD: National Joint Committee on Learning Disabilities

IPP: Individualized Programme Plan

MOE: Ministry of Education

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1.9 Importance of the Study

This study highlights the challenges that pupils with learning difficulties face in the selected school. The findings provide first-hand material on how teachers can identify pupils with learning difficulties in the classroom and can help equip the teachers in school. This study will help Ghana meet the national strategic plan of the nation that should be in full operation this year (2015). The Ghana Education Service could adopt this document to train student teachers in the Colleges of Education so they can identify the characteristics of learning difficulties and how to help their pupils in the primary schools where they would go to teach after leaving college. The study opens up avenues for more research to be conducted by researchers in the field of education.

1.10 Organization of the rest of the text

The thesis was organized in five chapters. Chapter two has the review of theoretical and empirical literature covering learning difficulties. Methodology adopted for the study is covered in Chapter Three and involves the research design, library research, the population of the study, sampling, and data collection instruments used. It also embodies the types of data collected, administration of instruments, data collection procedures and data analysis plan used by the researcher. Chapter four deals with presentation and discussion of findings obtained from data collected for the study. The thesis ends with a summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Overview

This section of the thesis deals with the review of related literature. The review was done on the following topics:

- Learning
- Learning Difficulties
- Characteristics of Learning Difficulties
- Classification of Learning Difficulties
- Learning Difficulties and Behaviour
- Identification of Learning Difficulties
- Causes of Learning Difficulties
- Educational Factors
- Environmental Factors
- Psychological Factors
- Physiological Factors
- Genetics
- Trauma
- How to manage pupils with Learning Difficulties
- Behaviour Modification
- Administration of Drugs
- Dietary Management
- Precision Teaching

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- Adaptive Instruction
- Strategies of Adaptive Instructions
- Universal Design for Learning
- Differentiated Instruction
- Accommodation
- Barriers to Effective use of Accommodation
- Prevalence of Learning Difficulties

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2.1 Learning

Learning

Learning has been defined in several ways. According to Farrant (1996:107), learning is "the process by which we acquire and retain attitudes, knowledge, understanding, skills and capabilities that cannot be attributed to inherited behaviour patterns or physical growth". To Farrant, individuals' have inborn capacity to learn based on psychological factors. In contrast to this assertion, Skinner (as cited in Farrant, 1996) sees learning as a series of experiences, each of which influences behaviour. Learning results should therefore be considered in terms of understanding of the core processes within the specified content standards. The various types of learning identified by Farrant are:

a) Affective learning - learning that involves feelings and values and therefore has influence on a person's attitude and personality. Examples of affective learning include disciplined behaviour and courtesy.

b) Cognitive learning – learning that is achieved through mental processes that involve recalling and reasoning or how one thinks.

c) Psychomotor learning – the development of skills like efficient co-ordination between the brain and the muscles as seen through drawing from observation or writing what is seen.

Farrant (1996) describes learning as a process of progression through the following five stages of:

Preparation: Setting the scene for new knowledge by bringing together relevant previous knowledge.

Presentation: The act of introducing the selected new knowledge to the learner.

Association: Relating new knowledge to existing ones.

Systematisation: Making sense of the new knowledge in readiness for its use.

Application: Using the new knowledge.

Farrant (1996) also explains that as far as learning is concerned, it is the teacher's duty to help the learner go through each of the learning stages in an efficient manner. Efficient learning therefore requires readiness, motivation and involvement on the part of the learner. These factors are explained as follows:

a) Readiness: Readiness for learning depends on physical and mental maturation and also accumulation of experience as the basis for new learning. Readiness in a child is often shown by an eager response to learning tasks and is always accompanied by rapid progress. The lack of readiness may be due to lack of maturation upon which new learning will be built. Though readiness to a large extent depends on the child himself, it is also the duty of the teacher to take advantage of that aspect of the child to ensure efficient learning takes place.

b) Motivation: This is a force that determines how much effort an individual puts into learning. There is less effort, energy and enthusiasm to learn if a i individual's motivation is limited. The interest and desire of the learner is his or her motivation. The basis of self-motivation involves a person's drive and goal (Curzon, 1996). Kochhar (2004) suggests that it is necessary for a teacher to understand this in order to use the natural urges of the child to assist him to acquire new and desirable motives.

To Everard and Morris (1985), motivation implies getting results through people or getting the best out of people. According to Curzon (1996), motivation is considered by most teachers to be essential to effective communication, and cites the four effects of motivation as:

- arousing, sustaining and energizing students,
- assisting in the right direction of tasks;
- being selective in the sense that motivation helps to determine students' priorities; and,

- Assisting in organising student activities.

Some psychologists speak of motivational cycle based on the following components: need, drive, goal, and satiation (resulting in the cessation of the drive activity). Maslow as cited in Curzon (1996) looks at motivation in terms of the individual striving for growth and a person's behaviour being dominated by his or her needs. Herzberg, as cited in Curzon (1996), believes that persons are affected by motivators and hygiene factors. Herzberg explains motivational factors as those that are directly associated with the content of activity. In the classroom setting, such factors include style of instruction adopted by the teacher, security of the learner, and interpersonal relationships with the learner.

Cognitive theorists Farrant, describe motivation as intrinsic or extrinsic. Intrinsic motivation involves no apparent reward except the reward inherent in the activity itself; in extrinsic motivation, performance is influenced by an apparent reward. Other psychologists have grouped motivation into other categories as follows:

- Instrumental motivation: This type is in contrast with intrinsic motivation. Pupils perform tasks solely based on the consequences that are likely to ensue. Where this type of motivation is required, the teacher should ensure the assigned tasks can be perceived by the pupils as pleasant.
- Social motivation: A child tends to perform tasks just to please those they respect.

Learning and what goes into it becomes crucial with early childhood education. There are however, challenges that some children go through in the course of their education. Learning difficulties need therefore to be investigated in order to understand how they affect children in particular, and how they can be managed to make it easy for children who have learning difficulties to develop their potentials.

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2.2Learning Difficulty

Lerner (2000) defines learning difficulty as a dynamic and expanding condition that makes it difficult for one to absorb, retain and bring back to memory what is absorbed. The United States of America's Public Law 94-142 for instance defines "Specific learning disability" as a disorder in one or more of basic psychological processes involved in using spoken or written language, which may manifest itself in an imperfect ability to listen, think, speak, read, write, and spell or to do mathematical calculations. The term "Learning Difficulty" however, does not include learning problems, which are primarily the result of visual, hearing or motor handicaps, mental retardation, emotional disturbance, or environment, cultural, or economic disadvantage (Lerner, 2000).When this definition was proposed it was seen as vague and unacceptable to many professionals. Three problems were most troublesome. First, it separated the field to groups who supported the importance of identifying underlying causes of Learning Difficulty (such as psychological processing disorders) and those who did not. Second, the definition's reference to children alienated adults with Learning Difficulty. Third, it created confusion with its ambiguous ―exclusion clause. Professionals expected a clearer statement that Learning Difficulty (LD) can exist with other disabilities but the condition cannot be the result of those disabilities. The National Joint Committee of Learning Difficulty (1991), which comprised the professionals and parents of children with learning difficulties therefore proposed the definition that describes LD as "a generic term that refers to a heterogeneous group of disorders that manifested as significant difficulties

in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities".

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In this respect, learning difficulties were presumed to be intrinsic to the individual and the result of central nervous system dysfunction. This definition implies that learning disability may occur concomitantly with other handicapping conditions such as sensory impairment, mental retardation, social and emotional disturbances, insufficient or inappropriate instruction but LD may not be the outcome of those conditions or influences. Nevertheless, learning disability remains a controversial issue. Even after many decades of research no final consensus has been reached concerning a precise and unambiguous definition of learning disability (Westwood, 1997). Westwood argues that the best known form of specific learning disability is dyslexia – a disorder that manifests through difficulty in learning to read despite receiving conventional instruction, having adequate intelligence and socio-cultural opportunity. Other forms of learning disability have been identified as dysgraphia (problems with writing), dysorthographia (problems with spelling) and dyscalculia (problems with arithmetical calculation).

2.3 Characteristics of Learning Difficulties

A variety of characteristics of symptoms have been attributed to children with learning difficulties. Bryan and Bryan (1978) have determined that the ten most frequently cited characteristics are:

(1) Hyperactivity: A hyperactive child runs excessively, cannot stay seated for long and does things quickly without thinking.

(2) Perceptual-motor impairments: difficulty in coordinating a visual or auditory stimulus with a motor act, such as difficulty in recognizing, interpreting and understanding external stimulus.

(3) Emotional liability: emotional outbursts that observers consider unreasonable in the light of a situation or a child‘s immediate past history. Often there is an identifiable cause for these emotional ups and downs — a bad day at the office, worry over bills or a deadline, or perhaps not enough sleep the night before.

(4) General coordination deficits: clumsiness or awkwardness. A child with learning disability may have difficulty in activities like cutting, buttoning, lacing shoes, copying from the chalkboard, and sorting out objects according to shapes and sizes.

(5) Disorder of attention: either distractibility – (paying attention to what one should not) or perseveration – (concentrating on something for too long.)

(6) Impulsivity: describes actions that occur without careful thought and deliberation.

(7) Disorder of memory or thinking: difficulty in recalling materials that should have been learned and failure to understand abstract concepts. A child with learning disability may also have difficulty remembering sounds, letters, or words that have been learned. This disorder also affects comprehension. The

child may distort the sequence of sounds or letters in words for example, may write ’stop‘ for ‘tops‘ or ‘pots‘.

(8) Specific learning disabilities: inability to learn reading, spelling, writing, understanding comprehension, and arithmetic computations.

(9) Disorders in Speech and hearing: Have difficulty understanding or remembering spoken language, deficits in articulation, difficulties in expressing oneself verbally and using the correct vocabulary.

(10) Equivocal neurological signs: A child with learning disability may show signs of neurological impairment; may display behavioural signs of brain damage which include lack of fine motor coordination, poor balance, clumsiness and poor speech.

It must be noted however, that not all children with learning-disabilities exhibit all the above difficulties. And as Bryan and Bryan (1978) pose it, having one of them does not automatically make a child learning disabled. Most children placed in programmes for learning disabilities however, manifest several of these characteristics. Once the characteristics of LD are known, teachers need to understand the classification of LD for appropriate placement and remedial action.

2.4 Classification of Learning Difficulties

As learning difficulty (LD) is concerned with difficulties in learning some things or subjects, the classification of learning difficulties (LDs) is done according to the degree of learning difficulties. Adima (1989) lists them as follows:

(i) Mild learning difficulties

This is the level of learning difficulty which is not severe. Learners with mild LD can be successfully integrated in the general education classroom where delivery of education services will be shared between the general and special educationist. If this condition is neglected, it may become worse. Even though this is not regarded as serious, it is serious enough to attract the attention of the parents and teachers.

(ii) Moderate learning difficulties

This level is between the Mild and the Severe Learning Difficulty. This condition is serious and it requires intensive assistance to enable the child to succeed. Learners with moderate LD require remedial instruction in a resource room. At the resource room, learners have an opportunity to receive specific instruction while remaining integrated with their friends in the school. In addition to the programmes being flexible to fit the level of the learner, resource rooms have a variety of materials.

(iii) Severe learning disabilities

The child at this level cannot learn without special materials, special method, and individualized educational programme (IEP). Severe Learning disability, being a very delicate state of difficulty in learning, learners require intensive and comprehensive intervention, which ideally can be offered in a separate class within the school or a separate school. While in a separate class, such learners appear to have a better self-concept than in regular classrooms possibly because regular class competition sets achievement criteria that these learners cannot meet.

It is possible that teachers will find one or more of these classifications of LDs in classroom situations. A clear understanding of these classifications will enable teachers to identify learners with LD and the degree of learning difficulties experienced.

2.5 Learning Difficulty and Behaviour

Alberta Education (2014) states that teachers should explore the possible existence of a learning disability when a student who appears to be capable has a history of struggling with specific components of school and/or begins to demonstrate behavioural difficulties. Students with undetected learning disabilities might demonstrate undesirable behaviour for a variety of reasons. They might feel angry, sad, lonely, frustrated, or hopeless as a result of focusing on their difficulties. Frustration might arise out of the students' level of

performance compared to their level of actual ability, lack of understanding of why they struggle to perform the task or sometimes the inability to communicate in an appropriate way. According to Alberta Education (2014), a student might also exhibit inappropriate behaviour in order to avoid the frustrating task itself. At other times behaviour might result from poor self-esteem, connected to the student's focus on what he/she cannot do; or a student might quit trying, believing that no matter how hard they try they will never attain success. Other behaviour might be the result of an emotional disturbance. However, as LD presents itself, students with learning disabilities can experience success in school if appropriate supports are provided. It is important to focus on early identification and remediation and utilize research-based, effective strategies to assist students before behavioural or emotional issues emerge.

