TEACHERS AWARENESS AND INTERVENTION FOR PRIMARY SCHOOL PUPILS WITH LEARNING DISABILITIES IN INCLUSIVE EDUCATION IN MAKADARA DIVISION KENYA

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DECLARATION

This thesis is my original work and has not been presented for a degree or any study program in any other university.

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To my late dad, Dr. Francis Gateru Muya. May your soul rest in Eternal Peace
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Honour and glory goes to the Almighty God and may He bless you all.
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ABBREVIATIONS AND ACRONYMS

AEO- Assistant Education Officer
ATS - Approved Teacher Status
BOG- Board of Governors
CRC-Convention on the Rights of the Child
CSIE – Centre for Studies of Inclusive Education
DEO- District Education Officer
DfEE – Department of Education and Employment
EAACE – East African Advanced Certificate of Education
EFA – Education For All
FPE – Free Primary Education
IDEA – Individuals with Disability Education Act
IE – Inclusive Education
IEP – Individualised Education Program
ILSMH- International League of Societies for Persons with Mental Handicap
KACE – Kenya Advanced Certificate of Education
KIE- Kenya Institute of Education
KIEP-Kenya Integrated Education Program
KISE- Kenya Institute of Special Education
LD – Learning Disability
LEA-Local Educational Agencies
LRE – Least Restrictive Environment
MOEST – Ministry of Education Science and Technology
NARC – National Rainbow Coalition
NCEOP – National Committee on Educational Objectives and Policies
NGO – Non Governmental Organisation
OECD- Organization for Economic Cooperation and Development
PMLD – Profound and Multiple Learning Disability
SEN – Special Education Needs
SDP– School Development Plan
SLD – Severe Learning Disability
SNE- Special Needs in Education
SPSS- Statistical Package for Social Sciences
TIVET- Technical, Industrial, Vocational and Entrepreneurship Training
UK – United Kingdom
UNESCO – United Nations Educational, Scientific and Cultural Organization
UNISE-Uganda National Institute of Special Education
UPE – Universal Primary Education
USOE – United States Office of Education
WHO-World Health Organization
Abstract

The introduction of inclusive education poses different challenges to pupils with LD in primary schools. This is because they cannot cope with the regular school curriculum like their non-disabled peers. The purpose of this study was to assess the teacher awareness and intervention for pupils with Learning Disabilities in inclusive education in Makadara Division. The study was guided by the following objectives: to establish teachers’ awareness and intervention for pupils with LD, to establish teachers’ opinion towards inclusive education for pupils with LD, to establish teachers academic and professional preparedness for effective inclusive education, to find out the challenges facing the success of inclusive education and recommend on the ways of improving the success of inclusive education. Descriptive survey research design was used for the study. The population for the study was 26 primary schools in Makadara Division. Out of the 26 targeted schools, 10 primary schools were studied. The target respondents were primary school teachers (regular and special education) and the head teachers. A total of 30 respondents were sampled for the study; out of which 28 responded giving a response rate of 93%. The primary data was collected using structured questionnaires, interviews and observations schedules. The reliability of the instruments was tested using split-half method. Content analysis was used to analyze interview schedules. It was established that 68% of the respondents were aware of the meaning of inclusive education, 63% were aware of the inclusive education practices in the schools and 79% of the respondents had identified pupils with Learning Disabilities in their schools. The study also established that teachers had interventions such as using different learning strategies e.g. using corrective approaches for reading as indicated by 64% of the respondents. Other interventions included: providing options for pupils to demonstrate their knowledge or skills, accommodating individual differences among the pupils by identifying a preferred style of learning and either providing instruction and direction in the preferred style or teaching in a multi-sensory fashion that stimulate both auditory and visual perception, modification of activities into simpler units and planning them from simplest to the most complex ones; this is to enhance the understanding of the pupils with Learning Disabilities. The study found that 63% of the teachers were of the opinion that pupils with learning disabilities should be left to adapt to the arrangements prevailing in mainstream schools. It was further revealed that only 29% of the teachers had received in-service training to handle pupils with Learning Disabilities. It was found that the main challenge to inclusive education was covering the syllabus in time for the examinations. The study concluded that teachers were aware of inclusive education in their schools, teachers had different interventions in place to ensure the success of inclusive education e.g. the use of corrective approaches, direct instructions, systematic phonics and using connectivity with pupils’ individual learning needs and that teachers were not professionally prepared to cope with pupils with Learning Disabilities in inclusive education. The study recommended that more awareness be created in order to ensure that pupils with Learning Disabilities benefit from education just like their non disabled peers. It was also recommended that teachers should come up with other intervention measures on how to handle pupils with learning disabilities to ensure the success of inclusive education.
CHAPTER ONE
INTRODUCTION

1.1 Background to the Study
For years, the traditional education systems worldwide have provided special education and related services to pupils with disabilities. This is according to Lindqvist, (1999), who also adds that in a majority of countries, there is a dramatic difference in the educational opportunities provided for disabled pupils and those provided for non-disabled pupils. The global community will not realize the goal of Education for All (EFA) if it does not achieve a complete change in the situation). According to a study done by Gartner and Lipsky, (1997); Villa and Thousand, (1992), the existence of a dual education system, one for regular education pupils and one for special education pupils, is being challenged by advocates of pupils with learning disabilities. Florian (1998), adds that according to these disability advocacy groups, this focus has often contributed further to the exclusion of pupils with special education needs. In fact, when the Brown versus Board of Education decision was made in the United States in 1954, disability advocacy groups launched a series of legal battles based on the argument that segregated special education schooling is inherently unequal and therefore unconstitutional. In Australia for instance, 21 years later (1975), these legal challenges culminated in the passing of the Public Law 94-142, the Education for All Handicapped Pupil Act in 1975.

Sands, Kozleski and French, (2004), argue that as the educational, social, political and economic needs of society underwent rapid change, it became increasingly evident that the traditional ideas of schools and classrooms were becoming outdated. It was now clear that increasing pupil diversity and changing economic and social conditions were straining the capacity of any education system to produce well-educated pupils.

The OECD (1997), reports that in many countries, specific instructional or organizational provisions are created for pupils with special educational needs such as some kind of disability or lack in the area of cognitive, social, physical, or motor development.
According to the OECD (2000), the effectiveness of an education system is questioned and as a result, the concept of inclusive school practice was widely discussed as a philosophical basis for the development of one education service delivery system to serve all pupils. Today, a full-time inclusion of pupils with moderate and severe learning disabilities in regular education classrooms in Primary schools is practiced in many countries. Special education pupils in segregated categorical classrooms and separate facilities are being returned to their neighborhood schools and age-appropriate regular education classrooms with their non-disabled peers. Inclusive education is a developmental approach seeking to address the learning needs of all pupils with a specific focus on those who are vulnerable to marginalization and exclusion.

The UNESCO (1994), reports that the principle of inclusive education was adopted at the World Conference on Special Needs Education (SNE). The idea of inclusion is further supported by the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities proclaiming participation and equality for all. The Dakar Framework for Action adopted a World Declaration on Education for All (EFA) in 2000, which established the goal to provide every girl and boy with Free Primary School Education by 2015. It also clearly identified Inclusive Education (IE) as a key strategy for the development of EFA. The Salamanca Statement and Framework for Action was endorsed by 92 governments and 25 International Organizations at the World Conference on Special Needs Education, June 1994 in Salamanca, Spain. This Statement proclaims that every pupil has unique characteristics, interests, abilities, and learning needs and that “those with special education needs must have access to regular schools which should accommodate them with a pupil-centered pedagogy capable of meeting those needs. The Salamanca Statement also asserts that educational systems that take into account the wide diversity of pupils’ characteristics and needs “are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all. Moreover, they provide an effective education to the majority of pupils and improve the efficiency and ultimately the cost-effectiveness of the entire education system”.
In general terms, Inclusive Education implies four key elements: one, it is essentially a process of looking for the most appropriate ways of responding to diversity as well as learning how to learn from the differences; two, it is linked to stimulating, through multiple strategies, the creativity and the problem solving capacity of pupils; three, it comprises the right of the pupil to attend school, to express his/her opinion, to have quality learning experiences and to attain valuable learning outcomes without regard to their natural, social, cultural and ethnic characteristics; and four, it implies the moral responsibility of prioritizing those pupils who are at risk of being marginalized and excluded from the school, and of obtaining low learning outcomes.

According to Rouse and Florian (1997), there are a set of conditions necessary to promote inclusive education for pupils with learning disabilities. These conditions are necessary to promote inclusive practice and aid in the implementation efforts so as to help bridge the gap between the acceptance of equal rights for all as embodied in policy and actual achievement of inclusive practice. These are: an opportunity for pupil participation in the decision-making process, a positive attitude about the learning abilities of all pupils, teacher knowledge about learning disabilities, skilled application of specific instructional methods, and parent-teacher support. Some barriers such as other education laws which are incompatible with the establishment of these conditions exist in regular schools.

Rouse and Florian add that though it is easy to understand how the separate system of special education evolved in response to the exclusionary practices of schooling, it is much easier to see how the current practice depends on a set of practices which require another form of exclusion. To understand the practice, it is necessary to remember that the creation of special education as a separate system was in part a response to the exclusion of pupils with disabilities from regular schools. Thus, special education as an exclusive field of study originated in an act of discrimination but now it supports a profession i.e. teachers are nowadays trained in handling pupils with disabilities. Acknowledging this is a fundamental requirement in moving the debate about inclusive education forward. Consideration of the extent to which special education policy itself
leads to pupil exclusion, may be useful in illuminating the assumptions underlying and defining the way services are delivered. Thus, the development of practice can be a vehicle for change.

Rosenberg and Jackson (1988), report that fifty years ago (1959) in the United Kingdom, innovative professionals were able to demonstrate that all pupils could learn despite policies excluding certain pupils from school. Though the methods that were developed adhered to a behavioural model emphasizing a structural, teacher-directed approach to instruction the contribution of special education to the development of instructional methods with applicability to all pupils represent a significant advance in extending the right to education for all. Today, the same level of innovation is required to demonstrate how all pupils can learn together. Ainscow (1997), calls upon the teaching profession to develop ways of working so as to ensure the capacity of regular schools to accommodate successfully increasing levels of pupil diversity. Carpenter (1995), argues that inclusive education can be achieved if schools examine the content learned by each individual pupil. Meeting the needs of individual pupils through the process of curriculum delivery holds the key to successful inclusion.

According to the Report of the Taskforce on Special Needs Education (MOEST, 2003), inclusion is a philosophy built around the belief and understanding that education is a basic human right and the foundation for a just society. It takes the agenda of Education For All to design ways to enhance the capacity of the ordinary schools to serve all pupils in their natural communities. Around the principle of inclusive education, every school tries to cater for all pupils including those with varying disabilities for example, low intellectual capacity and abilities and above average for example, the Gifted and Talented. Inclusive education identifies the barriers that make it impossible for pupils with disabilities and special needs in education to access education and works with the local school community to remove such barriers. To achieve this objective, inclusive education mobilizes appropriate human, physical and material resources for the transformation of such schools.
According to UNESCO (2003), the population of people with disabilities in Kenya is estimated at 10% of the total population. About 25% of these are pupils. Out of a total of 750,000, an estimated 90,000 have been identified and assessed. However, only 14,614 are enrolled in educational programs for pupils with disabilities, while an equivalent number are integrated in regular schools. This implies that over 90% of pupils with disabilities are either at home or in regular schools with little or no specialized assistance. There is need therefore to enhance mobilization and awareness programs to eradicate taboos and beliefs associated with disabilities. In addition, we need to develop and implement a flexible and pupil-centered curriculum that can make education all-inclusive.

1.2 Statement of the Problem
The effective inclusion school according to Rouse and Florian (1996), acknowledges that a staff commitment to create and maintain a climate conducive to learning for all pupils require policies, leadership and long term professional development. The Salamanca Statement passed by UNESCO (1994), supports the practice of inclusive education for pupils with learning disabilities with the caution that while inclusive schools provide a favourable setting for achieving equal opportunity and full participation, their success requires a concerted effort, not only by teachers and school staff, but also by peers, parents, families and volunteers. The success of inclusive education therefore calls for positive attitude from the school heads and teachers and the general school community. But this is only possible where some of the pupils’ needs have been identified by their teachers, and then appropriate action is taken.