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2.6 Identification of Learning Difficulties

In most cases as cited in the National Association of Special Education Teachers Report (2010), the classroom teacher is usually the first to notice signs of learning disabilities and refers students for special education assessment. In addition the teachers assist in gathering assessment information and in the coordination of special services. Students may be identified as learning disabled at any age, but most are noticed during the elementary years. There are two major indicators of learning disabilities. First, students appear capable but experience extreme difficulty in some areas of learning. This is a discrepancy

between *expected* achievement and *actual* achievement. For example, a young child may be verbal, appear bright, but be very slow to learn to say the alphabet, write his or her name, and count to 20. The second indicator is variation in performance; there is a discrepancy among different areas of achievement. A class four child for example, may perform well in math but read and spell poorly (Lewis & Doorlag, 1983). In addition to these two main indicators of learning disabilities, teachers should watch for several other signs.

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According to Gulliford (1971), outstanding examples of LD cited are:

1. Severe difficulties in reading, writing, spelling and arithmetic.

2. Distinguishing left from right, up and down, front and back.

3. Perceptual and language weaknesses.

4. Some clumsiness in hand and eye tasks.

5. Visio-spatial difficulties in recognizing and distinguishing written symbols; in reproducing letters or groups of letters correctly; confusing or reversing letters.

6. Speech-sound difficulties in synthesizing words from their component sounds; in relating words to meanings. Most of these children show a history of late or slow speech development often with continuing minor articulatory defects and hesitancy in verbal expression.

7. Association difficulties such as in associating speech sounds with their symbols in reading and writing.

8. Difficulty in spatial orientation–they bump into things, and cannot estimate distances.

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Moreover, California Association for Neurologically Handicapped Children (1980), an affiliate of the National Association for Children and Adults with Learning Disabilities in the USA, cites other signs that are seen in children with Learning Difficulties as:

a) Guessing constantly when reading.

b) Trouble understanding or following instructions.

c) Difficulties expressing thoughts.

d) Trouble understanding time and distance.

e) Short attention span: easy distractibility.

It needs emphasizing that difficulties in learning can manifest in any age group (preschoolers, elementary children, adolescents and adults) which imply that each age group requires different interventions and teaching strategies. However, the literature suggests that substantial numbers of children with Learning Difficulties are identified in the age range of nine through fourteen years. It also indicates that most children are not identified until age nine when

Learning Difficulties become apparent as they enter school and fail to acquire academic skills in areas like reading, mathematics, writing and other school subjects (US Education Department, 1998). Myklebust (1981) has therefore emphasized the importance of developing checklists and testing measures by schools to help teachers identify students with disabilities.

In answer to this request, Myklebust developed a Pupil Rating Scale as a screening tool for Learning Difficuties, which has since become a research instrument included in extensive investigation of the incidence and nature of LD in public schools in the United States of America. Besides identifying signs of Learning Difficulties, it is important to know the root causes of learning disabilities among children for effective intervention measures.

2.7 Causes of Learning Disabilities

According to Westwood (1997), there is seldom a single cause for learning disabilities and sometimes, it is impossible to identify any predisposing factors. Though in most cases the causes of a child‘s learning disabilities remain unknown, the possible causes can be classified into four broad categories namely; educational, environmental, psychological and physiological. These categories are considered in the following sections.

1. Educational Factors

These are factors within the educational system that may cause learning disabilities. These include inadequate and inappropriate teaching, use of poor

teaching methods, lack of motivating or stimulating activities, use of materials and curriculum that is too difficult for the children to learn, frequent absence from school as a result of illness, lack of encouragement from parents or guardians, and financial problems (Westwood, 1997). According to (RASUGU, 2010), Kenya's education system is highly examination-centred and schools are keen on how much of the curriculum they can cover within a given time instead of what children learn. In the process, children who are unable to cope with the pressure of preparing for examinations develop learning problems with some of them eventually dropping out due to frustrations.

According to Engellman (1977), many children are labelled LD not because of anything wrong with their perception, synapses, or memory but because they have been seriously mis-taught. Concurring with this view, Lovitt (1978) argues that learning disabilities are made; people are not born that way.

2. Environmental Factors

Evidence shows that environmentally disadvantaged children are likely to exhibit learning difficulties. Environmental factors, which affect learning include poor nutrition, lack of emotional and social security, lack of security, witchcraft, accidents, love, warmth and acceptance at home, lack of harmony at home such as single parenting, child abuse, alcoholic parents or drug abusive parents, quarrels among siblings, inconsiderate step mother/step father, overwork, and inadequate sleep (Westwood, 1997).

3. Psychological Factors

These refer to an interference with senses that are used to transfer information leading to disorders in functions like receiving and recalling information (Westwood, 1997). Children with LD exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic. These difficulties include conditions, which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia, among others.

4. Physiological Factors

These include genetics and trauma as explained here.

Genetics

Pringle (1974) as cited in (RASUGU, 2010) indicates that learning disabilities are hereditary and tend to run in families. When one identical twin has a reading disability, the other one is also likely to have reading disability (but not the case with fraternal twins).

Trauma

Rehman, Ali and Yonas (2008) state that injury or infection of the brain, which occurs before, during or after birth, may affect the neuro-motor system leading to problems in perception, thinking and emotional behaviour. Trauma interferes with the normal learning process. A significant number of children with

learning problems do have a history of traumas that may include prolonged labour, absence of oxygen, prematurity and injury from medical instruments such as forceps. Once the causes of learning disabilities are known, teachers will be able to take necessary intervention measures for the affected children to benefit from education.

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2.8 How to Manage Students with Learning Difficulties

Lewis and Doorlag (1983) assert that if learning difficulties are suspected, the teacher should refer students for special education assessment. Parents are notified of the reasons for referral and presented with an assessment plan prepared by the educational team. If consent is given for special education evaluation, a team of experts must begin to collect information about the student. There are a number of intervention strategies for children with learning difficulties. However, Koppitz (1973) notes that there is no specific teaching method or technique, which can be used as a cure, thus teachers should apply a wide range of instructional materials and techniques.

The following sections present an overview of the techniques that have been discussed by Lerner (1976), Wallace and McLoughlin (1975), and Wallace and Kauffman (1973), among other authors.

1. Behaviour Modification

This is an effective measure in remediating learning problems, eliminating undesirable behaviours and establishing desirable ones. In addition to these

techniques that are to be used in class, there are other interventions, which can be administered outside the school.

2. Administration of Drugs

Hyperactive children are constantly in motion, restless and impulsive. Physicians tend to treat these characteristics by prescribing drugs to calm them. Though some caution has to be taken in the treatment of hyperactivity, drugs have nonetheless been found to produce substantial academic and behaviour improvements.

3. Dietary Management

Another controversial approach used in the treatment of hyperactivity is the management of diet (Feingold, 2000). Some chemicals found in food, including additives and food colouring, cause children to become hyperactive. However, Cott (1990) cast some doubt that diet management can reduce hyperactivity in the child.

4. Precision Teaching

Developed by Lindsley (1964), this technique uses a chart on which the teacher records the progress in the child‘s behaviour in relation to the desired or target behaviour. The graph is called *The Class Behaviour Chart.* The child‘s daily progress on a given task is recorded and also the rate of performance. This style

of teaching is effective when adaptive instructions are issued on students with Learning Difficulties.

2.9 Adaptive Instructions

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Adaptive or differentiated instruction is a way and form of responding to different learning needs of learners during instruction. Differentiated instruction occurs whenever a teacher reaches out to an individual or small group to vary his or her teaching in order to create the best learning experience possible. Tomlinson (2000) says differentiation consists of the efforts of teachers to respond to variance among learners in the classroom. Recent thinking suggests that some learners, especially those with LDs, do not benefit from teaching methodologies and materials used in the regular classroom (Agbenyega & Deku, 2011; Avoke & Avoke, 2004). Planning for the diverse learning needs of students with learning disabilities involves making informed decisions about content, materials and resources, instructional strategies and evaluation procedures. The fundamental conception of the situation of pupils with learning difficulties (LDs) is often that teachers do not effectively address the needs of pupils with LDs in the regular classroom (Dotse, 2012; Gyasi, 2011; Henne, 2013; Thomas, 2012).

According to Alberta Education (2002), the factors that enhance Adaptive Instructions are based on questions that the teacher asks him or herself in order

to make appropriate decisions about teaching. These involve the following factors:

1. **Learning Environment**

- What steps will I take to create a supportive learning environment?
- What classroom management procedures do I need to introduce?

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2. Grouping

• What learning activities can best be achieved individually, in pairs, in small groups or in the whole class?

• How will the pairings and groupings be determined?

• What transitions will ensure a smooth flow from one activity to the next?

3. Learning activities

• How will I provide lesson overviews?

• Which graphic organizers will I use?

• What strategies activate, clarify and extend prior knowledge?

• How will students make connections between what they know and what they will be learning?

• What key words and concepts are essential?

• Which strategies will introduce and reinforce these words and concepts?

• What are the critical questions students need to think about?

• How will students apply their learning?

• What extension activities will reinforce and extend learning?

• Do these learning activities offer a variety of ways to demonstrate learning?

• How will instructions be reinforced; e.g., key words on board, printed instructions, labelled diagrams on board?

• How will students use handouts and other materials?

• Does this learning activity allow for a frequent change of pace?

• Are there opportunities for discussion, writing, drawing and viewing?

• What alternative activities can I use if students need a change in pace or a refocusing of attention?

Some general considerations for planning adaptive instructions are presented as follows.

• Accommodate a variety of students' learning needs by modifying:

− The degree of structure or open-endedness of the task

− The pace of learning

− The degree of independence

− The presentation formats

− The reading level of materials

− The products and assignments to demonstrate learning.

• Use students' Individualized Program Planning (IPPs) to guide decisions about:

− Instructional strategies that will be most effective

− Strategies that need to be taught explicitly to increase students'

Effective and independent approaches to tasks such as note-taking are essential for mediating instruction for students with learning difficulties.

2.10 Strategies of Adaptive Instructions

Children with learning difficulties benefit from a combination of direct instruction and strategy instruction. According to Agbenyega (2006) and Kuyini (2013), direct instruction is explicit instruction with clearly specified objectives taught in specific small steps with detailed explanations, demonstrations of steps and connections among concepts. Strategy instruction involves teaching children how to approach tasks and use knowledge to solve a problem. Both direct instruction and strategy instruction involve modelling and demonstration, feedback, guided and independent practice, and transfer. Often, some teachers exclusively blame certain learners and, at times, subject them to severe punishment for failing to comprehend what is taught in school. The teachers do this with the intention of motivating pupils to work harder than they presently do.

Children with learning difficulties face many challenges in school. However, many of these difficulties can be addressed by providing accommodations. An accommodation is a change or alteration to the regular way a student is expected to learn, to complete assignments or to participate in the classroom (Shonkoff & Phillips, 2000). There are three types of accommodations:

1. Classroom/physical accommodations; alternative seating, adaptive devices

2. Instructional accommodations; providing copies of notes, alternative reading materials

3. Evaluation/testing accommodations; extra time, oral tests.

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2.11 Universal Design for Learning (UDL)

Universal design for learning (UDL) is a framework of instructional approaches that recognizes and accommodates varied learning styles. It provides learning activities that expand pupils' opportunities for acquiring information and demonstrating learning, as well as for enhancing social participation and inclusion. The driver for universal design is the philosophy of proactively addressing needs. Universal design for learning is integrated into regular instructional planning as a mechanism to make diversity the norm. It provides support for all pupils and motivates through the element of choice (Alberta Education, 2002). This Design, as its names suggests, is a Universal Design for both students with Learning Difficulties and those without, it is accommodating which ensures equal opportunities. Figure 2 is a flow chart of the chronological order of learning.

Figure 2.2 Universal Design for Learning (UDL)



Source: Alberta Education (2003)

2.12 Differentiated Instruction

Differentiated instruction is a flexible approach to teaching in which a teacher plans and carries out varied approaches to address content, learning processes, learning style, practical procedures, presentation strategies, and assessment tools. It results in a more personal, proactive learning environment, inclusive of a wide variety of learners (Nelson Education, 1993). When teachers differentiate instruction, they provide students with the structures to maximize

strengths, work around weaknesses, and experience timely remediation. This enables students to take advantage of effective learning strategies as they begin to understand their own personal learning styles, interests, needs, and engage with their learning. As a result, student motivation increases.

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2.13 Accommodation

Accommodation is an adaptive system of instructions where students with learning difficulties are allowed to find their own way of learning thereby lessening the pressure on the student due to his or her peculiarities. In reality, accommodation removes, or at least lessens the impact of a student's learning disability and therefore gives the student the same opportunity to succeed as other students (Dawson & Guare, 2004). There are however, barriers to accommodations as explained in the following sections.

2.14 Barriers to Effective use of Accommodation

Alberta Education (2005) states that teachers play a key role in helping pupils identify and use accommodations appropriately. Similarly, parents, students and other school personnel have important roles in selecting, monitoring and evaluating the use of accommodations. Understanding some of the common barriers to the effective use of accommodations is an important starting point. Common barriers (Dawson & Guare, 2004) include the following:

1. Misunderstanding the purpose

Parents, pupils and teachers sometimes perceive that accommodations give pupils with learning difficulties an unfair advantage over other students. In other words, by changing the way a student can take a test or submit an assignment, students with learning disabilities may be perceived as having opportunities that other students do not have. In reality, accommodations remove, or at least lessen, the impact of a student's learning disability and therefore give the student the same opportunity to succeed as other students. A second misunderstanding is the perception that accommodations replace the need to acquire or develop basic skills. Accommodations are necessary for many students with learning disabilities to reduce the impact of their learning disabilities, and make it easier for them to acquire and produce information. However, it is important to balance the use of accommodations with the teaching and practice of basic literacy, numeracy and study skills so that students with learning disabilities can develop their skills to their fullest potential.

2. Accommodations are often not appropriate

Deciding on appropriate accommodations is not an easy task. Many teachers, psychologists and other professionals working in schools report having difficulty translating assessment information into appropriate accommodations. As a result, there is a tendency to rely on the same basic accommodations for

all students with learning disabilities rather than individualizing the accommodations to match the needs and strengths of the student.

3. Accommodations are not used consistently

An accommodation is essentially a change in the way something is normally done to provide students the needed time to learn how to use accommodations effectively. Accommodations must be used regularly in order for teachers to determine if they are helping. Some students report that they did not have opportunities to try accommodations before they used them on major assignments, such as tests or exams.

4. Lack of student involvement in the process

Teachers and other school-based personnel often report that it is difficult to involve pupils in the decision-making process. Research, however, indicates that students who benefit most from accommodations are those who were involved in the process of selecting accommodations. All too often a student who benefits from an accommodation does not make full use of it because he or she is self-conscious about doing things differently than peers. Involving students in selecting accommodations provides opportunities for students to learn about accommodations and become comfortable using them.

2.15 Prevalence of Learning Disabilities

Estimates of the severity of learning disabilities in developed countries vary widely – ranging from 1 to 30 percent of the school population, with about 5 percent receiving services in the schools (Lerner, 2000). It is important to point out that the number of children affected with learning disabilities in developing countries is not clearly known (Murphy, 2001). There have been a number of estimates of prevalence of Learning Disability (LD) in the world. Emerson, Hatton, Felce and Murphy (2001) have suggested that prevalent mild learning disability is between 2.5 percent and 3 percent. The World Health Organisation (1985) also puts the figure of mild LD for children in industrialized countries at 2 percent to 3 percent. Smith (2001) reports that in the 1995-1996 school year, 51.2 percent of school going children were learning disabled in United States which implied that there were more students with LD than any other disability.

It has generally been approximated that four boys are identified to every girl (4:1) with LD, meaning that there are more boys with LD than girls. In Netherlands, approximately 110,000 people have LD, or 7.4 per a thousand persons, and approximately 57,700 of them have a severe handicap (Ministry of Economic Affairs, 2000). Owing to lack of accurate data, prevalence of LD in Canada, United Kingdom (UK), China, Japan, India, Australia, South Africa, Kenya, Tanzania and Uganda has been extrapolated to be 1.69 % of the total population of respective countries.

The statistics used for the prevalence of LD are typically based on US, UK, Canadian or Australian statistics (http://www.wrongdiagnosis/stat-country.htm). However, these estimates cannot be accepted uncritically. The "real" prevalence of learning disabilities is subject to much dispute because of the lack of an agreed-upon definition of LD and objective diagnostic criteria. Some have argued that the currently recognized 5 percent prevalence rate is excessive and is based on vague definitions, leading to inaccurate identification (Lyon, 1996). However, Lyon suggests that difficulties in the identification of children with learning disabilities do not make the disabilities any less "real" to the student who cannot learn to read, write, or understand mathematics despite good intelligence, an adequate opportunity to learn, and ostensibly good teaching. The question remains, however, of how to go about increasing the ability to identify individuals with LD accurately. Valid prevalence estimates depend upon a set of criteria for identification that are clear, observable, measurable, and agreed upon.

2.16 Learning Disability in Other Countries

According to Wong (1998), America has made achievements in the field of learning disabilities (LD) in four major areas. First, more children are currently being served in LD programmes than in any other area of special education. Second, the extensive services to children and youth with LD in the United States are the result of the field‘s firm status within the law. Beginning with P.L. 94-142 (The Education of the Handicapped Act of 1975), all school

districts are required to provide free and appropriate education to children identified as LD The essential provisions of P.L. 94-142 were reaffirmed in P.L. 98-199 (The Education of the Handicapped Act of 1983), also contained some provision for expansion of services at preschool, secondary, and postsecondary levels. Finally, this legislation, now known as the Individuals with Disabilities Education Act (IDEA) it was reauthorized in 1997, with provisions to assist with discipline, assessment and accountability, and development of individualized educational programmes for children with disabilities.

The third indication is in the number of associations that have been formed to advocate on behalf of children with LD, support professional development, and provide a forum for discussion of research. These organizations include Learning Disabilities Association of America (LDA), the Learning Disabilities Association of Canada, the Division for Learning Disabilities (DLD), the Council for Learning Disabilities (CLD), the Orton Dyslexia Society, and the National Joint Committee on Learning Disabilities (NJCLD) which play a very important role in contributing to the development and continuing visibility of the field.

The final indicator is the level of interest in the topic among researchers. It is a very active area of research. Research on LD within the United States received a major impetus with the passage of the Health research Extension Act of 1985, which mandated the formation of an Interagency Committee on Learning

Disabilities to examine the current state of knowledge in the field of LD and then make a report to the Congress, with recommendations for a research initiative in the area (Wong, 1998).

Gates (2003) observes that institutions for people with learning disabilities existed in Netherlands at the end of the 19th century with large institutions being built after the 2nd World War. All people with learning disabilities got some care from care providers in institutions, in the community or in special schools where they had their daily care and activity in day care Centre for children or adults. The government and professional groups embraced four concepts in the process of care provision: the concept of Tailor-Made Care, the Quality of Care Act, the personal contract and the individual care plan along with the coordinating role of the case manager.

Whereas Sweden has been providing for pupils with LD since 1866 when the first special school was established for pupils with LD, the law for people with LD came into force in1944, which provided for children and young people with mild LD. Another law followed it in 1954. With the inception of the Act concerning support and service for persons with certain fundamental impairment (Disability act) in 1994, local authorities have taken over responsibility for support and provision of services for persons with LD (Gates, 2003). However, it is significant to point out that what happens in developed countries is in sharp contrast to the situation obtaining in developing countries where learning disabilities is an emerging new area (RASUGU, 2010).

2.17 Learning Disability in Ghana

In Ghana, the Special Attention Project report (SAP, 2011) indicates that the incidence of Children with Learning Disability has been noticed for many decades. There are schools for children with visual impairment, hearing impairment and intellectual impairment, managed by the Special Education Division (Sp.Ed.) of the Ghana Education Service (GES). More recently, 'Inclusive Education' has been adopted by GES (National Education Strategic Plan [NESP], 2003), meaning that children with special educational needs should not be separated from other children but that they should learn together whenever possible. The Special Education Division of GES has now posted 'Resource Teachers' to districts and clusters of schools in five regions; their mandate is to assist children with special educational needs in the mainstream schools.

According to The NESP (2003) 'Special Education' in Ghana strongly focuses on the 'traditional disabilities' of sight, hearing, intellectual and physical challenges. Special Education Teachers are trained to teach pupils with any of these disabilities, according to the programme areas mapped out by the Special Education Division of GES. However, children who have normal intelligence but a learning difficulty in a specific area (for example reading or mathematics) are not formally recognised as children with special educational needs and there are no provisions for their assessment and support. In spite of this, there are very few possibilities for screening and testing on Special education LDs

although the GES does not have the facilities to screen or test these learning difficulties. As a result, there is not much information on children with Specific Learning Disabilities in Ghana. Statistics from other countries however, suggest that up to 10% of children in any population have a specific learning disability.

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2.17.1 Disability Act

A report entitled 'SAP, Children with Learning Disability in Public Schools (2012) shows that in 2006, Ghana enacted a Disability Act (Act 715) that was approved by Parliament, after years of lobbying by the disability movement. The Act provides for Persons with Disabilities in the areas of employment, education, health care, transportation, justice administration, and access to public places. It also provided for establishment of a National Council for Persons with Disabilities in 2009.

The definition of 'disability' in Act 715 is a general description covering 'physical, mental or sensory impairment', and specifies 'visual, hearing and speech disability'. This does not clearly include persons with specific learning difficulties. The Act does provide for free education for children with disabilities but rather focuses on designated schools in each region which provides the necessary facilities for persons with disabilities. The Act also mentions that the government should establish special schools for individuals whose disability makes it impossible for them to be in mainstream schooling. Admission in regular school may however, be refused when a child is assessed

and found to be in need of special schooling. These provisions do not promote Inclusive Education.

2.17.2 Ghana's Education Strategic Plan 2010-2020

In the Education Strategic Plan 2010-2020, the guiding principles for education for children who have disabilities in Ghana have been formulated as follows:

The delivery of education to young people with disabilities and special educational needs is informed by three guiding principles: The right to education; the right to equality of educational opportunities; the right and obligation to be included in and participate fully in the affairs of society.

The Strategic Goal is: To provide education for excluded children (including those who are physically and /or mentally impaired or disabled, slow/fast learners, orphans, young mothers, street children, those from deprived areas, slum children, and poverty victims) by including them, wherever possible, within the mainstream formal system or, only when considered necessary, within special units or schools.

The strategies are to:

1. Include disadvantaged children within the existing education system or provide special facilities for them.

2. Include all children with non-severe physical and mental disabilities within mainstream institutions.

3. Provide special schools or education units for those severely disabled.

The Strategic Goal seems much more 'Inclusive' than any of the current legal provisions, by emphasising inclusion in the mainstream. It also mentions 'slow / fast learners', which refers specifically to (dis)abilities related to learning.

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2.18 Summary of the Literature Reviewed

The literature reviewed confirms that the definition of learning disabilities is debatable. Despite this, there is evidence from the literature that learning disabilities indeed exist among learners who appear capable but experience extreme difficulty in some areas of learning such as orientation, reading, writing, spelling, comprehension, and arithmetic. Controversies surround the definition of learning disability as well as the causes of learning disabilities. However, the literature outlines a number of possible causes, which include: educational factors, environmental factors, psychological factors, and physiological factors. From the literature reviewed of the classification of learning disabilities ranges from mild and moderate to severe. A number of intervention measures have been highlighted in the literature, which are behaviour modification, administration of drugs, dietary management and precision teaching which is effective when adaptive instructions are issued on students with Learning Difficulties. The literature has also introduced a system of accommodation which is very relevant as far as adaptive instruction is concerned and the barriers to that effect.

CHAPTER THREE

METHODOLOGY

3.0 Overview

The methodology comprises discussions of research design adopted in achieving the objectives of the study. Data collection instruments used in the study were interviews and observation. The study includes primary school teacher's identification and management of pupils with learning difficulties in Primary One to Three of KNUST Primary School, a survey of parents, teachers, school headmistress and observational rating of the school environment (classroom, playground, school compound and other facilities) by the researcher. Furthermore, a conclusion of how data collected and analysed was discussed.

3.1 Research Design

The research design refers to the overall plan employed by the researcher to obtain answers to the research questions and for testing the hypothesis formulated (Agyedu et al, 2007 as cited in Nortey, 2009). It encompasses decisions about how the research is conceptualized, the conduct of the research and the type of contribution the research is intended to make to the development of knowledge in a particular field of study (Cheek, 2008). According to Cheek, in developing a research design, theoretical, methodological and ethical considerations relevant to the study are taken. The study adopted the qualitative research design for data collection and analysis.