According to a report by the Department of Education, Training and Youth Affairs, Australia (2000), improving the literacy and numeracy outcomes for pupils is a key concern of any teacher, parent and the government. The presence of pupils with learning disability in the primary schools in Kenya is challenging as it clear that pupils with disability cannot learn at the same pace with non-disabled pupils. By including the pupils with disability in the same learning set up, it has been found that such pupils have been found to be left behind in terms of performance by their non-disabled counterparts. There
is therefore a need to provide effective assistance to pupils who need extra support, as part of ensuring that all pupils gain a level of literacy essential for successful participation in schooling, in work, and in everyday life. According to Doig, McCrae, & Rowe, (2003); McCain & Mustard, (1999), the prevention and intervention in early childhood is viewed widely in the community as important for increasing the opportunities of pupils at risk of poor learning outcomes, and for ensuring the educational success and general well-being of young people. However, effective intervention requires specialist knowledge about the instructional needs of pupils with Learning Disabilities (LD) and how best to cater for these needs.

Carrington (2000), adds teachers feel isolated for executing mandates that were developed without their consideration. Carrington further states that educationists develop policies and leave them upon the classroom teacher to implement. In a related study Thompson and Ross (2000), warned that increased pupil diversity and a shift in emphasis from knowledge to work; requires skilled teachers, who are expected to ensure that all pupils learn and perform at appropriate levels despite the fact that some have learning disabilities.

In Kenya, pupils with Learning Disabilities are joining the regular schools. In a study done by Gona (2004), on the identification of children with learning disabilities in Kilifi, the following disabilities were prevalent in the area: epilepsy 25.3%, walking 24.9%, seeing (6.3%), learning difficulties (18.6%), speaking 15.2% and hearing 10.1%. This evidence suggests that a number of disabilities exist in the regular school set-up. The presence of pupils with learning disabilities in the primary schools in Kenya is challenging; this is due to the fact that they cannot learn at the same pace with their non-disabled peers and the teachers are not well equipped with teaching/learning methods to enable them cope with pupils with LD. There is therefore a need to assess the awareness of teachers with regard to the learning disabilities of pupils and the possible interventions they employ in ensuring that no child is left behind because of the learning disabilities they have. It is upon this background that this study is aimed at assessing the teachers’
awareness and intervention approaches for pupils with learning disabilities in inclusive education in the regular school set-up.

1.3. The Purpose of the Study
The purpose of this study was to assess teachers' awareness and intervention for primary school pupils with learning disabilities in inclusive education in the regular schools in Makadara Division, Nairobi Province, Kenya.

1.4 Objectives of the Study
The specific objectives of this study were to:

1. To establish teachers' awareness and intervention for pupils with LD.
2. To establish the opinion of teachers towards inclusive education for pupils with LD.
3. To establish the teachers' academic and professional preparedness for Inclusive Education for pupils with LD.
4. To find out the challenges facing the success of inclusive education for pupils with LD.
5. To recommend on the ways of improving curriculum, educational facilities, materials and equipment in the schools for effective Inclusive Education.

1.5 Research Questions
The research questions arising from the stated objectives of the study sought answers to the following questions:

1. What is the extent of teachers' awareness and interventions for pupils with LD?
2. What are the opinions of the teachers towards Inclusive Education for pupils with LD?
3. What academic and professional competencies do primary school teachers have for effective Inclusive Education for pupils with LD?
4. What are the challenges facing the success of inclusive education for pupils with LD?
5. What would you recommend to be done to improve the curriculum, educational facilities, materials and equipment in the schools to ensure the success of inclusive education?
1.6 Significance of the Study

The findings of the study will provide useful insights on inclusive education to the primary school head teachers together with their teachers as they gain insight on the diversity of their pupils' learning disabilities.

By highlighting different interventions used by teachers, the findings of the study will help teachers by giving different ways of handling pupils with learning disabilities. This will enhance effective inclusive education in the regular school set-up as teachers will get to know how to handle students basing on their needs.

The findings of the study will in addition provide insight to the Ministry of Education policy makers on the importance of consulting the teachers who are directly in charge of the implementation of the inclusive education in the primary schools for the effectiveness of its implementation.

The pupils, especially those with learning disabilities are expected to benefit when the teacher's awareness and intervention of their special needs is aroused by the study and the teachers use up-to-date teaching/learning methods to teach them.

The parents of children with learning disabilities will also feel relieved when their child/children with learning disabilities are being taught by teachers who are aware of the existence of pupils with learning disabilities unlike previously when the teachers were not aware of the learning disabilities in the pupils.

The study will not only contribute to the existing body of knowledge on inclusive education in Makadara Division, Kenya, but also to the body of knowledge in this area. It may also stimulate prospective researchers to replicate the study in other parts of Kenya.
1.7 Scope and Limitations of the Study
This study focused on the teacher awareness of LD pupils and the possible intervention measures in Inclusive Education in Makadara Division, Nairobi Province, Kenya. The study assessed the perception of the teachers with regards to introduction of inclusive education in regular school set-up and their level of preparedness in terms of training to handle pupils with LD in a regular classroom setting. The findings of the study may not be used to generalize as the setting of the study locale may not be the same as of other parts of the country. Data collection was done during the holidays and during teachers’ strike in January, 2009 which paralysed learning in most parts of Kenya including Makadara Division and therefore, most teachers were not in their respective schools.

1.8 Assumptions of the Study
The following were the assumptions of the study:

- That inclusive education is taking place in Makadara Division, in Nairobi Province, Kenya.
- That special educators are involved in regular school set-up.
- That regular education teachers are involved in teaching pupils with LD.
- That teachers were undertaking intervention measures once they identified pupils with learning disability.

1.9. Theoretical Framework of the Study
This study was based on Piaget’s (1970), theory of cognitive development. A theoretical framework is a frame of reference that serves to guide a study. It helps to formulate the study’s research problems and defines what relevant data are. It also provides a basis for interpreting the gathered data.

According to Piaget’s (1970), theory, knowledge is equated with action. He states that, to know something means to act on that thing, with the action being either physical, mental or both. Knowledge then is a process rather than some stable state. To try to put a number on intelligence ignores the changing nature of a pupil’s interaction with the world. Piaget was interested in discovering the different ways pupils interacted with the
world to create knowledge. As pupils mature, they gain more experience, new social interactions and transmissions and their ways of knowing the world also change. They acquire new ideas and this, leads to learning, which is the permanent change in behaviour.

Piaget further argues that pupils gain knowledge through invention, that is, the pupil deduces the relationships from his or her interactions with the objects in different circumstances. It is therefore true that such knowledge cannot be taught by others since it is a complex process in which the pupil imposes upon the world. Although Piaget differentiates discovery from invention, both of these components of knowledge require the active participation of the pupil and the role of the teacher is one of a facilitator and a guide. The teachers should therefore structure some activities to provide the experiences necessary to encourage discovery and invention. The teacher therefore needs to view the material to be taught from the pupil’s point of view and to consider the pupil’s cognitive developmental level when formulating lessons, curricula and units.

Piaget’s theory also emphasizes the importance of giving pupils an opportunity to interact with the environment and with others. The psychology behind Piaget’s theory is that teachers can help their pupils by providing an environment that allows for this interaction with the environment through a variety of materials and other pupils since this gives pupils plenty of opportunity for discovery. If the pupils with special education needs were left to learn in segregated schools, then learning to them would be very limited in scope. They would be denied the opportunity to interact with their non-disabled peers and according to Piaget, interaction helps to enhance learning.

The prevailing view in special education around the world today is that pupils with special educational needs should, wherever possible, be educated with their peers in the regular school set-up. It is only in this way that the pupils with learning disabilities will interact with their environment and peers. The teachers should only be facilitators to ensure that learning takes place. Approaches and/or strategies in which changes can be made to the structure and organization of schools to encourage systematic inclusion are of vital concern (Pijl, et al. 1997).
1.10 Conceptual Framework on Teachers Awareness and Interventions for pupils with LD in inclusive Education

Source: Researcher (2008)

The conceptual framework above shows the relationship between the variables of the study. The independent variables are awareness of inclusive education and interventions for inclusive education while the dependent variable is effective inclusive education. In testing the awareness of inclusive education the variables such as: meaning of inclusive education, awareness of inclusive education in schools and identification of pupils with LD are used. On the other hand, to test on the interventions for inclusive education, the variables such as teacher interventions, teaching/learning strategies and teacher training and academic qualifications are used.
1.11 Operational Definition of Central Terms

**Awareness**: This is the ability to understand or to be conscious of what is happening in a learning environment especially in identifying the needs of pupils with learning disabilities.

**Curriculum**: The systematic planning of what is taught and learned in schools as reflected in courses of study and school programs.

**Curriculum Differentiation**: The adjustments of the curriculum so as to suit pupils with different abilities and capabilities in a given situation for example in Inclusive education.

**Disability**: The physical, sensory, mental, learning, behaviour disorders or other impairments, which have substantial long term or adverse effects on a person’s ability to carry out normal day to day activities.

**Division**: An administrative area within a district comprising all the schools and institutions located in the geographical area, usually headed by a District Officer (D.O.). An educational division is headed by an Assistant Education Officer (AEO) who reports to the District Education Officer.

**Implementation**: The stage at which syllabuses and teaching–learning materials are being used by the target group usually the teacher and the pupils.

**Inclusion**: A philosophy that all pupils including those with disabilities belong with their non-disabled peers and that all participants in any society should aim at ensuring all persons regardless of their disability are not excluded from any of the society’s activities including education. Their differences are respected, valued and implemented and practised.

**Inclusive Education**: An environmental situation where all pupils including those with learning disabilities in education participate in all activities in a school setting that recognizes and addresses their individual needs as much as possible.

**Inclusive Setting**: The opportunity for persons with disabilities to participate fully in all of the educational, employment, consumer, recreational, community and domestic activities that typify everyday society.
**Innovation:** Making changes or introducing new ideas with a view to improving the existing situation in this case educational services. It also refers to an improvement, which is measurable, durable and unlikely to occur frequently (Huberman, 1975).

**Integrated Education:** This is an educational provision that ensures that all pupils including those with special needs in education for example those with Low Intellectual Capacity and abilities for example the Gifted and Talented receive appropriate educational services within their neighborhood schools which they would have attended if they did not have any disabilities.

**Intervention:** This refers to the strategies for modifying the curriculum, teacher instructions, or student activities to meet the needs of pupils with LD.

**Learning Disability:** A disorder in one or more of the basic psychological processes involved in pupils understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. The term does not include pupils who have learning problems which are primarily the result of visual, hearing, or motor handicaps or mental retardation, or emotional disturbance or of environmental, cultural or economic disadvantage (Smith, Polloway Patton and Dowdy, 2001).

**Metacognition:** Pupils’ awareness of their own cognitive performance or abilities and their use of this awareness in altering their own behaviour.

**Normalisation:** Making available to all persons with disabilities, patterns of life and conditions of everyday living which are as close as possible to or indeed the same as the regular circumstances and ways of life of society (Nirje, 1985).

**Resource Rooms:** Classrooms where pupils with special needs go for short periods of the day for specialized instruction, like speech reading, Braille, orientation and mobility among others.

**Special Needs Education:** Education which provides appropriate modifications in curricula, teaching methods, educational resources, medium of communication or the learning environment in order to cater for individual differences in learning.
Special School: A school that is organized to exclusively provide educational services to pupils with disabilities.

Special Unit: A classroom(s) that is attached to a regular school, but set aside for educating pupils with specific type of disabilities for example mentally retarded, visually impaired among others.

Specialist Curriculum: A different curriculum from the regular curriculum that supports the implementation of the regular curriculum.

Strategy: An individual's approach to a task. It includes how a person thinks plans, executes and evaluates performance on a task and its subsequent outcomes. Pupils with LD may not automatically develop strategies for learning or the ones they develop may be inefficient or ineffective (Smith, Polloway Patton and Dowdy, 2001).

Whole Language Method: A reading approach among pupils that focuses on using writing, oral language and literature to develop reading and comprehension skills.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1 Introduction
This chapter presents Definitions of Learning Disabilities; Inclusionary Practices, promoting effective learning, Education in Kenya, Summary of related literature.