Marshall and Rossman (1999) indicate that research which attempts to increase our understanding of why things are the way they are in our social world and why people act the way they do is called "qualitative research". In this study, the qualitative research design provided the researcher a narrative investigation and description of the quality of relationships, situations, events, materials and conditions as observed in the sampled school and classroom settings of the schools studied.

Qualitative research in its purest sense follows the paradigm that research should be conducted in the natural setting and that the meanings derived from research are specific to that setting and its conditions thereby being a holistic and peculiar interpretation of the natural setting under study (Wiesma & Jurs, 2009). Bogdan and Biklen (as cited in Fraenkel & Wallen, 2008) describe five features of qualitative research as follows:

1. The natural setting is the direct source of data and the researcher is the key instrument in qualitative research.
2. Qualitative data are collected in the form of words or pictures rather than numbers.
3. Qualitative researchers are concerned with process as well as product.
4. Qualitative researchers tend to analyse their data inductively.
5. How people make sense out of their lives is a major concern to qualitative researchers.

3.2 Research Approach

Case study method was used, this is a research approach in which one or a few instances of a phenomenon are studied in depth, (Blatter, 2008). It is argued that the strong emphasis in recent theoretical approaches of aspects such as ideas and timing is favourable for the adoption of case study approaches. The research design provided answers to the specified research questions thereby achieving the set objectives of the research study, making data collected easier and useful for interpretation and effective recommendations made thereof. Photographs were used to reinforce textural description within the findings as a form of documentation explaining conditions existing during the period of the study within the KNUST Primary schools. Photographs of school environment, classrooms, wall charts and exercise books used by the pupils identified with learning difficulties in the lower primary.

3.3 Population for the Study

The study was carried out at the Oforikrom sub – metro of Ghana. The researcher conveniently sampled the Kwame Nkrumah University of Science and Technology Primary School because of its proximity and easy accessibility. The Head teacher of the school cited the population as 1,647 pupils and 51 teachers.

3.4 Sampling Frame

The sampling strategy utilized in any research study influences the extent to which the results can be generalized to a wider population. This means the sampling strategy has implications in terms of the external *validity* of the study (Leedy & Ormrod, 2005; Baumgartner *et al*, 2002). Due to the fact that observation is conducted during a formal contact session on a particular day, only those pupils and teachers attending class on the day of the observation and those who provide informed consent constitute the resulting sample. As such, a certain percentage of *non-response* due to either *non-coverage* (pupil's not attending class on the day of the observation) or *refusal* (pupils and teachers not willing to participate in the study) can realistically be expected.

In this study, a sampling frame or list of all potential respondents was obtained from the KNUST Primary School. This sampling frame facilitated the use of the quantitative sampling technique of convenience sampling in selecting samples for this study.

3.4.1 Sampling Techniques

Convenience sampling involves drawing samples that are both easily accessible and willing to participate in a study (Teddlie & Yu, 2007). In this study, the Convenience and Purposive techniques were used to select a sample of three Lower Primary classes, which is from Primary one to three which constituted

47% of the target population which is within the recommended appropriate sample for descriptive studies (Gay, 1987).

3.4.2 The Sample

The sample studied included 40 pupils (31 males (or 77.5%) and nine (9) females (or 22.5%) and the head teacher who is female. The sample of teachers involved 18 class teachers, although only 10 were accessible, which represents 55.55% of the total number of class teachers. There were three subject teachers and a Counsellor. Out of the 40 pupils, 38 respondents were accessible, which formed 95% of the total number of pupils that were studied. The average age of the pupils studied was found to be eight years.

3.5 Types of Data

Data collected were in the form of pictures, video and audio recordings, and field notes of the concepts and strategies that were used to manage pupils with learning difficulties in relation to the literature reviewed for the study as outlined in Chapter Two. Both primary and secondary data were collected for the research. Primary data collected gave the researcher an overview of events, situations, conditions that prevailed within the primary school under study. Most of the data collected was non numeric normally based on verbal and non-verbal activities of respondents, the teachers and primary pupils.

3.5.1 Primary Data

Primary data collected by the researcher from KNUST Primary School, specifically the lower primary classes, represent the findings on the conditions under which pupils learn and teachers knowledge about learning difficulties in the school. This enabled the researcher to draw conclusions on the study of the primary school which actually reflected the performance of the pupils who were identified as having learning difficulties. Non participant observation and interviews were adopted in collecting primary data for the study. Primary data were derived from both verbal and nonverbal survey. Verbal data sources were gathered from interviews granted in the form of field notes and pictures of activities and items composing the nonverbal data sources.

3.5.2 Secondary Data

Literature that was sourced as secondary data involved both empirical studies collected from online repositories and information documented on Learning Disabilities/Difficulties and available online. Notable amongst these valuable research data are the Alberta Educational Resource material, the nature and prevalence of learning disabilities among standard three primary school pupils in Starehe division of Nairobi province, Kenya, (Grace Kwamboka and Teacher Effectiveness in Adapting Instruction to the Needs of Pupils With Learning Difficulties in Regular Primary Schools in Ghana by Abdul-Razak Kuyini Alhassan and Okey Chigorom Abosi,a professor of the University of Brunei

3.6 Data Collection

Upon making appropriate appointments, the researcher proceeded to the sampled school to make familiarization visits and held discussions with head of the school to make necessary arrangements for the actual data collection. The researcher personally had an interview on head teacher and teacher. The primary one to three teachers were considered best suited to administer the pupil rating scale so long as s/he met the basic requirement of at least one month of experience with the children. The researcher, through training, guided the teachers on how to administer and score on the scale and was present throughout the session for consultation. Those who scored below 20 on verbal skills (Auditory Comprehension and Spoken Language) and below 40 in non-verbal skills (Orientation, Motor coordination and Personal-Social Behaviour) and total scores less than 65 were further evaluated.

With the help of class teachers, the researcher administered the Pupil Tests. Pupils were required to fill and return the instruments the same day. Upon collection of all instruments, the researcher assembled, organized and sorted out all the used instruments. Editing was done to remove any inconsistencies of the instruments. Any blank responses in the interview and Pupil tests of about 25 percent were not included in the data set for analysis.

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3.7 Research Instruments

Data for this study were gathered using four instruments: observation, Interview, a pupil rating scale and pupil tests as discussed in the next sub-section.

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3.7.1 Interview

A method of data collection, information or opinion gathering that specifically involves asking a series of questions. Typically, an interview represents a meeting or dialogue between people where personal and social interaction occurs (Davies, 2006). The researcher employed the interview method of data collection to help yield as much information about the phenomenon as possible and also helped to address the objectives of the research. The use of the research interview helped to explore the views, experiences, beliefs and/or motivations of respondents in the creative art class.

3.7.2 Head Teacher's Interview

An interview contained both closed-ended and open-ended questions administered on head teachers. First item to be captured was the head teachers 'bio-data, while the second item sought data on school enrolment, the third item generated data on the head teachers' knowledge about learning difficulties in the school and fourth was to elicit information on what is being done to pupils with learning difficulties. The final item focused on challenges faced in the

management of LD cases and suggested ways of effectively providing for pupils with LD.

3.7.3 Class Teacher's Interview and Observation

This interview was administered on standard one to three class teachers to find out how they manage pupils in their classes who have LD. Information from these interview has been corroborated with the data from the head teacher, pupil rating scale and pupil tests. Considering that they are trained in child development, teachers are expected to know their children. Their observations were therefore critical because they could easily tell when there was a gap. First item was intended to capture class teachers 'bio-data, while the second sought to establish their knowledge about learning disabilities third item focused on what was being done to manage LD cases and last item solicited comments on how class teachers were managing pupils with learning disabilities.

3.8 The Pupil Rating Scale

Developed by Myklebust in 1981 in the United States of America, the Pupil Rating Scale was adopted and used to screen the sampled pupils for learning disabilities in this study. The Pupil Rating Scale, which has been used widely in investigating the incidence and nature of LD, assist teachers to observe and rate the children on five areas of behaviour: Auditory Comprehension and Memory, Spoken Language, Orientation, Motor Coordination and Personal-Social Behaviour. This is an internationally standardised and validated research

instrument (Myklebust, 1981) which specifies that children who score below 20 on verbal skills (Auditory Comprehension and Spoken Language) and below 40 in non-verbal skills (Orientation, Motor coordination and Personal-Social Behaviour) and total scores of less than 65 should be subjected to further screening through a Pupil test.

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3.9 Pupil Test

Children with LDs are most often diagnosed on the basis of their performance in school, because present performance is the only diagnostic method (Neely, 1982). A test prepared by the researcher was used to confirm the teachers 'opinions about the pupils already found to have a high incidence of LD. With the help of Primary Three class teachers, the researcher administered the curriculum-based pupil test, which covered only English. This comprised of six (6) items each. The English test assessed the pupils 'visual perception in association with kinesthetic response, spelling skills, auditory perception and visual auditory perception and writing skills (see Appendix 3).

3.10 Validity of Research Instrument

This refers to the ability of a test or research instrument to measure what it purports to measure (Ingule, Rono & Ndambuki, 1996). The validity of the research instruments used in this study was enhanced through the application of content validity procedures. Mugenda and Mugenda (1999) state that content validity is a matter of judgment by professionals or experts in the particular

field. This is done to ensure that all possible items that should be used in measuring the concept under study are included. In order to establish the validity of the instruments the researcher sought expert opinions of the supervisors and lecturers in the field of Special Education who were well versed in the area being studied.

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3.11 Reliability

This is a measure of the degree to which the instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 1999; Saunders, Lewis & Thornhill, 2003). To establish reliability of the instruments, the test-retest method was used at an interval of one week between the first test and the second test using the same respondents. The scores of both tests were correlated and reliability established using the Spearman Rank Order correlation coefficient formula as 0.8. According to Mugenda (1999), a correlation coefficient greater or equal to 0.75 shows a high reliability of the instrument.

3.12 Data Analysis

Data from the pupil rating scale and pupil tests were analyzed using Statistical Package for Social Sciences (SPSS) because of its efficiency and ability to handle large amounts of data. Upon the researcher establishing relevant categories, themes and codes for the responses, this quantitative data were analyzed by using descriptive statistics, which are presented in the form of frequencies and percentages. Qualitative data categories and themes were

generated using codes and then keyed into the computer and analyzed using descriptive analysis. Data analysis was based on the objectives of the study. Data on existence of LD in the sampled school were analyzed by describing the responses.

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Data regarding how the teachers identified pupils having Learning Difficulties and how they are managed were recorded according to their characteristics and numbers and then analyzed using frequencies and percentages. To analyze data on ways of managing LD in the sampled school, responses were grouped into commonly used ways, coded and summarized in percentages. Data regarding suggested measures of managing LD in schools were coded and analyzed into suitable sub-headings and reported using percentages. To analyze data from the pupil test, item analysis was conducted and results given in numbers, frequencies and percentages. Then data were presented in the form of tables and charts.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.0 Overview

This chapter presents the results of the study which aimed at investigating the conditions under which teaching and learning occurs in KNUST Primary School and how pupils who have Learning Difficulties are identified and managed. The research findings are interpreted, explained and presented with regards to the objectives specified for the study.

4.1 Research Question One: Under what conditions do teaching and learning go on?

KNUST Primary School

Kwame Nkrumah University of Science and Technology (KNUST) Primary School is in the Oforikrom sub-metropolitan area of Kumasi in Ashanti Region, Ghana. The school is sited opposite the KNUST Botanic Gardens on the north-east side of the KNUST campus, close to the main entrance of the University (see Plates 4.1 and 4.2). It has classes starting from Primary One to Primary Six with each year group having seven classrooms named A- G



Plate 4.1. The Sign Post at the Main Entrance of the KNUST Primary School



Plate 4.2 Main Entrance of the KNUST Primary School

NYANSAPƆ WƆSANE NO BADWENIM

4.2 School Environment

The KNUST Primary School has a good school environment in terms of classrooms, playground and immediate surroundings. It has a clean environment and has all its facilities available within the school compound which is enclosed by a metal fencing. The school is well structured and organized. The school has a big compound as seen in Plates 4.3 and 4.4.



Plate 4.3 The school compound facing the Class 2 Block



Plate 4.4 The school compound (Back View of Class 1 Block)

4.3 Classroom Environment

Classroom environment greatly influences the child's learning abilities and pace either by providing and complementing the learning experiences of the child through interactive learning or inhibiting his or her desire to learn (Alberta Education, 2010). The Lower Primary classrooms of KNUST Primary School are painted yellow and brown which provides the children with a serene ambience for good teaching and learning outcomes. Each of the Primary One classrooms has a big storage cupboard in which the pupils' exercise and text books are stored. Due to the small size of the classrooms and the arrangement of the pupils' chairs and tables, and the storage cupboard, mobility is quite restricted for both the pupils and the teachers.

Display items such as wall charts, posters and readily accessible flash cards of the English alphabet that are hung along the walls in the classrooms such as shown in Fig 4.5 provide avenues to arouse the interest of the children.

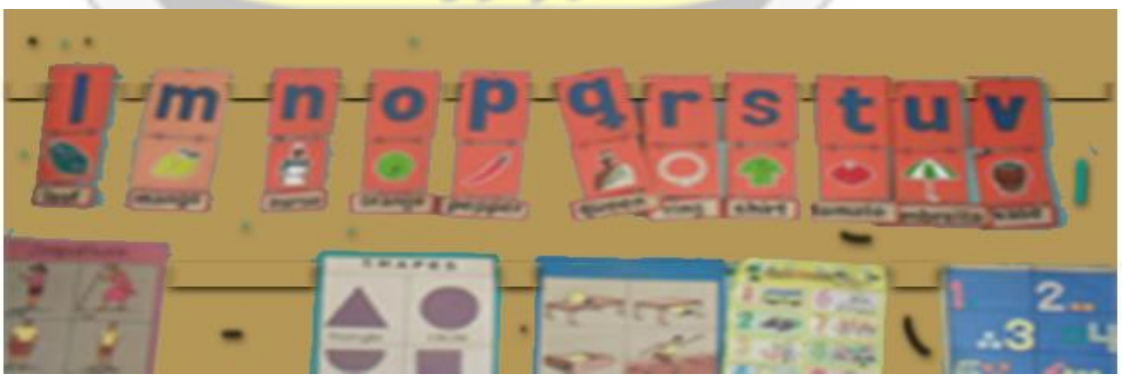


Plate 4.5. Wall hangings in the Primary One classroom

The Lower Primary One section of the school has five classrooms that have been named A to E. All these classrooms have one door with a wooden trap door that prevents entry of flies and also allows in fresh breeze and light concurrently. All the classrooms (A to E) have between four and six functioning windows. Each classroom has over 45 sets of small tables and chairs to give the pupils comfort but they are arranged so close together (see Plate 4.6) that it prevents a teacher from reaching pupils who need help, which discourages individualized style of teaching.

4.4 Conditions under which teaching and learning go on in the school

Plate 4.6 shows a panoramic view of one Primary Two classroom while Plate 4.7 shows the front view of a Primary One classroom.



Plate 4.6 Primary Two pupils in class



Plate 4.7 Primary One Classroom

The Primary Two classroom had 48 pupils and the Primary One class had 49 pupils in these very small sized spaces. The arrangement of tables and chairs in the classrooms makes the environment really crowded which shows it will be difficult for the teacher to use individualized teaching. As Jones (2010) explains, "a good classroom seating arrangement is the cheapest form of classroom management". Many experienced teachers therefore recommend assigning good seating arrangement to facilitate and promote individualized style of teaching**.** The researcher observed that there the pupils were crowded causing high traffic in the class as far as mobility of the teachers and also pupils are concerned. Best practice (Jones, 2010) suggests the following rules for managing classroom seating arrangements.

1. Students should be seated where their attention is directed toward the teacher.
2. High traffic areas should be free from congestion.

3. Teacher mobility should be the aim of any classroom seating arrangement.

From what Jones (2010) says, the teacher's mobility in the classroom is important for effective teaching and learning, which implies that classroom should not be congested. Re-arrangement of the classrooms is essential for the teacher and pupils to move about easily but reducing the class size would also be a good option for class management as well as ensure the pupils receive one-on-one attention from their teachers. Free movement of teachers in the classroom will also encourage the use of individualized teaching styles which will enable the teachers to quickly reach those pupils who may need extra help during lessons. This suggests that the conditions under which the pupils in the lower classes in KNUST Primary School are studying are not so conducive for the pupils to do effective learning especially those who have learning difficulties.

Arnold (2000) has also shown that large classes cause wider educational achievement gaps between disadvantaged learners and their peers. This is because there is less communication, interaction, and coordination with the teacher(s). For instance while observing teaching and learning activities in the Primary One and Two classrooms, it was realized that on several occasions during lessons and after a teacher has finished teaching these classes of 48 or more pupils, none of the pupils asked any questions. This could make the teachers assume that all the pupils had understood all that was taught.

4.5 Research Question Two: How knowledgeable are the teachers about Learning Difficulties, are there pupils with Learning Difficulties, how they identify and manage the lower primary pupils with learning difficulties?

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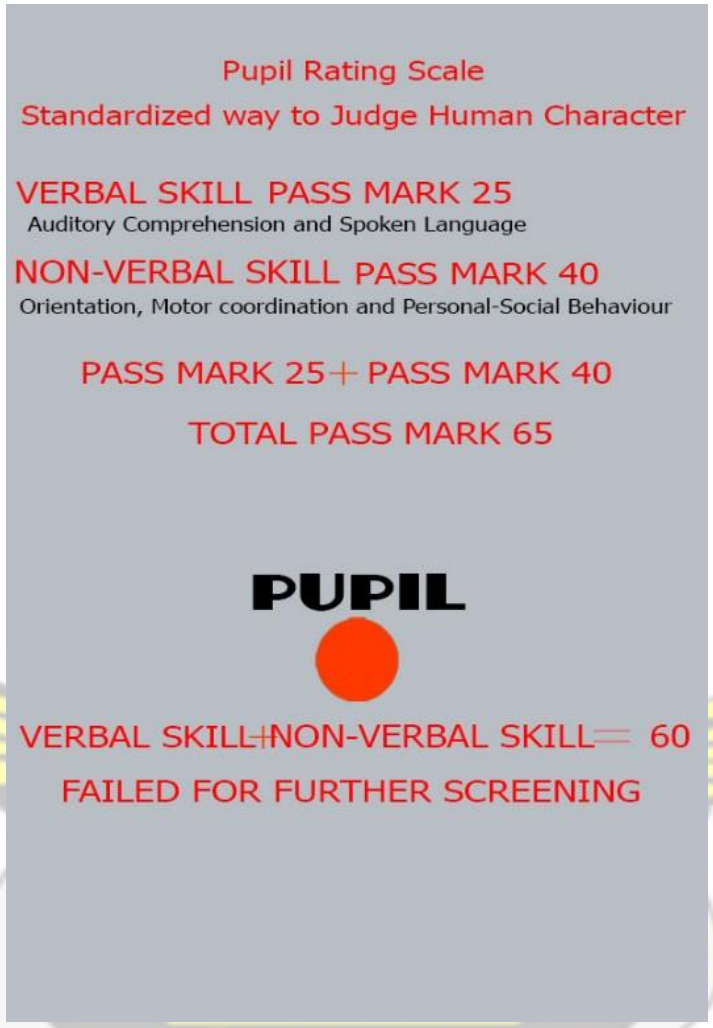
Firstly, the presence of Learning Difficulties among the observed Lower Primary pupils in the KNUST Primary School was done in different ways. The process involved the use of the pupils' rating scale, the head teacher's interview, class and subject teachers' interview and pupil tests. A pupil's rating scale, which is the Standardized Method of Judging Human Character (Myklebust 2001), was used to screen the pupils for learning difficulties. As Myklebust indicates, the Pupils' Rating Scale is one of the standardized ways to judge and document pupils' character during lessons. The rating scale comprised five observational areas namely Auditory Comprehension and Spoken Language to detect the pupils' verbal skills, their Orientation, Motor coordination and Personal-Social Behaviour, which measure the non–verbal skills. The rating scale was given to teachers a month before further screening was done. The teachers used the rating scale to grade the pupils whiles lessons were in progress.

The pupils were graded on their ability to spell, read and speak which made up the rating scale for verbal skills. This was done for two weeks. The rating scale was used to grade the same pupils on their non–verbal skills, which comprised the way they behaved during lesson and their posture for the last

two weeks before the further screening was done. The overall mark for both verbal and non-verbal skills was 100%. The pupils who got below 20% in verbal skill during lesson (Auditory Comprehension and Spoken Language) and below 40% in non-verbal skills, which gives a total of 60%, which is less than the pass mark of 65%, were classified as having failed the test. This meant that such pupils had a high probability of exhibiting a Learning Difficulty and therefore qualified for further screening. Table 4.1 gives a summary of the results retrieved from the use of the Pupils' rating scale. It should be noted that the pupils who were observed using the Rating scale were drawn from those already ranked by the class teachers as poor performers based on the quality of their class work and were perceived to have a high risk of failing in school. Figure 4.1 describes how the Rating Scale was used

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Fig 4.1 Explanation of how the Pupil Rating Scale was used



Source: Wragg (2012).

Table 4.1 Performance of pupils in Verbal and Non-Verbal Skills Observed

School Performance	Verbal Skills			Non- Verbal Skills		
Level	**Passed**	**Failed**	**Total**	**Passed**	**Failed**	**Total**
Primary 1	5 (29.41%)	12 (70.58%)	17 (100%)	9 (52.94)	8 (47.0%)	17 (100%)
Primary 2	4 (19.04%)	17 (80.95%)	21 (100%)	10 (47.61)	11 (52.3%)	21 (100%)
Total	9 (23.68%)	29 (76.31%)	38 (100%)	19 (50%)	19 (50%)	38 (100%)

Table 4.1 shows the percentage of pupils who passed and those who failed in the Verbal and Non-Verbal rating as observed by the teachers. It indicates that there were nine (9) (23.68%) passes and 29 (76.31%) failures in verbal performance as compared to 19 (50.0%) passes and 19 (50.0%) failures in non-verbal performance. This table also shows that though 40 pupils were sampled for this study, only 38 qualified for the screening. Out of the 29 that failed in the verbal performance, 17 were in Primary Two and 12 were in Primary One. Secondly, out of the nine (9) that passed the verbal

performance, five were in Primary One and four were in Primary Two respectively.

However, 19 pupils from both classes passed the non–verbal performance and out of the 19, nine (9) were in Primary One and 10 were in Primary Two. Secondly, 19 pupils of both classes also failed the non–verbal performance and out of the 19, eight (8) were in Primary One and 11 in Primary Two. Table 4.1 also indicates that all these pupils needed special attention so they were observed again using the same verbal and non-verbal skills screening criteria and they all failed again. Repeated trial is a measure of the degree to which the instrument yields consistent results or data (Mugenda & Mugenda, 1999; Saunders, Lewis & Thornhill, 2003). The pupils were put together for this second observation.

The first screening that was done resulted in the percentages seen in Table 4.1 so a further screening was needed to confirm the results shown in Table 4.1. The test results were similar as the pupils go almost the same percentage marks, which indicated that they had a different type of learning difficulty that this scale rating of Verbal and Non–Verbal Skills was designed for. After the screening the researcher found out that all pupils suspected to be having learning difficulty qualified for further evaluation because all these pupils had low scores for either Verbal or Non–verbal performance and need to be further evaluated. Myklebust (1981) therefore recommends that every child who receives a low score should be further evaluated to determine their specific deficiencies or disability for remedial instruction to be initiated. The

pupils who were identified to have Learning Difficulties were further assessed to find out the specific Learning Difficulty they were experiencing. Table 4.2 shows the pupils' assessment on the various aspects of behavioural characteristics.

KNUST

Table 4.2 Aspects of the pupils' behaviour characteristics

Behavioural Characteristics	**Number of Pupils**
Auditory Comprehension	**14**
Orientation	**10**
Personal Social Behaviour	**7**
Spoken Language	**36**

The results in Table 4.2 show that on average, the pupils performed well in motor coordination (focused more on manifest classroom traits); only two pupils had a problem with Motor coordination with the lowest percentage recording of 5.26%. Spoken language had the lowest average recording hence the highest percentage of 94.73%. The results generally show that most of the pupils had weaknesses in verbal learning, which combines Auditory Comprehension and Spoken Language, the factors which have far-reaching effects on successful school learning. Personal Social Behaviour

and Orientation were not so much an issue since that is expressed as dissatisfaction on the side of the pupil.