2.2 Definitions of Learning Disability

Smith, Polloway Patton and Dowdy (2001), define Learning Disabilities (LD) as multi-faceted and multidimensional. For the purpose of this study, pupils with LD are defined as, those who experience significant difficulties in acquiring literacy and numeracy skills and are performing at or below national ‘benchmark’ levels, but excludes pupils who have an intellectual, physical or sensory impairment. This group of pupils includes (but is not limited to) those with specific learning disabilities for example reading, writing and arithmetic, dyslexia, Attention Deficit Disorders and Attention-Deficit/Hyperactivity Disorder, and language and communication disabilities. Typically, these pupils have memory and organization problems and do not make satisfactory progress with the regular classroom curriculum.

According to Nathanson (1986), the basis for inclusionary education has been brought about from the beliefs that pupils with exceptional education needs would benefit both socially and academically in a learning environment with their age appropriate peers as opposed to being separated. Initially, LD pupils learned to adapt to their educational environment or chose not to participate in public education. With the compulsory school attendance laws, self-contained programs were introduced and schools were forced to educate all pupils including those with learning disabilities together. Prior to these laws, LD pupils were educated in a classroom setting separate from their age appropriate peers with smaller teacher-pupil ratio, and with a specially trained teacher.

As reported by Harwell (1989), research findings in the 1960’s showed that these practices were not considered educationally sound due in part to the following factors:
One, self contained programs carried a negative stigma. Two, behavior problems arose because special education pupils tended to imitate each others’ behaviors instead of imitating their non-disabled peers who were not available. Three, post high school integration of disabled and non-disabled individuals became almost impossible. Four, individuals with disabilities were not receiving educational opportunities that were equal to their non-disabled peers.

Lipsky and Gartner (1998), report that for more than a decade (from 1963-1974) in the U. S., LD pupils were served in self-contained programs separate from their age appropriate peers until Public Law 94-142 in 1975 evolved. The passing of this law usually referred to as Education of All Handicapped Pupils Act assured a free appropriate public education regardless of handicapping conditions. All pupils were to be educated in the “least restricted environment” (LRE) to the maximum extent possible. One practice brought about by this law was integration. Salisbury (1991), described integration as being an educational practice which allowed LD pupils to participate in general education programming for some part of the day, and being excluded from other age appropriate activities for the rest of the day. Salisbury further states that even after the passing of PL 94-142 and special programming changes, literature supported more inclusive programs for special education pupils to improve the quality of learning for both LD and non-disabled pupils. Fuchs and Fuchs (1994), concur that “Special classes, separate schooling, or other removal of LD pupils from the regular education environment occurs only when the nature and severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily”. “....The Education of All Handicapped Pupils Act was reestablished in 1991 as the Individuals with Disabilities Act (IDEA). Two issues brought to light again with the reestablishment of the act were least restricted environment and appropriate education. Kendall and DeMoulin (1993), argue that all handicapped pupils have available to them a free, appropriate public education which emphasizes special education and related services designed to meet their unique needs in the least restricted environment.
Lipsky and Gartner add that IDEA emphasizes two major principles: The education of pupils with disabilities should produce outcomes akin to those expected of pupils in general and pupils with disabilities should be educated with their regular peers”. Hence, inclusionary practices have evolved from years of educational changes and mandated laws developed to protect the educational welfare of pupils with special needs.

According to Smith, Polloway, Patton, Dowdy (2001), the initial studies of pupils later described as having learning disabilities were done by physicians interested in brain injury in the pupils in United Kingdom. Deiner (1993), states that over the years, various meanings were introduced into the literature to describe these pupils. The most common include minimal brain dysfunction (MBD), brain damage, central nervous system process dysfunction, and language delay. To add to the confusion, separate definitions were also offered to explain each term. The term specific learning disabilities was first adopted publicly in 1963 at a meeting of parents and professionals in Washington D.C, USA. Kirk (1962), developed the generic term learning disabilities in an effort to unite the field, which was torn between individuals promoting different theories regarding underachievement. The term was received favorably because it did not have the negative connotations of the other terms and did not describe the primary characteristics of the pupils. Smith et al. state that in 1968, a committee appointed by the U.S. Office of Education (USOE), developed a definition of learning disabilities as ‘a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations’. This definition has only been modified slightly over the years.

Hammill, Leigh, Mcnutt, and Larsen (1981), add that the U.S. Office of Education’s definition of learning disabilities has been used by a majority of states although it has been criticised over the years, for including concepts that are unclear or difficult to use to identify pupils with learning disabilities. The concept of deficits in “psychological processes” is the most nebulous and has been interpreted in several ways, including perceptual-motor deficits, deficits in the process of taking in information, difficulty in
making sense of information and expressing knowledge effectively, and deficits in cognitive processes such as attention, memory and metacognition (the way one thinks about and controls his or her cognitive processing, e.g., self monitoring, predicting, and planning). When the U. S. Office of Education (1997), published the criteria for identifying pupils with learning disabilities, the processing component was not included in the requirements, and the language and academic problems were described within the context of a discrepancy factor.

A more straightforward definition is offered by Harwell (1989), who identifies an individual with a learning disability as one who: can see, hear, has general intelligence in the near-average, average, or above-average range, but has educational disabilities that do not stem from inadequate educational experiences or cultural factors and does not acquire and use information efficiently because of an impairment in perception, conceptualization, language, memory, attention, or motor control. Harwell adds that perhaps the most difficult aspect of understanding and teaching pupils with learning disabilities (LD) is the fact that the disability is hidden. When pupils with obviously normal intelligence fail to finish their work, never seem to follow directions, and turn in sloppy, poorly organized assignments, it is natural to blame poor motivation, lack of effort or an undesirable family life. However, the lack of accomplishment and success in the classroom does have a cause; the pupils are not demonstrating these behaviors to upset or irrate their teachers. A learning disability is a cognitive disability; it is a disorder of thinking reasoning and also of memory. Because the dysfunction is presumed to be due to the dysfunction of the central nervous system, the disability is not visible.

In conclusion, Smith et al. assert that the pupils with LD experience frustration living with a disability that is not easily identified. Pupils with LD look like the other pupils in their grade. They can perform like the other pupils in some areas, but not in others. For example, a pupil may have good social skills and make good grades in math, but fail in reading. Another pupil may be able to read and write at grade level but fail in math and get in trouble for misconduct. Pupils with LD may also perform inconsistently. They may know spelling words on Thursday and fail to get the test on Friday. It is only the teachers
who have the keys to unlocking these pupils’ problems. This research therefore assessed teachers’ awareness and intervention of inclusive education for pupils with learning disabilities in Makadara division, Nairobi Province.

2.3 Inclusionary Practices

In the United States legislation has mandated that pupils with special needs be educated in the least restrictive environment which has led school districts to adopt some inclusionary practices. But it appears that the interpretation of inclusion has been left up to the individual districts, administrators, teachers and parents. Currently, numerous definitions and models of inclusion are practiced in the educational systems. Rogers, (1993), suggested not just a specific physical placement, but more of a philosophy on inclusion. He states that inclusion is the acceptance of pupils with special needs as full members of their home based schools where all educators have responsibility for all the pupils in the school.

Inclusion as a theme is particularly timely; the Salamanca World Statement (UNESCO, 1994), called on national governments to adopt the principle of inclusive education for all pupils. According to the Ministry of Education Science and Technology (2003), the Government of Kenya is responding to this through the Ministry of Education in conjunction with the Kenya Institute of Education, the Kenya Institute of Special Education, and the Quality Assurance and Standards Officers in an effort to having pupils with Learning Disabilities (LD) included in the regular/ordinary schools. In addition, Kenyatta University has implemented an inclusive education curriculum in its Bachelor of Education (Special Education) Degree.

As reported by Florian, (1998), the concept of inclusive education enjoys a high profile around the world by virtue of its incorporation into the policy documents of international organizations, most notably the United Nations Standards of UN policies such as those embodied in the UN Convention on the Rights of the Child (1989), the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993), and the UNESCO Report on the Education of Pupils with Disabilities (UNESCO, 1994) all
affirm the rights to equal education without discrimination within the regular education system. According to Florian, the study of the education of pupils with learning disabilities is rightfully placed within the context of inclusion. Sack (1997), amplifies that point by stating that:

Some models propose the inclusion of literally all pupils with disabilities and define this as full inclusion. Others define full inclusion as regular class placement for all pupils with disabilities, but for on a part time basis for some; still others propose the inclusion of pupils for whom it is appropriate or even suggest that separate, special schools are part of their inclusion plan.

Sailor (1991), defines full inclusion as possessing the following characteristics: special needs pupils attend the school that they would if they did not have a handicapping condition; naturally occurring proportion of special needs pupils are served at each school site; no pupil will be excluded from any educational opportunity because of a handicapping condition; schools as well as general education placement be in an age appropriate environment with no special education classes or self-contained programs operating at the site; practices including cooperative learning and peer tutoring are utilized; and special education support is provided in the general education classroom.

The U. S. Department reports that 55 % of pupils with disabilities are not fully included in regular classes, (U. S. Department of Education, 1997). This is despite the fact that laws require that pupils with special needs are to be educated with their age appropriate peers in the general education setting when appropriate.

2.3.1 Positive Aspects of Inclusionary Practices

According to Raschke and Bronson (1999), pupils who learn together learn to live together. This is despite the fact that we live under the assumption that we are more alike than different. In a related study, Friend and Cook (1996); Graden (1989); Phillips and McCullough (1990); Pugach and Johnson (1995); Salend (1994), add that advocates for inclusion stress that inclusionary practices are more true to life. No matter what the program, be it full inclusion or resource room practices, educational research supports the integration of disabled pupils into the general education classroom.
According to Smith, Polloway, Patton, and Dowdy (2001), academic achievement is improved when pupils with LD adhere to higher standards that are usually evident in a regular education classroom. In general, pupils with LD are more willing to put forth effort to comply with the standards in the general education classroom so that they may cope with their non-disabled peers. The report by UNESCO (1994), states that socially, pupils with LD have more opportunity to model appropriate behavior in the general education classes as compared to special education classrooms. Pupils with LD also have a better opportunity to establish friendships with regular peers. Furthermore, low acceptance by peers of pupils with LD has been a persistent problem, and there is concern that non-inclusive programs contribute to this. Taylor, Asher, and Williams (1987), in a related study concur that lack of membership in the classroom community, and overall low social status of pupils with LD are also a contribution of segregated educational practices.

After conducting a three year study on inclusion of pupils with LD in regular schools, Walther-Thomas, Korinek, McLaughlin and Williams (2000), concluded that a large majority of the pupils felt that inclusion helped improve their self-confidence and self-esteem. The teachers reported that many pupils with LD acquired a better attitude about others and themselves; demonstrated improved motivation; were less defensive; and were more concerned about homework and physical appearance. Denton and Foley (1994), reported that inclusion improved pupils' self-concept, which led to more appropriate behavior, better school attendance, and higher motivation. Through peer interaction, opportunities for learning new skills presented themselves more readily in the general education setting.

In their study, Gibb, Young, Allred, Cyches, Egan and Ingram (1997), reported their findings on parents whose children participated in inclusionary programs. The Parents stated that their children enjoyed school more than when they were in a segregated environment, and that they had greater feelings of accomplishment. Gibb et al. (1997), add that inclusionary practices improved the self-image of pupils with learning disabilities. The non-disabled pupils were more willing to socialize with peers with LD
and the pupils with LD appeared to have friends without disabilities. Lowenbraun, Madge, and Affleck (1990), found that parents of pupils with LD rated inclusionary classrooms and resource rooms equally in regard to academic growth, but considered inclusionary programs superior in the promotion of self-esteem and social opportunities: 87% of the parents whose pupils had participated in both inclusionary classrooms and resource rooms preferred the inclusionary setting.

Raschke, and Bronson (1999), add that inclusionary programs are not only beneficial to pupils with disabilities, but benefits for their non-disabled peers have also been documented. Pupils are able to experience diversity in a small setting, which develops respect for diverse characteristics along with sensitivity toward others' limitation. Inclusionary practices for pupils with LD in the general education classroom provide opportunities for teachers to teach as well as help other pupils.

2.3.2 Negative Aspects of Inclusive Education Practices

According to Kauffman (1995), advocates against inclusionary programs argue that inclusive programs are not able to meet the individual needs of pupils with learning disabilities. Originally, both gifted and talented and pupils with LD were segregated from their general education peers because they were better served in segregated programs. Willis (1994), adds that other advocates against inclusion stated that in an effort to make classrooms more suitable for pupils with LD, the curriculum may be watered down, therefore neglecting the challenges of average or higher functioning pupils.

In their research, Gibb, Young, Allred, Cyches, Egan and Ingram, (1997), indicate that some parents of pupils with learning disabilities who compared inclusionary programs with segregated programming felt that inclusive programs did not provide adequate individualized instruction for their pupils with LD. Other concerns were that their pupils' self-image was poorer when they compared themselves to their non-disabled peers. According to Baker and Zigmond (1990), and McIntosh (1993), evidence suggests that pupils with LD will not do well in general education classroom settings, where non-modified instruction is the norm and where whole group instruction is the teaching
approach for the majority of the instructional time. In a similar study, Vaughn, Boss and Schumm (2000), state that furthermore, general education teachers do not feel that they are adequately prepared to meet the specific educational needs of pupils with LD. Smith et al. (2001), insist that extensive interventions for the general education teacher, along with appropriate modifications and accommodations for the pupils with LD must be provided in the general education setting to make it the most suitable learning environments for all involved.

2.4 Promoting Effective Learning

There are different ways of promoting effective learning for pupils with LD. The following are some of the ways of promoting effective learning:

2.4.1 Motivation: Self-efficacy and self-concept

Linnenbrink and Pintrich (2002), in their study report that sometimes in everyday discussion we may comment that the pupil is ‘motivated’ or ‘not motivated’, or how highly the pupil is motivated. In this view, motivation is conceptualized as a stable trait of an individual and motivational factors are separated from cognitive factors in understanding a pupil’s achievement. Pupils can be motivated in multiple ways and the important issue is in understanding of how and why pupils are motivated for school achievement. The common belief is that that motivation is shaped by the pupil’s active regulation of his/her motivation, thinking, and behaviour and that this mediates the relationship between the person, context and eventual achievement. This means that the pupil’s own thoughts about their motivation and learning play a key role in mediating their engagement and subsequent achievements.

Bandura (1997), states that self-efficacy beliefs, attributions, development of intrinsic motivation and goal orientations are some of the most important constructs in understanding motivation. Self-efficacy has been defined as the individual’s beliefs about their performance capabilities in a particular context or a specific task or domain. Self-efficacy has been positively related to higher levels of achievement and learning, higher
levels of effort, and increased persistence on difficult tasks. According to Linnenbrink and Pintrich, (2002), pupils who have more positive self-efficacy beliefs (i.e. "I can learn spelling") are more likely to work harder, persist, and eventually achieve at higher levels. They are also more likely to participate in more difficult courses. Lyytinen, Rasku-Puttonen, Poikkeus and Ahonen (1994), in their study on pupils with LD further agree that self-efficacy is best facilitated by providing opportunities for the pupil to succeed on tasks within their range of competence. Through these experiences the pupil can actually develop new capabilities and skills. The importance of emotions, motivation and teaching-strategies for learning new concepts, especially in pupils with learning disabilities, was also shown in a Finnish study.

2.4.2 Basic Processes and Skills
According to Tallal and Benasich (2002), developmental language learning impairments are one of the most prevalent of all developmental disabilities and occur in pupils for a wide variety of reasons. Many developmental cognitive disorders (e.g. mental retardation, autistic spectrum disorders, ADHD, Down Syndrome, Fragile X and Klinefelter's Syndrome) may include delay in language development. It has been estimated that approximately 20% of all pupils have some form of language (oral or written) learning impairment and seven per cent of pupils have significantly below average language development of unknown origin.

2.4.3 Study Skills and Learning Strategies
Melzer (1996), asserts that effective learning results when pupils' application of specific learning strategies interacts with a wide range of other processes like automatic retrieval of basic skills, appropriate attention in learning situation, self-awareness, motivation and self-concept. Learning strategies or study skills are especially important when the pupil has problems in basic skill or attention deficits. Pupil's awareness of his or her own study skills and strategies and learning disabilities is an important intermediate step for strategic learning.
In the figure below adapted from Meltzer, processes contributing to learning are divided into two levels: the lower level of motivation, self awareness and self-concept, and the upper level of cognitive or neurocognitive processes. All these interacting processes are important for effective learning.

Figure 2: Illustration of Effective learning


Pupils with learning disabilities often demonstrate ineffective study skills. They tend to assume a passive role in learning and rely on teachers or parents to regulate their studying. These pupils are not always aware of the purpose of studying and do not monitor their understanding of context. They do not go back in the text when they do not understand the content and they often use similar fixed strategies in dissimilar problem solving tasks. This behaviour demonstrates that they do not exhibit an executive level of thinking in which they plan and evaluate their studying.
Gettinger and Seibert (2002), grouped the most important study skills into four clusters: repetition-based skills, procedural study skills, cognitive-based study skills and metacognitive skills. There is now a lot of evidence supporting the effectiveness of study skills to promote academic competence among pupils. Harvey and Goudvis (2000), report that overall, study-skills instruction has been shown to improve academic performance, strategic knowledge, and affective responses among pupils with learning problems across multiple academic domains.

2.4.3.1 Repetition-Rehearsal Based Strategies
These strategies are most useful when storing small bits of information for the short term, or when content being studied is used frequently. There is extensive evidence of creation and use of mnemonic devices involving mental imagery. Academic performance is significantly better when pupils receive training in creating mental imagery devices, such as keywords, than when they learn a simple rehearsal technique. Although pupils do not spontaneously use mental-imagery on their own, they can be assumed to do so.

2.4.3.2 Procedural or Organization-Based Study Skills
Lack of organization is common among pupils with poor study skills. Procedural study skills encompass the behaviours and habits that allow pupils to maximize the benefits of their study time (e.g. time management, material organization, development of schedules or consistent study routines). Studies offer some guidelines for best-practice: complete difficult work at times when you are most alert and least distracted; divide long assignments into shorter units; vary the type of study tasks and be flexible in scheduling breaks and rescheduling study time if conflicts rise.

2.4.3.3 Cognitive-Based Study Skills
The goal of these skills is to guide pupils to engage in appropriate thinking about information they are required to learn. The greater knowledge pupils have about content, the more likely they are to think about, understand, and remember it. Studying is enhanced when new material is meaningful to pupils, and integrated with their existing knowledge. It follows that good studying requires the pupils to: activate assemble
background information prior to studying, connect new ideas, information, or concepts to what they already know and develop new schemata, when necessary, to integrate content to be learned. The use of semantic maps as visual representations of the interrelatedness of ideas, question generation and summarizing the main ideas are good examples of cognitive organizers.

2.4.3.4 Metacognitive-Based Study Skills
Montague (1998), argues that the extent to which pupils apply study skills when the need arises largely on their metacognitive capabilities (i.e. ability to assess the need for studying, to plan, implement, monitor, and evaluate study approaches). Whereas cognitive-based study strategies relate to how pupils process information, metacognitive strategies relate to how pupils select, monitor, and use strategies in their repertoire. Pupils with learning disabilities lack the metacognitive skills necessary to become successful independent pupils, but research has demonstrated that training can significantly improve pupils’ metacognitive abilities. It is interesting that pupils with learning disabilities appear to make the greatest gains when they use metacognitive-based study strategies.

2.5 Effective Practices of Teaching Pupils with LD
The Commonwealth of Australia (2005); Ellis (2005); Hoad et al. (2005); Purdie and Ellis, (2005), concur that from the local and international evidence-based research, the following teaching strategies are consistently identified as ‘effective’ for pupils, whether or not they experience learning disabilities:

2.5.1 Corrective Reading
This is a direct instruction approach to the teaching of reading with individuals or small groups—characterised by explicit performance expectations, systematic prompting, structured practice, monitoring of achievement, reinforcement and corrective feedback. A widely used corrective reading program is Reading Mastery for pupils. This program uses an explicit phonics approach and emphasises pupils’ ability to apply thinking skills in order to comprehend what they read.
2.5.2 Explicit instruction

According to Rosenshine (1986), this is a systematic method for presenting material in small steps, pausing to check for pupil understanding, and eliciting active and successful participation from all pupils'. In a study by Engelmann (1999); Kameenui, Simmons, and Dickson (1997, grounded in behaviourist theory, this mode of instruction places emphasis on the learning environment and gives little attention to the 'causes' of learning disabilities or the pupil’s underlying abilities. Farkota (2003), and Hempenstall (1996), add that direct instruction programs are designed according to ‘what’ and ‘how’, not ‘who’ is to be taught. Individual differences among pupils are allowed for through different entry points, reinforcement, practice, and correction strategies. Hattie (2003 & 2005), state that the findings from meta-analyses of more than 500,000 studies consistently indicate that direct instruction methods have significantly greater positive effects on pupils’ learning progress than any other methods.

2.5.3 Phonics

Center (2005); Ehri, Nunes, Stahl and Willows (2001), define phonics as the explicit teaching of reading and spelling via letter-sound correspondences involving decoding and phoneme/grapheme translations.

2.5.4 Phonics Instruction

Ehri, et al. (2001), report that phonics Instruction is different from instruction in phonemic awareness to the extent of providing explicit instruction and practice with reading words in and out of text. Several approaches have been used to teach phonics systematically, including: synthetic phonics, analytic phonics, embedded phonics, analogy phonics, onset-rime phonics, and phonics through spelling. Key features of these approaches are summarised below:

Analytic Phonics uses a whole-to-part approach that avoids having pupils pronounce sounds in isolation to recognise words. Rather, pupils are taught to analyse letter-sound relations once the word is identified. For example, a teacher might write the letter ‘p’ followed by several words: put, pig, pet, play. The teacher would help pupils to read the
words by noting that each word begins with the same sound that is associated with ‘p’. Synthetic phonics programs use a part-to-whole approach that teaches pupils to convert graphemes into phonemes (e.g., to pronounce each letter in ‘stop’, /s/-/t/-/o/-/p/) and then blend the phonemes into a recognisable word.

Embedded phonics and onset-rime phonics approaches teach pupils to use letter-sound relationships with context clues to identify and spell unfamiliar words encountered in text. For example, sheep in a ship, sheep in a jeep etc. These embedded phonics delight children while they also emphasize repeated orthographic patterns that children need to learn.

Analogy phonics teaches pupils to use parts of written words they already know to identify new words. For example, pupils are taught a set of key words that are posted on the classroom wall (e.g., tent, make, pig) and are then taught to use these words to decode unfamiliar words by segmenting the shared rhyme and blending it with a new onset (e.g., rent, bake, jig).

Phonics through spelling programs teach pupils to segment and write the phonemes in words. Ehri et al. (2001), add that some phonics programs are hybrids that include components of two or more of these approaches, and may differ in important ways. Two of these ways include: (a) the extent to which the teaching approach involves direct instruction in which the teacher takes an active role in eliciting pupil responses, or a ‘constructivist’, problem-solving approach is used; and (b) how interesting the explicit instructional activities are for teachers and pupils.

2.5.5 Strategy Instruction

According to Dole, Brown, and Trathen (1996), this strategy assumes an active reader (mostly for pupils beyond the early years of schooling) who constructs meaning by using existing and new knowledge, and the flexible use of cognitive and meta-cognitive strategies to foster, monitor, regulate and master comprehension. In contrast to direct instruction, which focuses primarily upon the acquisition of foundational skills (a
‘bottom-up’ approach), *strategy instruction* aims to develop pupils’ higher-order cognitive abilities (a ‘top-down’ approach).

2.6 Less Effective Practices of Teaching Pupils with LD

From the local and international evidence-based research, the following teaching strategies are consistently identified as ‘less effective’ for pupils, whether or not they experience learning disabilities. Despite its various forms and wide endorsement throughout the education community (Ellis, 2005; Purdie and Ellis, 2005), research findings from the application of constructivism, as a theory of knowing and learning rather than of teaching, indicate that the literacy and numeracy learning needs of pupils with learning disabilities are not served well.

2.6.1 Constructivism

The key element in constructivism is that the learner is an active contributor to the learning process, and that teaching methods should focus on what the pupil can bring to the learning situation as much as on what is received from the environment. This approach has its origins in the work of Piaget, Bruner and Vygotsky. According to Ausubel (1968), the most important single factor influencing learning is what the learner already knows. The type of Learning that builds effectively on the learner’s current knowledge is said to be within the pupil’s zone of proximal development (ZPD). The ZPD establishes what the learner already knows, and can do with minimal assistance by a teacher or peer – following which the individual is expected to undertake learning tasks independently.