The results in Table 4.2 also show that the pupils who failed in the spoken language had deficiencies that manifested in comprehending word meanings, following instructions, comprehending class discussions, retaining information (Auditory Comprehension, How the brain understands what it hears), vocabulary, grammar, word recall, storytelling-relating experiences and expression of ideas or Spoken Language). This is consistent with studies carried out by Myklebust (1981) who recommends that intervention measures for learning disabilities should dwell on verbal communication.

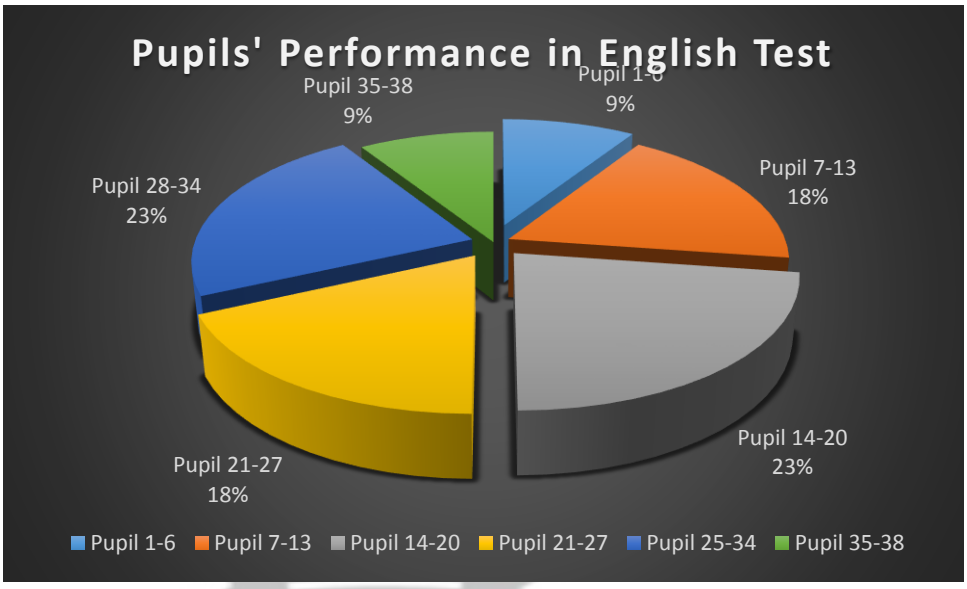
Out of the 38 pupils scaled by the teachers, it was found out that 31 were males which formed 81.57% of the total number of pupils who had Learning Difficulties and only seven were females who also formed only 18.42% of the total number of pupils. The results suggest that boys are more likely to be affected by learning disabilities as compared to girls. This finding is consistent with that of Finnucci (1978) and Lerner (2000) who have reported that learning disabilities are more common in boys than in girls. Lerner (2000) explains that more boys than girls are identified with LD because of biological causes whereby males may be more vulnerable to LD, cultural factors (boys tend to exhibit more disruptive behaviours that are troublesome to adults), and expectation pressures for success in school which may be

greater for boys than girls. However, further research needs to be carried out to confirm these findings in Ghana.

After the administration and scoring of the pupil rating scale, thirty eight (38) pupils were involved in an in-depth study to determine their specific deficiencies or difficulty. It is critical to establish how much children are learning in primary school especially with respect to basic skills like reading and writing. Therefore pupils identified with Learning Difficulties in the Lower Primary School were further evaluated by making them sit an English test. This test was marked out of 50 marks and the pass mark was 25. The pupils were tested in some major areas. These were Visual Perception, Spelling, Auditory Perception, Visual Discrimination and Written Expression. This is also consistent with studies carried out by Myklebust (1981). The result is represented in Figure 4.2.

KNUST

Figure 4.2 English Test



The test covered areas in Visual Perception, Spelling, Auditory Perception, Visual Discrimination and finally Written Expression. The pupils were divided into six sections since they were 38 pupils in all. Each section had six pupils solving a question individually with the average score of each section were 9%, 18% and 23% respectively. All the six sections failed, having the highest mark to be 23% and the lowest mark 9% which were below the pass mark of 25%. The test was made up of all the five areas stated: Visual Perception, Spelling, Auditory Perception, Visual Discrimination and finally Written Expression. This shows that the pupils had difficulties in English because they all failed in the test which had a pass mark of 25.

Literacy and numeracy skills are foundational skills that once acquired, are used to continue learning other subjects. Abadzi (2006) concurs that early

literacy acquisition is a good predictor of later educational success. The common types of errors noted in the English test included poor Visual-Motor Coordination, difficulty copying accurately from a model, spacing of letters and words, letter and word reversals, poor handwriting, some repetition of sentences, omission of some words and letters, overprinting to correct mistakes, grammar mistakes (punctuations, spellings and capitalization), inadequate expression of ideas and vocabulary, poor organizational skills, unreadable letters and words, and non-attempt or slowness in completing work. These findings are evidence that there were pupils having Learning Difficulties in the KNUST Primary School and needed to be helped.

4.5.1 Research Question Two B: To find out how knowledgeable the teachers are about Learning Difficulties

To establish whether teachers understood LD and if there were children in the school with learning disabilities, both the head teacher, subject and the class teachers were asked to explain the term 'Learning Difficulty' (LD) which was the first item on the Interview Guide (see Appendix 1). It is significant to report that all 10 teachers (respondents) explained LD as the challenges that some pupils face in their learning which can be a mild or severe one. (Adima 1989) also supports this definition that Learning Difficulty is a challenge and it ranges from mild to severe, this was evident that the teachers knew about Learning Difficulties.

4.5.2 Background of the Respondent Teachers

Kuyini's (2013) study on inclusive education in the Northern Region of Ghana reveals that only few teachers get training opportunities on the National Literacy Accelerated Programme (NALAP) and other inclusive teaching approaches. This means teachers need professional competencies to enable them to address the multiple needs and the diverse perspectives of the children they teach. Two interviews were therefore conducted with the school teachers to ascertain how they teach and handle pupils identified as having Learning Difficulty in class. The second item in the interview was to find out their backgrounds, experiences as far as education is concerned.

The interview was granted firstly for the Class teachers who fall under the generalist teachers and secondly the specialist teachers who teach Creative. The Class One class teacher had been teaching for the past nine months. She is a professional teacher who completed a degree programme in Art Education in 2013. This teacher read Art Therapy and Psychology as courses within the programme. She has no experience with regards to workshops, seminars and conferences geared towards enriching the expertise of teachers although she expressed interest in attending one when she gets the opportunity to participate in a conference. She recommended special seminars that will help a teacher know whether his or her pupils have learning difficulties or not.

The second teacher interviewed was the Head of the Creative Art Department. He has a Master's degree in Art Education from the Department of General Art Studies in KNUST. He is a professional teacher and he handles the Primary One class. He answered that he has attended workshops and seminars geared towards enriching his expertise in teaching. During the interview he responded that he has not yet attended a seminar on pupils with learning difficulties though he knows some pupils who had learning difficulties in the school.

The third teacher was the Creative Art teacher who teaches the class three pupils, she is also a professional teacher who is also pursuing her Master's degree in Education. She teaches the class. She also responded that she read Psychology and Principles of Teaching as student in the teacher training college. She was interviewed to find out whether she had attended and participated in conferences and seminars that taught on Learning Difficulties among pupils and how to identify them in class, her response was that she has attended seminars but not one that spoke on learning difficulties.

The other 10 teachers are all professional teachers, having graduated from the teacher training college. One had her master's degree in education from the University of Winneba, whiles the others had their qualification either as diploma or a degree in Education. During the interviews the teachers claimed they were all professional teachers who studied Psychology during their time of training in college but after the interview granted them, data collected showed that they could not apply what the Psychology they had studied.

Self-advocacy helps pupils gain higher self-perceptions, stronger self-esteem and independence. Young children are most likely to experience success in secondary and post-secondary studies if they understand and know how to explain their disabilities, can describe the accommodations that support their learning and engage with an adult to support them in navigating their school experience (Kuyini, 2013). It is very important and relevant for teachers to know their pupils and have knowledge about learning difficulties among pupils as Kuyini recommends.

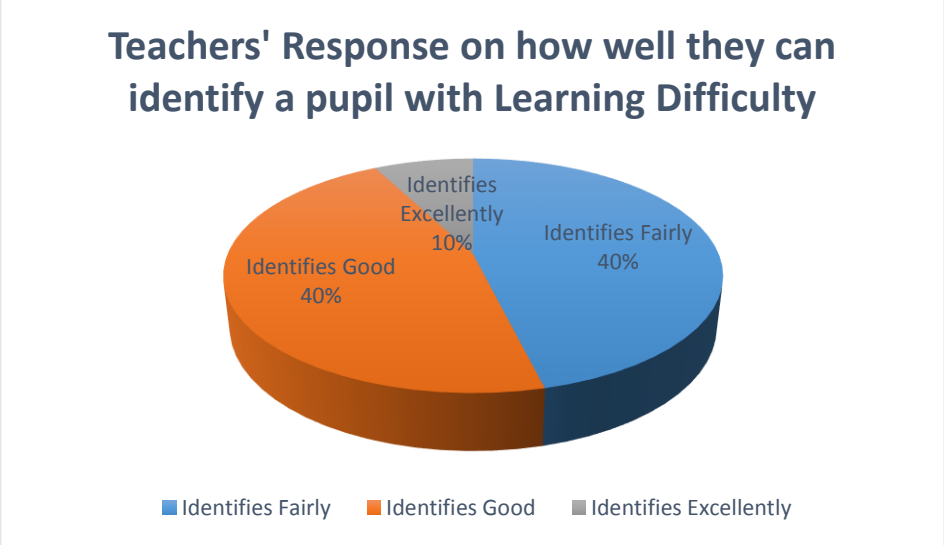
The teachers were asked to report on how knowledgeable they were in identifying pupils with learning difficulties and the results are presented in Figure 4.2, which shows that most of the respondent teachers had a fair knowledge about pupils with learning difficulties. They had no idea about how to help them with adaptive instructions. This therefore shows the relevance of this study which sought to document the types of learning difficulties there are and their relevant adaptive instructions.

The key findings are as follows:

Evidence from the data collected through interviews with the 13 Lower Primary teachers in the study school showed that all of them are all trained and qualified to teach pupils. Because only Lower Primary teachers were included in the study, the Upper Primary class teachers were excluded and were therefore not interviewed. Amongst the 13 teachers, seven (7) had teaching experience of above five years and six (6) had been teaching for

less than five years. When all the 13 teachers were asked how they are able to identify pupils with learning difficulties, using a grading scale of Fair, Good and Excellent, six (6) teachers rated their effort in identifying a pupil with learning difficulty as Fair, six answered the question as 'good' and one was able to confidently rate himself as 'excellent' at identifying pupils with learning difficulty. The results are as shown in Fig 4.3.

Fig 4.3 Teachers' Responses to how they can identify a pupil having a Learning Difficulty



It can be inferred from Fig 4.3 that this section was to find out how well teachers could identify a pupil with learning difficulty which was scaled as Fairly, Good and Excellent. Only one teacher out of the 10 teachers which forms 10% of the number of teachers, responded confidently about being able to identify a pupil having a Learning Difficulty Excellently, 40%

responded Fairly and the last 40% responded as Good. This reveals clearly that the teachers do not really know their pupils. This is a disturbing observation, particularly because without a good knowledge of the learner, the teacher will not be able to appropriately instruct in such a way to meet the individual needs of the pupils. The reason is that they might not be able to give appropriate instructions that meet the needs of individual pupils. As Kuyuni (2013) states, it is very important for teachers to know their learners so as to give appropriate instructions to them.

4.5.4 How are the pupils with Learning Difficulties in the sampled school managed?

The study sought to find out how pupils suspected to be having LD were being provided for in the school. Responses on the subject given by the class teachers are shown in Table 4.3.

Table 4.3 Approaches used to assist learners with LD

Approaches used to assist learners with LD	**Subject teachers**	**Class Teachers**	**Total**
	Responses	**Responses**	**Number**
Pairing learner with able peers	1	8	9
Giving remediation	1	10	11
Individualized attention	1	6	7
Given simpler tasks	1	11	12
Breaking tasks	1	7	8

Use relevant teaching materials	3	10	13
Extra time for tests	1	5	6

From the results given in Table 4.3, the Class teachers and the Subject teacher were asked about the measures they have put in place to manage those pupils they suspected to have Learning Difficulties based on the approaches listed in Table 4.3 as derived from the interviews granted the researcher. The results show that the most frequently used approach is the 'use of relevant teaching materials' followed by 'giving simpler tasks' and then 'giving remediation'. One interesting thing found in the responses was the variations in the responses given as against that given by the head teacher of the school.

There is only one head of the study school who also gave her response after the interview granted by the Subject and Class teachers on the approaches they put in place to manage the pupils who have Learning Difficulties. From the response given by the Head teacher during her interview and that which was given by the Class and Subject teachers, there was a clear variation amongst the two major responses. From the point view of the Head teacher, there are so many measures put in place to manage pupils who have Learning Difficulties. Meanwhile the teachers also gave their own side of the story which varies from the Head teacher's response. The researcher deduced that

the teachers might not be doing their work effectively as far as pupils having Learning Difficulties is concerned.

When the Head teacher was asked to state how well the teachers apply their skills to assist learners with LD, she stated that some used their skills well. However, it is important to note that the Head teacher, by saying that teachers used their skills to assist learners with LD, was expressing her expectation. She based her comment on the assumption that some schools had teachers with skills in special needs education. The Head teacher also said that teachers were trained, and that they were expected to use appropriate methods such as giving individual attention to pupils with LD meanwhile that was the one of the less used approaches the teachers said they use to assist pupils with learning difficulties in the school.

Another question that was asked the Class and Subject teachers besides finding out what challenges they face with pupils who have difficulties in their learning. The answers are the responses listed in Table 4.4.

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Table 4.4 Challenges teachers face with pupils with Learning Difficulty

Challenges	Subject Teachers	Class Teachers
	Responses	Responses
Inability to diagnose cases	1	5
lack of special education teachers	1	6
No time due to emphasis on examinations	2	7
Un-cooperative parents	2	10
Large class sizes	3	10

Table 4.4 reveals the most the frequently reported challenges faced by the teachers are the Large Class sizes which discourages Individualized Teaching style and also lack of parent cooperation to help their wards at home. Though lack of special education teachers and inability to diagnose LD had a lower response numbers, these may be the most serious challenges facing the school in the management of LD. A follow up question was asked these teachers why they felt they were not having problem diagnosing the pupils having Learning Difficulties, and the answer was that while they were in the training colleges, they undertook some training on Learning Difficulties but not in detail. It is hoped that a school with a large number of

pupils such as KNUST Primary must have a number of Special Education teachers to serve as counsellors in the school. To address the challenges faced in the process of providing for learners with LD, the respondents gave ten different ways as shown in Table 4.5.

Table 4.5 How teachers address challenges they face with LD

How the challenges faced are being addressed	**Subject Teachers**	**Class Teachers**	**Total**
	Responses	**Responses**	**Percentage**
Use of special education teachers to diagnose learners with special needs	3	10	100%
Severe LD cases are handled by special education teachers	3	10	100%
Giving individual attention	2	7	69.23%
Referring some for assessment	3	10	100%
Peer tutoring	2	9	84.61%
Remedial classes	2	9	84.61%
Motivation	1	8	69.23%
Guidance and counselling	2	10	92.30
Involving parents in assisting the pupil	1	9	76.92%
Asking parents to allow their children time for extra tuition	1	7	61.53%

Table 4.5 reveals that the class and subject teachers mentioned more specialized approaches to the challenges they face while working with pupils who have learning difficulties in the school, this was so obvious since the three approaches that got the highest percentages were all specialized approaches to address the challenges faced by pupils with learning difficulties. The head teacher was also asked the same question about how the challenges of pupils having Learning Difficulties are managed using the same list of approaches in Table 4.5 and she reported general methods of managing learners in classrooms such as peer tutoring, individualized attention, motivation, guidance and counselling and asking parents to assist their children. It can be deduced here that teachers who handle the pupils directly are requesting for help from specialist teachers in Learning Difficulties though they claim they had some training in the area of Learning Difficulties.

The Head teacher was asked to state ways that would make the teachers more effective in assisting learners with LD in the schools and also the degree of urgency using percentages. Table 4.6 summarizes the head teacher's response.

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Table 4.6: Head teacher's suggestion for making teachers more effective with LD

Responses	Percentage (%)
Regular in-servicing of all teachers on LDs	60%
Teacher curriculum to include more Special Education units	20 %
Hire specialists in schools	10 %
Reduced workload	10 %

Table 4.6 shows that the head teacher felt that LD can be managed more effectively if class teachers can be empowered in the area of Learning Difficulties. On the whole, the head teacher indicated that 60% was to be allocated to regular in-service training of all teachers on LDs. This indicates that the teachers need more training and awareness on how to firstly identify a pupil with a learning difficulty and secondly, how to meet the needs of these pupils appropriately.

4.6 Research Question Three: What are the strengths and weaknesses of the teaching strategies used by the lower primary school teachers?

To really know the strengths and weaknesses of the teaching strategies used by the teachers in the sampled school, an interview guide was prepared to find out the frequently used teaching method or style of teachers. There are

certain basic assumptions people make about the rudimentary skills of all teachers. Many of these expectations have to do with instructional decision-making skills and concerning what content and processes to teach and how to organize and deliver content in the most effective ways possible. The responses gathered from the teachers are shown in Table 4.7.

KNUST



Table 4.7 Response to the type of teaching method frequently used in class

Teaching Style	Class and Subject Teachers	
	Responses	%
Teacher Centered	8	61.53%
Individualized Teaching Method	9	69.23%
Computerized Structure	8	61.53%
Experimental Teaching Method	11	84.61%
Demonstrative Method	10	76.92%
Adaptive Instructions	9	69.23%

Table 4.7 reveals that the most frequently used teaching method used by the teachers in the study school are the Experimental and Demonstrative methods. This indicates that they put much attention on the participation of the pupils in their class. On the other hand, observation made by the researcher showed the opposite was rather happening, where the most frequently used teaching style was the Teacher-centered method of teaching. Wilson (2014) states that when a teacher is instructing in class and his or her

audience or learners are placed in a passive mode, it is often the Teacher-centered method of teaching that is being used. This was the exact picture painted in the classrooms; the pupils were passive learners and were not really playing a role during teaching. After the teaching, they allowed time for questions which the teachers then answered.

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The second item in the interview guide sought to find out whether they were aware of Adaptive Instructions and the use of Accommodation in class. The results to this issue are shown in Figure 4.4.

Figure 4.4 Awareness of Adaptive Instructions by teachers

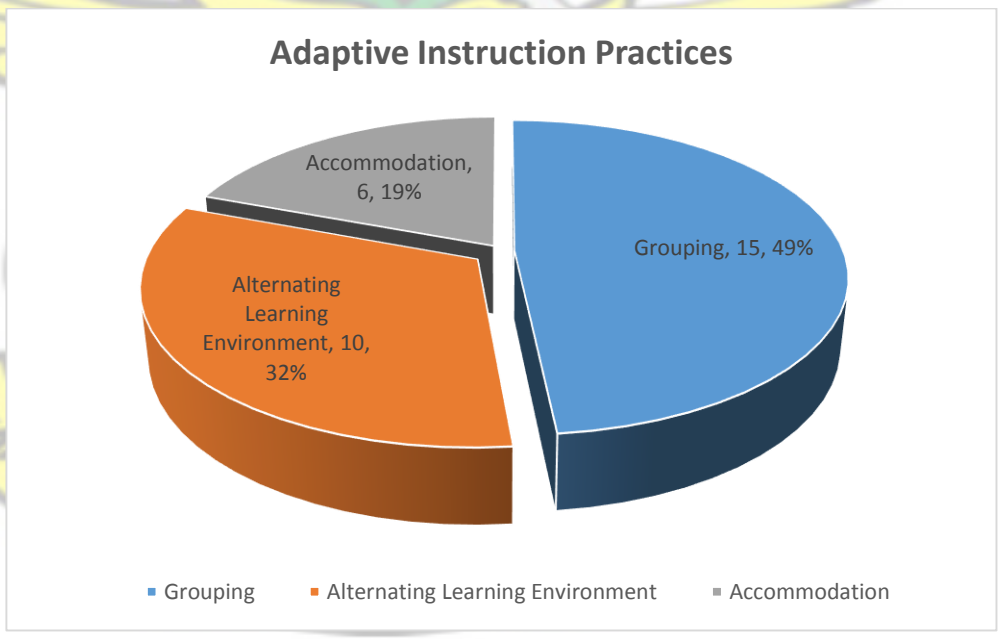


Figure 4.4 reveals the fact that the teachers were aware they have to alternate their teaching styles since 15 teachers who represent 49% of the total

respondents chose that as the approach that they were familiar with, which is grouping. The issue is that they are limited to the type of Adaptive Instructions to use to meet the needs of individual pupils. Recent thinking suggests that some learners, especially those with LD, do not benefit from teaching methodologies and materials used in the regular classroom (Agbenyega & Duke, 2011).

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Due to the fall in percentage with regards to Accommodation in Figure 4.3, a further question was asked on the type of Accommodation used so as to clear any misunderstanding in the term used. The results are shown in Table 4.8.

Table 4.8 Accommodation Practices in the Classroom

Practices in Accommodation	**Class and Subject teachers Responds**
	Responses
Degree of Independence	9
Pace of Learning	8
Allowing to Demonstrate	13

Table 4.8 reveals that the teachers were not sure of what Accommodation really meant so the further explanation helped them to give these responses on the Accommodation issues in their classrooms. Moreover, the teachers were not frequently adopting these Adaptive instructions in their classrooms hence the responses given by them.

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A follow up question was asked them about the challenges they face when they use these Adaptive Instructions as shown in Table 4.9 which shows a list of challenges the teacher face when they use these Adaptive Instructions in the classroom.

Table 4.9 Challenges in adopting Accommodation

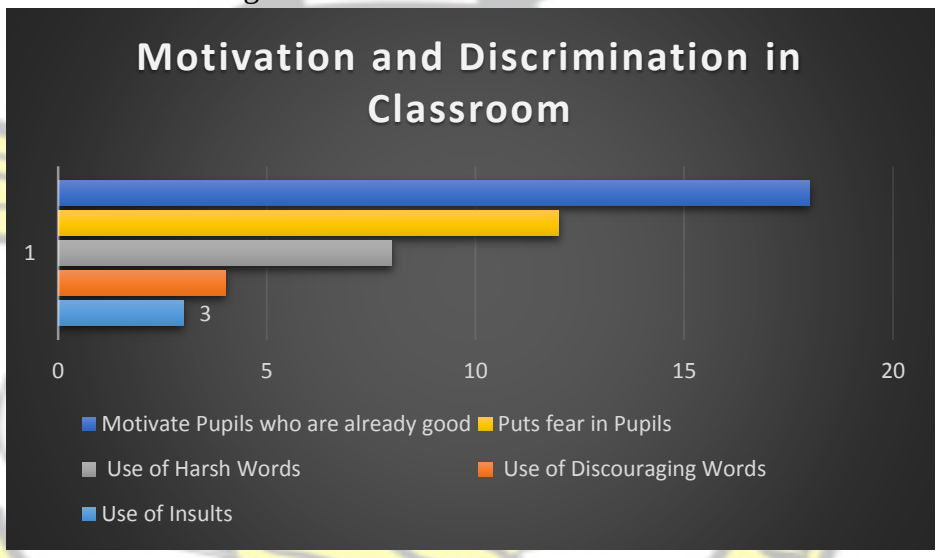
Challenges in adopting Accommodation	Number of Class and Subject Teachers	
	YES	**NO**
1. Misunderstanding the Purpose	9	4
2. Not appropriate	6	7
3. Lack of Student Involvement	10	3
4. Lack of Parents Involvement at home	13	0
5. It is not consistent	12	1
6. Gives too much room for Misbehaving by Pupil	13	0

Table 4.9 reveals that 13 respondents reported, based on their opinions, that they face other challenges when other methods like Adaptive Instructions are used in place of the normal teaching methods. The most frequently reported challenge was 'misbehavior of pupils', which they said discourages the teachers from using the Accommodation method of Adaptive

Instructions. However, the complete removal of this style of teaching will go against other pupils. In reality, accommodations remove or at least lessen the impact of a student's learning difficulty and therefore give the student the same opportunity to succeed as other students (Dawson & Guare, 2012)

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The last item in the interview guide was to find out the teachers' knowledge about Motivation and Discrimination in class. The researcher used a range to score the teachers based on some list of items. This was to find out if they really adopted motivation and also avoids discrimination in their classes. The results are seen in Figure 4.5.