Cambourne (2002), emphasizes that the role of the teacher is to be a *facilitator* of learning, rather than a director, and to provide opportunities for individual pupils to acquire knowledge and construct meaning through their own activities, and through discussion, reflection, and the sharing of ideas with other pupils with minimal corrective intervention. Sasson (2001), refers to *constructivism* as ‘... a mixture of Piagetian stage theory with postmodernist ideology that is devoid of evidence-based justification for its adoption as an effective method of teaching. In brief, *constructivism* emphasises the
formation, and the pedagogical strategy of 'scaffolding'. Cambourne (2002); McInerney and McInerney (2006), insist that the adoption of a constructivist approach in the classroom involves a shift from predominantly teacher-directed methods to pupil-centred, active discovery learning and immersion approaches via cooperative group work, discussion focused on investigations and problem solving activities with which pupils with learning disabilities struggle to engage purposefully and successfully. Its tenets have given rise to what is known and practiced as whole-language approaches to literacy instruction and to the teaching of reading in particular.

2.6.2 Whole-language Teaching Approach

Essentially, the whole-language approach to teaching and learning reflects a constructivist philosophy of learning in which pupils are viewed as inherently active, self-regulating pupils who construct knowledge for themselves, with little or no explicit decoding instruction. However, there is a strong body of evidence that whole-language approaches are not in the best interests of pupils experiencing learning disabilities and especially those experiencing reading disabilities. Munro (1997; 1998; 1999 & 2000), emphasises that similarly, for pupils from disadvantaged backgrounds who often do not have rich phonological knowledge and phonemic awareness upon which to base new learning, being taught under constructivist modes has the effect of compounding their disadvantage once they begin school. This is particularly the case for pupils from non-English speaking backgrounds, including Indigenous pupils where English may be their second or third language.

2.7 Teachers Interventions for Inclusive Education

Teachers should provide a wide range of interventions to meet individual needs for pupils with LD. The following are some of the interventions used by teachers in inclusive education:

2.7.1 Enhancing Content learning through listening

Pupils will not listen simply because they are told to do so. Rather, they often need oral presentations provided in ways that promote successful listening Wallace, Cohen and
2.7.1 Enhancing Content learning through listening

Pupils will not listen simply because they are told to do so. Rather, they often need oral presentations provided in ways that promote successful listening. Wallace, Cohen and Polloway (1987), also argue that pupils who struggle with selective attention (i.e., focus) or sustained attention (i.e., maintained over a period of time) respond more easily to speaking that supports the listener. Teachers should therefore provide oral presentations in ways that promote successful listening. This can be achieved through: repetition, vocal emphasis and cuing, enhancing listeners’ participation in form of clarification, feedback or responding, providing information in short units, accompanying oral presentations with visual aids that emphasize important points.

2.7.2 Adapting Oral Presentations

According to Chalmers (1991), Cheney (1989), Dowdy (1990), and McDevitt (1990), for effective presentation of content and to facilitate effective learning, teachers should follow specific considerations: one; use concrete concept before teaching abstractions (i.e. teach the concept of freedom by discussing specific rights to which pupils are entitled) when mastering of prior content is uncertain. Two; provide pupils with an overview before beginning. Three; reduce the number of concepts introduced at a given time. Four; encourage pupils to detect errors in messages and report what they could not understand. Five; reduce distractions within the learning environment (visual or auditory). Six; keep oral directions short and, direct and supplement them with written directions as needed. Seven; provide repetition overview and additional examples. Eight; provide further guided practice by requiring more responses, lengthening practice sessions or scheduling extra sessions. Nine; clarifying directions for follow-up activities so that tasks can be completed successfully.

2.7.3 Adapting Reading tasks

CEC (1997); Chalmers (1991); Cheney (1989); Gartland (1994); Hoover (1990); Reynolds and Salend (1990); Schumm and Stricklers (1991), add that teachers should consider options for adopting the task of textual materials. This is to establish a given assignments’ purpose and importance, highlight key words and phrases (e.g. colour
that the students can use them rather than simply recognize them, use individual conferences with students to verify their comprehension, locate lower level content material on the same topic to adapt tasks for pupils with reading difficulties, tape texts or have it read orally to a pupil, utilize advanced organizers and visual aids (e.g. charts and graphs) to provide an orientation to or supplement reading tasks, demonstrate how new content relates to the content previously learnt, encourage students to facilitate their comprehension by raising questions about text’s content.

2.7.4 Enhancing Written Responses
Chalmers (1991); Cheney (1989) and Dowdy (1990), emphasis that teachers should enhance written responses to improve the pupils writing ability by: avoiding assigning excessive amounts of written class work, allowing the pupils to select the most comfortable method of writing (i.e. cursive or manuscript), change the response made to oral when appropriate, set realistic and mutually agreed upon expectations for neatness, allow pupils to circle or underline responses, let the pupils type or tape record answers instead of giving them in writing, fasten materials to the desk to alleviate coordination problems, reduce amount of board copying or text copying and allow sufficient space for answering problems.

2.7.5 Promoting following Instructions and Completing Assignments
Teachers should enhance pupils’ ability to follow instructions by: getting pupils attention before giving directions, musing alerting cues, giving oral and written directions, giving one direction at a time, quietly repeating the directions to the students after they have been given to the entire class, checking for understanding by having the students repeat the directions, breaking up tasks into workable and obtainable steps and including due dates, providing examples and specific steps to accomplish the tasks, listing or posting requirements necessary to complete each assignment and checking assignments frequently.
2.7.6 Involving Peers
Slavin (1987), states that cooperative learning has been promoted as a key means of facilitating the successful inclusion of pupils with LD in general education classrooms. It is categorized by classroom techniques that involve pupils in group learning activities in which recognition and reinforcement are based on group rather than individual performance. Heterogeneous small groups work together to achieve a group goal and an individual pupils' success directly affects the success of other pupils.

2.8 Education in Kenya
In Kenya, both government and great majority of the population perceive education and training as factors that influence development in important ways. The experience of developed countries and world wide research findings bear witness that education and training are positively correlated with development. The role of education can be summarized as assisting the establishment of human resource base necessary for the generation of wealth and, more important, its application to the creation of a higher standard of living and improved standard of life. Although education and training play a major role in imparting skills that complement capital in the production of wealth, the human resource base comprises more than the labour force. Providers of education and training include both the state and the private sector. The Ministry of Education is in charge of Early Childhood Care and Development, Free Primary and Secondary Education, Special Education, Vocational and Technical Training.

The Ministry of Culture and Social Services has general responsibility for Adult and Continuing Education. It is also involved in education programmes for out of school youth, and manages the Adult Literacy Programme. The provision of education through non-public sector takes two forms. The NGOs (including religious organizations) and donors collaborate with the state in management and financing of public education training system. The private entrepreneurs have also set up institutions for catering for pupils at all levels of education and training.
According to MOEST (2003), since January 2003, when the National Rainbow Coalition (NARC, 2002), government came into power; major reforms to revamp the education sector have been implemented. The reforms cut across the major sub-sectors in education, i.e. Early Childhood Education, Primary Education, Technical, Industrial, Vocational and Entrepreneurship Training (TIVET) and Tertiary Education. According to Persons with Disabilities Act (2003), No person or learning institution shall deny admission to a person with a disability to any course of study by reason only of such disability, if the person has the ability to acquire substantial learning in that course. Special schools and institutions shall be established to cater for formal education, skills development and self-reliance for persons with diverse needs in education. The right education will be achieved through the provision of an inclusive and quality education that is accessible and relevant to all Kenyans.

2.8.1 Special Needs Education in Kenya

At the end of the Second World War (1945), many soldiers returned home disabled. These soldiers therefore needed rehabilitation services such as vocational training, guidance and counseling and this marked the beginning of Special Needs Education in Kenya. The Salvation Army played a crucial role at the beginning which was later emulated by the Lutheran and Catholic Churches. The efforts of the churches were complemented by those of charitable and non-governmental organizations such as Red-cross and Rotary clubs.

Special schools for persons with visual impairments, hearing impairments, mental handicap and physical handicaps were developed from 1940s. The first school was Thika School for the blind, which was established in 1946. This was followed by St. Nicholas Special School for the Mentally Handicapped (presently Jacaranda Special School) in 1948. Aga Khan Unit for Deaf Pupils was established in Mombasa in 1958 at the same time with Egoji School for the blind (now St. Lucy). The first school for pupils with physical handicaps was started at Dagoretti in 1961 followed by Joytown in Thika in 1962. Since then, Kenya has continued to offer both segregated and integrated special needs education.
According to the World Health Organisation (WHO) estimates, about 10% of any population has disabilities. It is therefore estimated that Kenya with a population of about 30 million people (1999 Census) has about 3 million people who have disabilities. Since 44% of Kenya’s population is aged below 15 years, it is estimated that about 1.3 million children aged between 0-15 years have disabilities. The statistics further indicate that approximately 1.8 million people in Kenya aged between 0-19 years have disabilities (National Development Plan, 2002-2008). Statistics received from various ordinary/regular schools throughout Kenya indicated that about 10-15% of children in regular classes are those with special needs in education. Enrollment in special education is low given that out of a total population of 750,000 children of school going age with disability; only an estimated 90,000 have been assessed. Of this number, only 26,000 are enrolled in educational programs. This implies that over 70% of handicapped children are at home.

According to the UN Convention on Rights of the Child (CRC), which was ratified by the Government of Kenya in 1990, a child with disability has the right to special care; education and training to help him or her enjoy a full and decent life in dignity and to achieve the greatest degree of self-reliance and social integration possible. Every child has a fundamental right to education and must be given the opportunity to achieve and maintain an acceptable level of learning. This is emphasized in the Kenya Children’s Act (2001). It is the responsibility of school managers to ensure that pupils with special needs in education get access to quality teaching and learning. The goal here is to inculcate positive values in the school community to ensure support for pupils with special needs in education for quality teaching and learning.

Integrated programs were introduced in Kenya in the mid 1970s, following the global trends. In this regard, special units mainly for pupils with mental challenges and for those with hearing impairments were set up in regular schools. Small homes for children with physical disabilities were built and the Kenya Integrated Education Program (KIEP) for pupils with visual impairments were initiated and later emulated by Lutheran and Catholic Churches. In Kenya, many problems were experienced right from the onset of
integrated education. Such problems include lack of preparation by schools, lack of resources and lack of adapted curriculum. The communities were not informed of what their roles would be and even the pupils did not understand why they were being moved from their special schools to regular schools. Before schools got to terms with the philosophy of integration, inclusive education was being introduced. Inclusive education requires proper planning and adequate support in terms of resources, legislation and commitment from stakeholders. It also calls for a complete attitudinal change by the government, communities, service providers as well as the pupils, both with and without special needs in education.

2.8.2 Kenya Institute of Special Education (KISE)

According to the legal notice number 17 of 1986, Kenya Institute of Special Education (KISE) was established as an institute that is managed by a council as opposed to a Teachers' Training College which was run by a Board of Governors (BOG). However, since its inception in 1986, the institute has been like any other diploma teacher training college with some of its key activities being controlled by some external bodies. The Kenya Institute of Education (KIE), develops KISE curriculum and the inspectorate is in charge of the moderations of its examinations. The admission of students at the institute is done by the directorate while Teachers Service Commission (TSC) is in charge of staffing.

KISE has offered SNE training to professionals from different countries such as Uganda, Malawi, Zambia, Tanzania, Ghana, Somali and Ethiopia among others (MOEST, 2003). Currently, KISE is collaborating with Uganda National Institute of Special Education (UNISE) and University of Oslo. Since KISE was established, it has trained approximately 741 teachers at diploma level and 3214 at certificate level through residential and in-service courses. Currently, there is another group of 5700 teachers on KISE distance learning program. Maseno and Kenyatta Universities have trained about 300 teachers. The MOEST (2003) report, further states that KISE offers both Diploma and short courses. Diploma courses in special needs education for primary school teachers are offered at KISE through full time and distance learning modalities. KISE
also runs in-service residential courses for specific areas of special needs education at both certificate and at Diploma levels. SNE teachers in the country are mainly trained at the Kenya Institute of Special Education, Kenyatta, Maseno, Nazarene and Kenya Methodist Universities.