Motivation and Discrimination in Classroom

Figure 4.5 also reveals that the teachers often motivate the pupils who are already good, followed by putting fear in the pupils. Fear makes a pupil anxious during class hours and that is not a good style of teaching. Learners with high self-esteem typically say that effort or ability, rather than luck or task difficulty,

is the root of their success (Ames &Ames, 1984). Students who have high achievement motivation usually identify effort as key to success, while those with low in this quality blame failure on luck or task difficulty. Motivating already good students is not bad but making them feel they are better than the pupils with learning difficulties discourages them (pupils with Learning Difficulties). From Figure 4.4, it is seen that teachers discriminated in class during lessons and that is not a healthy exercise for pupils at the lower primary level. Plate 4.8 shows a pupil hiding her work from the researcher due to demoralization from the teachers.

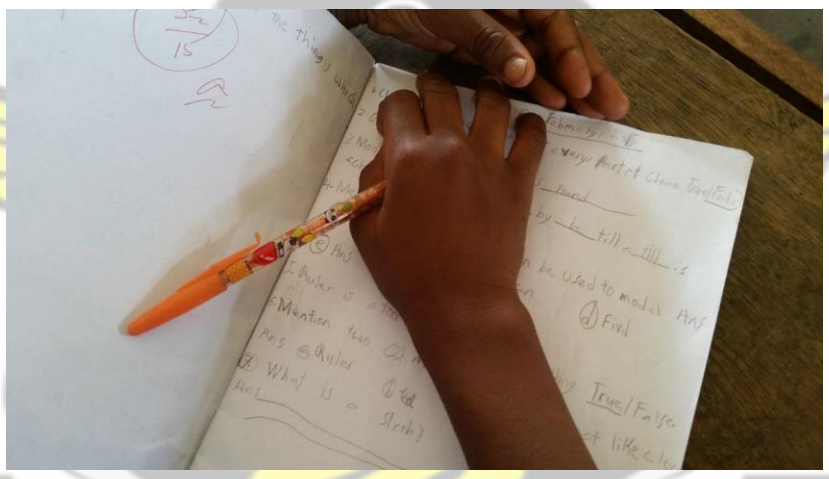


Plate 4.8 A pupil hiding work from researcher.

From the findings, the researcher deduced some weaknesses and strengths in the teaching styles or methods used by the teachers in the Lower Primary classes of the KNUST School. Teachers after teaching the class will ask a general question: “Do you understand?” and the general response received

from the pupils throughout the period of observation was “Yes Sir” or “Yes Madam”. This was basically what happened in all the classes observed.

Wilson, Teaching Styles (2013) indicates that this style of teaching falls under the teacher–centered style of teaching. Though the teachers found the Teacher-centered method of teaching more appropriate because of the large class size it was to the detriment of other pupils especially those having learning difficulties. Wilson (2013) states that good teaching is about making informed choices about methods of instruction that are best suited to the style of teaching, the subject (both content and process) and the learners and their instructional needs. This shows that knowing the nature of your learners is key to meeting their needs with appropriate instruction. It is important therefore that the class teachers in primary schools in particular to get to know their pupils very well so they can identify those who have difficulty learning what they are taught and be able to help them make good progress in school.

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CHAPTER FIVE

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

5.0 Summary

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In summary, the research sort to highlight the challenges that pupils with learning difficulties face in the selected school which is within the Oforikrom Sub-metro of the Ghana Education Service in Kumasi. This research became very urgent because the Government of Ghana through the Ministry of Education and the Ghana Education Service (GES) has been planning towards adopting inclusive education as the policy imperative for education by 2015, which makes it very urgent to see to it that preparations are put in place. Though on a small scale, this research highlights the challenges with learning difficulties which brings to the fore the urgent need to make preparations for the policy to be adopted as this year 2015 has almost ended. The Goal is to expand and improve pedagogy by using adaptive instruction, especially for the most vulnerable and disadvantaged children.

The purpose of this study therefore was to seek ways to equip classroom teachers in the selected school with firsthand material on how they can identify pupils with learning difficulties in their classrooms and also to meet the national strategic plan of inclusive education that was expected to come in full operation this year 2015. The case study approach of qualitative research design with observation and interview were therefore adopted as well as the descriptive approach to document the findings. The population

studied was the lower primary pupils, teachers, headteacher and the guidance and counselling coordinator of the KNUST primary school.

The study established disparities in the provision of school infrastructure within the Oforikrom sub-metro area of the Kumasi metropolis. From the interviews and observation, the disparities observed were:

1. The teachers were not able to tell which type of learning difficulty a pupil is experiencing,
2. The teachers are able to handle pupils with the learning difficulties and assign the appropriate instruction to meet the need of pupils with learning difficulties,
3. The use of words of demoralization by teachers
4. Discrimination among pupils which makes some pupils very confident and others very intimidated to even answer a question in class.

Despite these differences, the observation and interviews revealed that most children with learning difficulties showed so much happiness when in other extra-curricular activities. This shows that their needs could be met through a good observation of their personalities and meeting their needs through adaptive instructions. This finding is consistent with studies in Ghana, Vietnam, and Albania, which report that children with LDs often drop out of school because teachers neither adapt instruction to those pupils' needs nor pay attention to them during instruction (Agbenyega & Deku, 2011; Hido &

Shehu, 2010; A. A. R. Kuyini, 2013; A. B. Kuyini & Desai, 2008; Mukhopadhyay, Johnson Nenty, & Abosi, 2012; Peters, 2004; SAP, 2011).

For example, during lessons while the researcher was observing that some pupils were very timid in answering questions asked by their teachers. The class teacher's reaction to why the child was so timid was that "she was not intelligent". This established the fact that teachers use intimidating words on pupils and if a child accepts this word that he or she is not intelligent, it affects him or her psychologically. It is beneficial for teachers to use humor to hold students' interest and reduce classroom tensions (Ornstein & Levine, 1981).

5.1 Conclusions

The education of children and young people with Special Educational Needs (SEN) and disabilities is now an established key policy objective in many countries (Lindsay, 2007). Though this study has highlighted the ways of identifying pupils with learning difficulties, other research in other primary schools should be done to verify the results already collected and presented.

The main findings of the study, as listed according to the research objectives, are as follows:

1. **Objective One: To investigate and describe the conditions under what teacher and learning go on in the selected school.**

   The class size was very large 40 to 50 pupils in a class and there are over 4 classes each for a stage. Due to the number of the pupil in each class, they don't get the individualized attention from teachers when they need help. The teachers did not have enough information and knowledge about pupil with learning difficulties but knew some pupils had challenges in their learning in class. For the specific learning difficulties the pupils were experiencing, they were not knowledgeable about that

2. **Objective Two: To find out how primary school teachers identify, whether there are pupils having learning difficulties in the school and how they manage them.**

   The primary school teachers identified pupils with learning difficulties by the tasks given to them. If they are unable to do very simple tasks given them in class they start observing such pupils for some time and find out the problem the pupil may be experiencing. They also look out for very hesitant pupils who always avoid answering questions in class when asked to. The teachers are not able to meet the needs of the pupil because they are not really equipped to help pupils with learning difficulties though equipped to teach pupils who are without learning difficulties. They have not been able to use adaptive instructions to meet the needs of pupils with learning difficulties.

3. **Objective Three: To ascertain the strengths and weaknesses of the teaching strategies employed by the lower primary teachers in addressing the needs of pupils with learning difficulties.**

Before the strengths and weaknesses of the teaching strategies can be ascertained the teaching strategy used by the teachers were found out. It was seen that most of the teachers interviewed and observed were using more often than, not the teacher-centered teaching strategy. The strength of this learning strategy was that it was very good because the classes were large and the weakness is that it was not helpful for pupils who needed special attention in the class.

5.2 Recommendations

1. There should be verification in the form of further research in other primary schools of the results collected and presented in this study. This will help prepare teachers to meet the national strategic plan of the nation that was expected to be in full operation this year 2015.

2. The Ghana Education Service (GES) should encourage its teachers to do more instructional adaptation, if the needs of pupils with LDs are to be met in the regular classrooms.

3. Workshops and seminars could be organized by the Oforikrom District Sub-metro for teachers to keep them abreast on how to identify and also deal with pupils with learning difficulties. The department of General Art Studies could use this study to collaborate with Special Education and Early

Childhood Education professionals and other education officials to run such workshops.

4. Class size in the KNUST Primary School could be reduced so that pupils with learning difficulties can benefit from individualized teaching styles.

5. To enhance the competence level of teachers in adaptive instruction to address the needs of children with LDs in the regular classrooms, the GES needs to organize special training in adaptive instruction for its teachers. In particular, the training should involve teachers in the rural and semi-urban centres. In addition, this type of training should favour both genders because there is no significant difference between the competence level of female and male teachers. Such training should include the following components of adaptive instructions suggested by Lee and Park (2008):

a. Macro-level adaptive instruction. Teachers should be trained to develop skills in using or setting up alternative instructional goals; adapting curriculum content and delivery systems to accommodate the needs of children with LDs in the regular classroom.

b. Specific instructional procedures and strategies. Teachers should be trained in how to use specific instructional procedures that are suitable for some specific student's characteristics. This component of instructional adaptation requires training in how to identify relevant learner characteristics (or aptitudes) for instruction and the selection of instructional strategies that best suit the learning process of students with those characteristics. It is based on aptitude–treatment interaction (ATI).

c. Micro-level instructional adaptation. Teachers should also be trained to develop skills in how to diagnose students' specific learning needs during instruction and how to provide instructional prescriptions for such needs concurrently. For instance, knowledge of and skill in intelligent tutoring systems (ITSs) and adaptive hypermedia systems (AHSs) are common examples of this approach. This approach is capital and resource intensive, and therefore, more resources should be provided in the schools to allow teachers and pupils to benefit from these teaching approaches.

d. Adaptive pedagogical approaches. Teachers should be trained in special education proven pedagogical approaches that blend constructivist and instructivist approaches to teaching such as child-centered and explicit instructions.

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Appendix A

INTERVIEW GUIDE

Background of the teacher

How will you define Learning Difficulty?

What are your academic qualifications?

Which class do you teach in the primary school?

How many years have you taught in the primary school?

How do you identify any pupil with learning difficulty?

How do you handle such a pupil in the class?

Do you have other experiences such as seminars, conferences, access to identification of pupil with learning difficulty and how to handle them in class?

Do you have any idea of the instructions to use to help pupils with learning difficulties?

Do you know about Adaptive Instructions?

Do you know about Accommodation?

Background of learners

What is the average age of this class?

What is their family background?

What are the languages spoken by the children?

What are the best learning styles of the children?

What difficulties do you encounter in class during lessons?

How do you feel when asked a question in class?

How are you treated in class when you are not able to answer a question in class?

What are the best learning styles of the children?

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Appendix B

OBSERVATION CHECK LIST

Attitudes of teachers in class

- How they handle pupils with learning difficulties?
- What words they use of the pupils with learning difficulties?
- How the teachers handle pupils without learning difficulties?

Attitudes of pupils in class

- How pupils with learning difficulties behave during lessons:
  - When an assignment is given
  - When tasked in-front of the class to read or spell
  - When asked to answer a question
- How pupils with learning difficulties outside class in extracurricular activities?

Objective one

How many pupils are there in a class?

How does a pupil identified with a learning difficulty respond to questions asked him or her in class?

What Subjects do you teach?

What are some types of learning difficulties you have identified in class?

Have you participated in any seminar or conference on learning difficulties?

Objective two

How do you identify a pupil with learning difficulty?

How do you handle pupils identified with learning difficulties?

How do you help a pupil with learning difficulty to cope in class with those without?

What instructions do you use to help pupil with learning difficulties?

Objective three

What teaching strategy do you use during lessons?

What is the weakness of the teaching strategy often used by the teachers?

What is the strength of the teaching strategy often used by the teachers?

How does this teaching strategy affect pupils with learning difficulty?

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Appendix C

English Test for Pupils

Date…… Name of School……

Gender…… Age…….

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1. Copy the following story

   Abi is a girl. She is very intelligent. She always likes to play with her friends outside. In class she is very quiet and at home very noisy.

2. Till in the missing letter

a. H_ _ d
b. _ _ hool
c. Pe _ c_ l
d. B _ _ k

3. Dictation Exercise

a. Teacher
b. Pen
c. Flower
d. Picture
e. Radio

   NB. The teachers were assigned to dictate to the pupil

4. Colour the boxes that have the letters that are alike

Ad	Pp	Kh	Zz	Ff
Nh	Ij	cc	Ft	gg

5. Circle the odd one
   Bull, Bow, Pull, Full
   Plum, Peep, Sleep, Keep

6. Write five sentences about yourself