2.9 Summary of Related literature

In view of the reviewed literature, the passing of Public Law 94-142, the Education for All Handicapped Pupils Act (1975), and the renewed mandate of this law known as Individuals with Disabilities Act (IDEA), gave hope for the pupils with learning disabilities. This law emphasized the need for education for all pupils in a “least restrictive environment” this is because it became apparent from the review that self-concept in a pupil was important. A child begins to develop at a young age when he/she is able to interact with their environment and possess the ability to interpret feedback from others and school environment should be exception. Becker (1982), also adds that pupils with learning disabilities are at risk of developing a low self-concept because they are more insecure about their abilities. There is therefore the need to identify them on the basis of a detailed profile of their needs following assessment.

A learning disability is a cognitive disability; it is a disorder of thinking and reasoning. Pupils with LD experience frustration living with a disability that is not easily identified as they look like the other pupils in their grade. They can perform like the other pupils in most of the areas, but not in others. Pupils with LD are more willing to put forth efforts to comply with the standards in the general education classroom. It is only the teachers who can identify the special education needs. The literature review described inclusive education and the processes leading to its establishment and the best instructional and learning methods, the teacher awareness and their possible interventions. This lead to the concern on teachers’ awareness of learning disabilities and the possible intervention mechanisms they put in place for inclusive education in Makadara Division, Nairobi Province, Kenya.
The study has also reviewed literature on the interventions by teachers in ensuring successful inclusive education. The study found out that teachers use different interventions and strategies in inclusive education in their attempt to ensure that pupils with LD are not left behind by their peers. The study also reviewed literature on education in Kenya where special needs education is reviewed. The reviewed literature has also highlighted the institutions offering special education in Kenya.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction
In this chapter, the researcher describes the methods used and how the study was conducted. The chapter contains research design, the study locale, population, sampling techniques, the data collection methods and the methods in data analysis.

3.2 Research Design
Orodho (2004), defines a research design as a scheme, outline or plan that is used to generate answers to research problems. Kerlinger (1973), also comments that a design is a plan, structure and strategy of investigation which seeks to elicit answers to various research questions. In this case, the researcher found it appropriate to use a descriptive survey research design to investigate teacher awareness and intervention for pupils with LD in Makadara Division, Nairobi Province, Kenya. The purpose of descriptive survey is basically to observe, describe and document aspects of a situation as they naturally occur hence the choice for the study. The fact that it is not concerned with characteristic of individuals as individuals but provides information about population variables makes it my preferred design. According to Gay (2003), a descriptive survey is, a process of collecting data in order to answer questions concerning the current status of the subject. Abagi (1995), asserts that a descriptive survey research attempts to describe what was/is in a social system such as the school. Although Verma and Beard (1981), claim that survey does not seem to aspire to develop an organized body of knowledge, however, they also point out the fact that it does provide information for further research of an experimental nature. Nisbet and Entwistle (1972), concur with the two scholars by stating that survey is used for the whole wide range of pupils which involve observation of a situation as it is, without setting up experimental conditions or allocating groups to different treatments. The survey was therefore chosen as it seemed appropriate with regards to the study which was being carried out as it involved observation of situations in the randomly selected schools.
3.3 Location of the Study

The study was done in Makadara Division, Nairobi Province, Kenya. Makadara is one of the eight divisions that make up Nairobi Province. Makadara Division has common boundaries with Makadara Constituency of Nairobi. The entire division is located within Nairobi City Council area. The division has an area of 20 km². According to 1999 census survey, Makadara has a population of 276,277 people. The division is divided into two zones, Buruburu and Viwanda zones. Buruburu has fourteen primary schools while Viwanda has twelve primary schools. The economic activities of the people living in Makadara include: high income from salaried employment, established trading high returns, casual employment, petty trading and those without any income generation. Socially, the division has established health facilities, churches, recreational facilities and schools.

There is inclusive education in the primary schools in Makadara Division. This means that pupils with learning disabilities are taught together with other non-disabled pupils in the regular schools in the division. Due to this, the researcher chose to carry out the study in the Division to assess whether teachers are aware of the availability of children with learning disabilities and the strategies used by the teachers to ensure that they all get quality education. The financial and time constraints were factors considered by the researcher in choosing the study locale. There appeared to be no research carried out on Inclusive Education for the pupils with LD in the Division. The choice of Makadara division had been influenced by the research done by Wamahiū and Karugu (1995), Singleton (1993), and also Best and Kahn (1993), who point out that sometimes being familiar with the research site helps in gaining acceptance. They further argue that ‘if participants are consistently hostile or even indifferent towards you, your research cannot proceed.’ The researcher was familiar with Makadara Division, and hence data collection was not hindered by the respondents’ hostility due to suspicion or the researcher’s lack of familiarity with the division. Singleton (1993), argues that the ideal setting for any study is the one that is directly related to the researcher’s interest, easily accessible and allows for the development of immediate rapport with the informants. Best and Kahn (1993), point out that accessibility and cost factors are legitimate considerations for any research.
It is worth noting that familiarity with the respondents can be problematic. In the case of familiarity, the respondents may refuse to co-operate with the researcher since they would feel that the researcher already knows the situation in the area of study. The researcher must work with one group but must be aware of how to handle his or her respondents with integrity. Co-operation which goes a long way in assisting the researcher achieve his or her set objectives by establishing a good working rapport with the respondents is very important. This researcher had taken all these points into consideration.

3.4 The Target Population

Cooper (1996), defines a population or universe for a survey as any group of individuals or institutions which have one or more characteristics in common that are of interest to the researcher. The target population comprised all the teachers in the 26 public primary schools in Makadara Division. In addition, the target respondents for the study included special education teachers, regular education teachers and Head teachers. There are approximately 800 teachers in the 26 primary schools in Makadara Division. The teachers were chosen for this study because they were the major agents in any curriculum implementation as they receive, interpret, implement and evaluate any curriculum package. They are also in direct contact with pupils and it is their responsibility to effectively implement Inclusive Education for pupils with LD. The special education teachers were vital in this study because they are more versed with Inclusive Education.

The school heads are in-charge of their respective schools and they also supervise the schools to ensure effective implementation of the curriculum by the respective teachers. Hence, they provide the required resources and the general guidance to teachers in the process of carrying out their administrative duties. The school heads may facilitate or hinder effective implementation of Inclusive Education.
3.5 Sampling Procedures and Sample Size

Wiersma (1985), defines sample as a small proportion of a target population selected using some systematic procedures for the study. He points out that an ideal sample should be large enough so that the researcher can be confident within specified limit and be certain that different sample procedures can give approximately similar results.

3.5.1 Sampling Procedure

According to Mugenda and Mugenda (1999), descriptive research requires ten percent of the accessible population which is adequate for a sample. The study used simple random sampling method to select 10 primary schools out of the possible 26 schools in the division spread across the two zones. These are Buruburu and Viwanda zones having fourteen and twelve schools respectively. The purposive sampling was used to select the head teachers from the sampled schools. Simple random sampling method was used to sample teachers from the sampled schools. Nungu (1997), states that purposive sampling helps the researcher to only select the element which fits the description of the study. Simple random sampling method was used because it gives equal chances to every element being selected, thereby reducing the degree of biasness.

3.5.1 Sample Size

A total of 30 respondents were chosen for the study. Lindsey (1985), observes that the minimum permissible sample size is 30 sample units and argues that the error in basing a conclusion about an entire population on a small sample is likely to be very small. The respondents chosen comprised of 10 head teachers, 10 regular education teachers and 10 special education teachers, this gave a total of 30 samples for the study.

3.6 Data Collection Instruments

In formulating the research instruments, the researcher ensured the following; that the objectives of the study were clear; suitability of each instrument e.g. literacy level of the targeted respondents and the availability of the targeted group for the study. The study used questionnaires, interview schedules and lesson observations.
3.6.1 Questionnaires for the Teachers and the Head Teachers

Orodho (2004), defines a questionnaire as an instrument used to gather data, which allows a measurement for or against a particular viewpoint. He emphasizes that a questionnaire has the ability to collect a large amount of information in a reasonably quick space of time. Wiersma (1980), states that a questionnaire is a list of questions or statements to which the individual is asked to respond in writing. Verma and Beard (1981), clarifies that a good questionnaire should not only represent the aims of the researchers who send it out, but should also allow for the full variety of possible answers.

The researcher chose to use questionnaires since the targeted population were considered learned and therefore through this instrument, much of the data which were required for the study would be easily provided. Additionally, the researcher administered the questionnaires to the respondents which they in-filled themselves; this helped to save time during the data collection process. There were two sets of questionnaires namely: Regular and Special Education Teachers' questionnaire presented in appendix II and Headteachers' questionnaire presented in appendix III. The questionnaires were divided into different sections where each section contained the questions on a particular objective of the study. The questionnaires contained both open ended and closed ended questions.

3.6.2 Interview Schedules for the School Heads

Yin (2003), states that interviews are one of the most important sources of data and defines the interview as a two-way conversation that gives the interviewer the opportunity to participate actively in the interview. The interview is structured and based on predetermined questions. According to Yin (2003), the open ended type of interview is the most commonly used interview method as the researcher asks the respondent unstructured questions, thus allowing the interview to be more of a discussion. The respondents can be asked for facts as well as their personal opinion. Kerlinger (1973), observed that more people are willing to communicate orally than in writing and will therefore provide data more readily in an interview. The researcher therefore chose to use interviews in this study.
Face to face interview was used for the study where the interviewer asked the interviewee oral questions with regard to the objective of the study. This was mainly used to get more information regarding the topic of the study and through this the questions which could not have been captured in the questionnaires were asked. This method of data collection proved to be flexible and adaptable way of finding things out; this is particularly because it provided in-depth information about particular research issues and questions. The researcher interviewed 10 head teachers from ten schools in Makadara Division. The interview schedule used for the study is presented in appendix IV.

3.6.3 Lesson Observation Schedules

Mugenda (2008), states that in the field of social sciences, one of the most important and extensively used research methods is observation. The researcher observed two teachers of Inclusive Education from two randomly selected schools as they teach different subjects in the current 8-4-4 system of education. This enabled the researcher to identify various difficulties encountered by teachers in Inclusive Education. The researcher mainly concentrated in class four to seven. The class eight was not ideal because it was an examination class. The lower classes were also left out because the young pupils mostly acknowledge the presence of their class teachers with whom they are familiar. The researcher used the lesson observations to endeavor to answer such questions like the subject being taught, the topic being taught, the objectives, teaching/learning resources, the number of pupils being taught, the schemes of work and lesson plans. This observation was aimed at finding out the challenges to Inclusive Education by observing the classroom set-up and learning characteristics of pupils while in class. The observation Schedule used for the study is presented in appendix V.

3.7 Pilot Testing of Instruments

A pilot test was undertaken to test the feasibility of the study. Areas of the questionnaire that were unclear to respondents were clarified and the questionnaire further refined. This was done to ensure that the instruments yielded the needed data. Two schools were randomly sampled for the pre-test outside the 10 sampled schools for the actual study. The researchers randomly sampled one regular teacher and one special education teacher
and a head teacher from each of the selected schools for pre-test. After piloting, the ambiguous questions were corrected and the questionnaires given back to the same respondents to check if they yielded the same data.

3.8 Validity of Instruments
Validity is the appropriateness, meaningfulness and usefulness of the specific inferences researchers make in the data they collect. It refers to the degree to which results obtained from the analysis of the data actually represent the phenomena under study. According to Verma and Beard (1981), validity is the degree of success with which a technique or an instrument is measuring what it claims to measure. In order to test the validity of the instruments, questionnaires were first scrutinized and approved by two university supervisors from the Educational Management, Policy and Curriculum Studies and the department of Early Childhood.

3.9 Reliability of Instruments
According to Mugenda and Mugenda, (2003); Orodho (2004), reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. The questionnaires were tested for reliability by use of split-half method. The method involves scoring two halves usually odd and even items of a test separately for each person and then calculating the correlation coefficient for the two sets (halves) of scores. The coefficient indicates the degree to which the two halves of the test provide the same results and hence describes the internal consistency of the test.

The researcher will use Spearman Brown Prophecy formula:

\[
\frac{2 \times \text{Corr. Between the Halves}}{1 + \text{Corr. Between the Halves}} \text{ OR }
\]

\[
Re = \frac{2r}{r + 1}
\]

Where \(Re\) = reliability of the original test
\[ r = \text{reliability of the coefficient resulting from correlating the scores of the odd items with the scores of the even items.} \]

A coefficient of 0.70 is considered adequate but a coefficient of 0.80 is good according to Gay (2003). The study achieved a coefficient of 0.713 for teachers’ questionnaires and a coefficient of 0.700 for the head teachers’ questionnaires. The findings fall between the required range of between 0.70 - 0.80.

### 3.10 Data Collection Procedure

The researcher obtained a letter from Kenyatta University allowing her to go to the field. This letter was taken to the Permanent Secretary Ministry of Education and a permit to collect data was issued. The researcher administered each of the instruments to the respondents for the purpose of collecting data. According to Yin (2003), this was done in an effort to overcome the likelihood of the respondents discussing amongst themselves the appropriate answers to write. The questionnaires were personally administered to all the teachers of Inclusive Education in the ten sampled schools in the Division. The researcher travelled to each of the ten schools under study for familiarization purposes before the instruments were administered, and also to obtain the permission of the respective school heads and teachers of the sampled schools. These teachers were expected to respond to all the open and closed-ended questionnaire items.

Interview schedules were used to solicit views from the head teachers. The researcher administered the questionnaires personally to the respondents; the questionnaires were given to the respondents and were collected the following day by the researcher. This gave the respondents enough time to answer the questions. The interviews were also conducted personally by the researcher. The researcher sought for appointment with ten head teachers from the different schools within the location of the study and thereafter the interviews were then conducted. The head teachers were interviewed so that the researcher could get more information on their knowledge and opinions on Inclusive Education. The researcher observed two teachers in two different schools teaching classes five and six respectively after obtaining permission from their head teachers.
3.11 Data Analysis

Data collected were edited to identify and eliminate errors made by respondents. This was done by doing away with the inappropriate answers given during the data collection. Code numbers were assigned to each answer of survey question and from there coding list or frame were obtained. Coding was expected to organize and reduce research data into manageable summaries. The coded items were then analyzed with the aid of computer software for analyzing data, Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequencies and percentages were used to describe data. Content analysis was used to analyze the data obtained by the use interview schedules. According to Cooper (1996), content analysis is appropriate for analyzing content of a communication. The researcher therefore was convinced that the content analysis was the most appropriate to analyze the information obtained in during interview. The analyzed data were presented using pie charts, bar graphs, line graphs and tables where necessary.
4.1 Introduction

This chapter presents the analysis and findings of the study. The data were analyzed in two categories; the quantitative analysis which was used to analyze the data collected by questionnaires and content analysis for the interviews and observation. The researcher interviewed 10 head teachers from 10 schools which were randomly selected. An observation was made in two primary schools in Makadara Division; where two teachers were observed teaching classes five and six.

A total of 30 respondents comprising of 10 head teachers, 10 regular education teachers and 10 special education teachers were sampled for the study. Out of the 30 respondents sampled for the study, 28 responded giving a response rate of 93%. For the purpose of showing the relationships among various variables, quantitative analysis was done using percentages and frequencies. Bar graphs, pie charts and tables were used to present the findings. The following sections present the findings of the study as per the objectives.

4.2 Respondents bio-data

The bio-data comprised of gender, level of Education, professional qualifications, subjects taught, classes taught and teaching experience.

4.2.1 Distribution of Respondents by Gender

The study sought to establish the gender composition of the respondents and therefore asked them to indicate their gender. According to the results, 57% of the respondents were female while 43% were males. Out of the nine head teachers who responded, only two were male while seven were female, representing 90% and 20% respectively.
4.2.2 Distribution of Respondents by Level of Education
The respondents were asked to indicate their highest academic qualification. The study established that 79% of the respondents had University and teacher college education and only four per cent had A-Level education, while 17% had form four level of Education. Figure 4.1 below shows the presentation of the analysis.

Figure 4.1: Distribution of Respondents by Level of Education

4.2.3 Distribution by Professional Qualifications
The study sought to establish the professional qualifications of the teachers and therefore asked respondents to indicate their highest professional qualification. According to the results of the study, 79% of the teachers who responded had University and teacher college education qualifications. This was because teachers initially trained as P1 certificate holders and then enrolled for degree programmes in the Universities for further education. They attained Bachelor of Education Degrees to become graduate teachers. The study also found that all the head teachers had Approved Teacher Status qualification.

4.2.4 Distribution of Respondents by Subjects Taught
The respondents were asked to indicate the subjects they taught in the school curriculum. According to results of the study, 21% of the respondents taught mathematics and
The study shows that 14% of the respondent teachers taught a combination of social studies, CRE and languages that is Kiswahili and English. The findings are presented in figure 4.2.

**Figure 4.2: Subjects Taught**

![Diagram showing distribution of respondents by subjects taught]

4.2.5 Distribution of Respondents by Job Experience

The study sought to establish from the head teachers how long they had served as head teachers. It was found that majority of the teachers (61%) had taught for a period between 5-10 years. The results also revealed that 35% had taught for less than five years while only four per cent had taught for a period of over 15 years. From the results, it was evident that majority of the respondents had taught for a long period and therefore are considered experienced. The findings of the study were as presented in Figure 4.3.
4.3 Teacher Awareness of Inclusive Education

In this section the study sought to establish the extent of teachers' awareness as far as the learning needs of pupils with LD was concerned. The respondents were therefore asked to indicate their awareness and the findings presented in the subsequent sections.

4.3.1 Understanding of Inclusive Education

The teacher respondents were asked to indicate what they understood by the word inclusive education. Seven respondents (32%) did not respond to the question. According to 13 (68%) respondents, inclusive education was referred to as a system of education where all the pupils with or without learning disabilities are taught together in the same classroom regardless of their differences. These findings confirm that teachers understood what inclusive education is and their explanation of inclusive education agrees with Sailor’s (1991), definition of inclusion. Sailor referred to inclusive education as the case whereby pupils with learning disabilities attend the same school with their non-disabled peers and that all pupils are treated equally with no special classes, but cooperate learning and peer tutoring are utilized and special education support is provided in the general education classroom.
4.3.2 Awareness of Inclusive Education in Schools

The teacher respondents were asked to indicate whether they were aware of practices/intervention strategies of inclusive education in their schools which include corrective reading, direct instruction, phonics, and strategy instruction. The study found that 63% of the respondents indicated that they were aware of inclusive education practices in their schools. It was also found that 37% of the respondents indicated that they were not aware of inclusive education in their schools. The findings are as presented in Table 4.1 below. This was a clear indication that inclusive education was practiced in the primary schools in Makadara Division in Nairobi and that teachers knew what inclusive education entailed.

Table 4.1 Awareness of Inclusive Education in schools

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware of inclusive Education</td>
<td>12</td>
<td>63</td>
</tr>
<tr>
<td>Lack of awareness of inclusive education</td>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

4.3.3 Identification of pupils with Learning Disability

The respondents were asked to indicate whether they had identified pupils with learning disability among the pupils they taught. The results were as presented in figure 4.4. It was found that 79% of the respondents had identified pupils with learning disabilities. Only 21% had not identified pupils with learning disability. From the findings of the study, it can be said that the teachers were aware of the inclusive education in their schools as they could identify the students with learning disabilities.
4.4 Teachers Intervention for inclusive Education

In this section, the researcher sought to establish the teachers' intervention to inclusive education in primary schools in Makadara Division, Nairobi Province, Kenya. The findings of the study are presented in the subsequent sections:

4.4.1 School Administration Support for Teachers Involved in Inclusive Education

Teachers were also asked to indicate whether the school administration supported teacher involvement in inclusive education by providing teaching-learning resources or not. According to the results, only four teachers (20%) out of 19 indicated that the school administration supported teacher involvement in inclusive education for pupils with LD by providing teaching-learning resources. The study found that the schools supported teachers by inviting visitors with the knowledge to give insight on how to handle pupils with LD. A respondent also indicated that they get inducted by the head teacher who has the knowledge on special needs education.

4.4.2 Teaching Strategies used by teachers for Intervention in Inclusive Education

The study sought to establish the extent to which the respondents used teaching strategies as interventions for inclusive education to assist pupils with LD. The teachers were asked to indicate the extent to which different teaching strategies were used in inclusive education in their schools. The findings of the study are presented in Table 4.2.
Table 4.2 Types of Teaching Methods were used for Intervention

<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Not at all (%)</th>
<th>Very little (%)</th>
<th>Sometimes (%)</th>
<th>Quite a lot (%)</th>
<th>No Response (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrective approaches for reading and/or mathematics</td>
<td>0</td>
<td>7</td>
<td>14</td>
<td>64</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>Direct (explicit) instructions for maths and/or reading</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>36</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>Systematic phonics for the teaching of reading</td>
<td>0</td>
<td>14</td>
<td>36</td>
<td>36</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>Strategy Instruction approaches for reading and maths</td>
<td>0</td>
<td>7</td>
<td>43</td>
<td>36</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>Teacher ‘connectivity’ with pupils’ individual learning needs</td>
<td>7</td>
<td>14</td>
<td>50</td>
<td>14</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>Teacher ‘connectivity’ with pupils as ‘valued persons’</td>
<td>7</td>
<td>0</td>
<td>14</td>
<td>50</td>
<td>29</td>
<td>100</td>
</tr>
<tr>
<td>Constructivist approaches for reading and/or maths</td>
<td>0</td>
<td>14</td>
<td>21</td>
<td>50</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>Whole-language approaches to literacy, and especially to reading</td>
<td>0</td>
<td>29</td>
<td>35</td>
<td>21</td>
<td>14</td>
<td>100</td>
</tr>
</tbody>
</table>

The findings of the study in Table 4.2 show that generally the teachers used the listed teaching strategies as interventions for inclusive education to assist the pupils with LD but the degree of application differed. It was found that 64% of the teachers used corrective approaches for reading and/or mathematics quite a lot. The use of this method as discussed in the literature emphasizes pupil’s ability to apply thinking skills in order to comprehend what they read. It was also found that 50% of the teachers sometimes used direct (explicit) instructions for reading and/or mathematics. The finding shows how the teachers have internalized inclusive education as they are able to accommodate the pupils with LD. According to Rosenshine’s (1986), version of direct instruction, a teacher should present materials in small steps, pausing to check if pupils understand and ensuring participation from all pupils.

According to the results, 36% of the respondent indicated that they sometimes used systematic phonics to teach reading while the same percentage used this method quite a lot. According to Ehri, Nunes, Stahl and Willows (2001), found that it is very important to read words in learning. This method is very important in assisting pupils with reading problems. The results also show that 43% of the teachers sometimes used strategy instruction approaches for reading and mathematics and 36% used the method quite a lot.
Other results show that 50% of the teachers sometimes used teacher ‘connectivity’ with pupils’ individual learning needs. 50% of the respondents used teacher ‘connectivity’ with pupils as ‘valued persons and constructivist approaches for reading and/or mathematics quite a lot. This is a very important learning method according to Piaget (1970), in which the learner takes the active role in the learning process.

4.4.3 Teachers intervention for Inclusive Education

The respondents were asked to mention the interventions used by teachers in inclusive Education; the following were the responses given: One, teachers provide options for pupils to demonstrate their knowledge or skills (e.g. video tape presentations, artwork and oral or written presentation). Two, teachers accommodate individual differences among the pupils by identifying a preferred style of teaching/learning by either providing instruction and direction in the preferred style or teaching in a multi-sensory fashion that stimulates both auditory and visual perception. Three, teachers set guidelines for appropriate classroom behaviour and help the pupils to work towards them. Four, teachers modify activities into simpler units and plan the activities from the simplest to the most complex ones to enhance the understanding of the pupils with LD.

4.5 Teachers opinion on Inclusive Education

To establish teacher’s opinion towards inclusive education, the study tested on whether the pupils with LD should be given special treatment, whether the preparation given to the teachers to handle inclusive education was adequate and to find out the suggestions for ensuring the success of inclusive education.

4.5.1 Special Treatment for Pupils with LD

The study sought to establish from the respondents whether the pupils with learning disabilities should be given special treatment or they should be left to adapt to the arrangements prevailing in the regular/ordinary schools. Table 4.3 presents the findings of the study.
Table 4.3: Special Treatment for Pupils with LD

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should be left to adapt to the arrangements in regular school set-up</td>
<td>12</td>
<td>63</td>
</tr>
<tr>
<td>Should be given special treatment</td>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

According to the results on table 4.3, 63% of the respondents indicated that the pupils with learning disabilities should be left to adapt to the arrangements prevailing in regular school set-up while 37% indicated that these pupils should be given special treatment for example; individual attention and remedial classes after normal school hours.

Those who thought that the pupils with LD should be left to adapt to the arrangements of the regular school set-up actually agree with the Salamanca Statement (1994), that all pupils have the right of equal education without discrimination within the regular education system. The result also concur with Sailor (1991), in that in an inclusive education environment, there shall be no special education classes or self contained programs operating at the site.

4.5.2 Adequacy of the preparations given to Teachers to handle Inclusive Education for pupils with LD

The respondents were asked to indicate whether the preparations given to teachers to handle inclusive education were adequate. The findings of the study revealed that 42% of the respondents indicated that the preparations were adequate. It was also found that 58% of the respondents indicated that the preparations were inadequate. The findings of the study were as presented in Figure 4.5. From the findings of the study, it is clear that according to the teachers interviewed; teachers were not adequately prepared to handle inclusive education.
4.5.3 Suggestions for Successful inclusive education

The respondents (teachers and head teachers) were finally asked to give their opinions on what should be done to ensure the success of inclusive education. They gave the following suggestions: one, more teachers should be trained in handling pupils with LD. Two, the pupils with LD should be given special treatment. Three, the teachers should offer remedial classes to pupils with LD. Four, more teachers should be employed by the government to cope with increased number of pupils with/without disabilities due to free primary education. This will enhance the success of inclusive education.

4.6 Academic and Professional preparedness for Inclusive Education

The teachers were asked to describe their academic and professional preparedness for inclusive education and the following were their responses:

4.6.1 Teachers with Special Training in Handling Pupils with LD

The respondents were asked to indicate whether they had any special training to handle pupils with learning disabilities. The findings as presented in Figure 4.6 show that 71% of the respondents had no training on how to handle pupils with learning disabilities. Only 29% indicated that they had received some training. This implies that the achievement of the inclusive education may not be realized as most teachers do not have the necessary skills and knowledge needed to handle the pupils with LD.
When the teachers were asked whether they would like to be trained on how to handle pupils with LD, 86% of the respondents indicated that they were willing to take part in training to gain the necessary skills and knowledge to handle pupils with LD.

4.6.2 Preparations given to Teachers to Handle Inclusive Education
The respondents were asked of the preparations given to teachers to handle inclusive education. The findings of the study showed that one of the preparations was through offering in-service training to teachers. Another preparation was that the schools ensured that the teaching/learning resources were available.

4.6.3 Frequency of attending In-service Training by the teachers
The head teachers were asked to indicate how often the teachers attended in-service courses to prepare them to handle pupils with LD. The findings were as shown in Table 4.4.

Table 4.4: Frequency of attending in-service training by Teachers

<table>
<thead>
<tr>
<th>Frequency</th>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>Twice a year</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Often</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Not often</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 4.4 shows that five (56%) of the respondents indicated that teachers attended in-service training once a year and two (22%) indicated that teachers attended the in-service training twice a year. The head-teachers were also asked the last time the teachers attended these trainings, they indicated that the courses were attended during April, August and December holidays.

When the head teachers were asked to comment on the preparations given to the teachers to handle inclusive education for pupils with LD; they all indicated that the teachers were well prepared with the skills and knowledge acquired through in-service training for the success of inclusive education.

4.6.4 Regular Schools Preparedness for Pupils with LD

The study sought to establish the preparedness of regular schools for pupils with LD. As presented in Figure 4.7, 62% of the head teachers indicated that the regular schools were not prepared for the pupils with LD, while 38% indicated that the schools were prepared for these pupils.

Figure 4.7: Regular Schools Preparedness for Pupils with LD

The respondents were asked to expound on the preparedness of the regular schools to handle pupils with LD. Those who indicated that the schools were prepared stated that the schools have facilities required to cater for pupils with LD and that there were qualified teachers to handle pupils with LD. Those who stated that the regular schools were not prepared for pupils with LD argued that there was a shortage of qualified teachers to handle pupils with LD. The respondents indicated that enough research had not been done before the adoption of inclusive education.
4.7 Challenges to Inclusive Education

The study sought to establish whether there were challenges to inclusive education in schools. According to the findings, 57% of the teacher respondents indicated that they had not experienced any challenge when handling pupils with LD in inclusive education. It was also found that 43% of the teacher respondents had experienced challenges in handling pupils with LD in inclusive education. The results were as presented in Figure 4.8.

**Figure 4.8: Challenges in Teaching in Inclusive Education**

The respondents were asked to indicate the challenges experienced in inclusive education for pupils with LD. All the respondents indicated that it is difficult to complete the syllabus in time because pupils with LD slow down the teaching/learning process pulling back the other non-disabled pupils.

Another challenge mentioned by the respondents was that pupils with learning disabilities sometimes behaved like they had mild mental disorders which most teachers do not realize. This according to the respondent was posing major problems to the teaching of inclusive education.

The researcher observed that there were 65 pupils in one stream which made it impossible for the teacher to give pupils with LD any attention; hence the teacher could not test the understanding of the pupils during lessons by giving an exercise and marking it.
4.8 Content Analysis of Interview Guide and Observation

The interview method of collecting data involved presentation of oral-verbal stimuli and reply in terms of oral verbal response. This proved to be a flexible and an adaptable way of getting the data which were required to achieve the objectives of the study. The face to face interview offered a possibility of modifying one line of inquiry, following up interesting responses and investigating the underlying motives. Through the interviews, the respondents were able to provide in-depth information about the study objectives and questions. This made it ideal for investigating confidential information which could not have been gotten in a group set-up.

The researcher interviewed ten head teachers from the sampled schools. The specific questions were aimed at getting information on: whether the regular schools were prepared for the pupils with learning disabilities, whether the teachers in their schools attended in-service courses in preparation for inclusive education and the frequency of their attendance, to give comment on the preparation given to teachers to handle Inclusive Education for pupils with learning disability and finally to give suggestions on the ways of minimizing barriers to Inclusive Education in the regular schools.

The response given on the question on the gender of the interviewees showed that many of those interviewed were female head teachers. This could not be considered as biasness in the selection of the respondents but was as a result of the selection of the schools whose head teachers were to be interviewed.

The other interview questions were asked according to the specific objectives of the study. The summary of the response given according to each objective are as presented below.

4.8.1 Preparedness of the Regular Schools for Pupils with Disability

With regard to this objective, the interviewees were asked whether the regular schools were prepared for the pupils with learning disability. All the head teachers interviewed agreed that most of the regular schools were prepared for such pupils. When they were
Further asked to give an explanation, their responses were that; some of the schools already had teachers who were trained in handling pupils with learning disabilities and that some schools also had special units for pupils with disabilities.

The interviewees were also asked to give information on how often the teachers in their schools attend the in-service courses in preparation for Inclusive Education and when they last attended the interviews. The response revealed that most of the in-service courses were attended during the holidays and at least twice in a year. It was also found that most of the teachers had attended the trainings in the past one year.

The respondents were asked to comment on the training given to teachers in preparation for handling pupils with learning disabilities; one of the comments given by most of the interviewees was that the training courses attended by teachers gave them adequate preparations to handle inclusive education for pupils with learning disabilities. Another comment was that schools should arrange for in-service training for teachers handling pupils with learning disabilities.

4.8.2 Challenges to Inclusive Education for Pupils with Learning Disability

The interviewees were asked to mention the challenges facing inclusive education for pupils with learning disabilities in schools. The responses given were: both parents and their children were unwilling to open up for the fear of being isolated and that there was inadequacy of trained teachers to handle pupils with LD.

The head teachers were also asked what their schools had done to minimize the barriers to Inclusive Education. The interviewees stated that; schools were encouraging parents to take their children for pre-school classes so that those with disabilities could be identified earlier in life and possible interventions taken. The schools were setting up streams specifically for pupils with LD and that some schools were equipping their libraries with books to create a reading culture at an early stage of a pupil’s life.
The findings from the interviews therefore revealed that regular schools were prepared for pupils with learning disabilities and that one of the challenges facing the teaching of Inclusive Education was inadequacy of trained teachers to handle pupils with learning disabilities.

4.8.3 Observation Schedule

The researcher also used observation method of data collection. Lesson observation schedule was used in two Primary Schools. The main objective was to learn how the teachers handled the pupils and to establish the understanding capacities of the pupils in the class as the lesson progressed. This was with an aim of understanding the environment of the regular schools with regards to Inclusive Education.

It was observed that one of the streams chosen (class five) had a class capacity of 69 pupils while the other stream (class six) had 65 pupils. It was worth noting that due to this large number of pupils, the teacher was not at able to pay attention to individual pupils. This revealed that for the success of Inclusive Education, the class capacity was found to be one of the most important issues that should be addressed.

The researcher also observed that most of the pupils in that class were not paying attention as the teacher was teaching. This was because most of the pupils were busy playing in class as the teacher was teaching. It was also observed that the teacher was not able to look at every pupil’s exercise books even for those with disabilities. This was attributed to the fact that the class had a large number of pupils making it impossible for the teacher to mark and comment on each pupil’s work.

It was revealed from the observations made that one of the challenges facing the teaching of inclusive education in schools can be attributed to the large number of pupils per class.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter seeks to evaluate the thesis as a whole in order to determine whether the objectives of the study had been achieved. The main objective of the study was to assess the teachers' awareness and intervention for pupils with learning disabilities in inclusive education in the regular schools in Makadara Division, Nairobi Province, Kenya.

It commences with a recap of the purpose of the study followed by a discussion of the major findings of the study. The chapter ends by giving the conclusions of the study and recommendations for further study.

5.2 Summary

A total of 30 respondents comprising of 10 head teachers, 10 regular education teachers and 10 special education teachers were given questionnaires. Out of which nine head teachers and 19 teachers (28 in total), responded giving a response rate of 93%. The researcher also conducted interviews with 10 head teachers and an observation done in two schools. The study established that 79% of the respondents had teacher college/University education. The study also found that all the head teachers had Approved Teacher Status (ATS) professional qualification.

The study established that the respondents were aware of the meaning of inclusive education as 68% of the respondents indicated that inclusive education was considered as a system of education where all the pupils with or without learning disabilities are taught together in a classroom regardless of their differences. 63% of the respondents indicated that they were aware of inclusive education practices in their schools. The study established that 79% of the respondents had identified pupils with learning disabilities in their schools.
In establishing the teachers’ interventions for inclusive education, the study found out that the school administration supported teachers involvement in inclusive education by providing teaching-learning resources as indicated 20% of the respondents. The study also established that the teachers used different learning strategies e.g. using corrective approaches for reading as indicated by 64% of the respondents, using direct (explicit) instructions for reading and/or mathematics as indicated by 50% of the respondents, using systematic phonics to teach reading as indicated by 36% of the respondents and the use of ‘connectivity’ with pupils’ individual learning needs as indicated by 50% of the respondents.

The study also established different teachers’ interventions for inclusive education as: providing options for pupils to demonstrate their knowledge or skills (e.g. video tape presentations, artwork and oral or written presentation). Another intervention was that teachers accommodate individual differences among the pupils by identifying a preferred style of learning and either providing instruction and direction in the preferred style or teaching in a multi-sensory fashion that stimulate both auditory and visual perception. It was also mentioned that teachers set guidelines for appropriate classroom behaviour and help the students to work towards them. Finally it was mentioned that teachers modify activities into simpler units and plan the activities from simplest to the most complex ones; this is to enhance the understanding of the pupils with LD.

To establish teachers’ opinion on inclusive education, it was found that 57% were of the opinion that pupils with learning disabilities should be left to adapt to the arrangements prevailing in regular schools. It was also found that 58% of the respondents were of the opinion that teachers were not adequately prepared to handle inclusive education. The teachers therefore suggested that: more teachers should be trained in handling pupils with LD, the pupils with LD should be given special treatment, more teachers should be employed by the government to cater for the increased number of pupils enrolment as a way of enhancing the success of inclusive education and that teachers should offer remedial classes for pupils with LD.
In establishing the preparedness of the teachers for inclusive education, the study found out that only 29% of the teachers interviewed had been trained in handling pupils with LD. The study also found out that one of the ways in which teachers were prepared to handle inclusive education was by going for the in-service training. In establishing the regular schools preparedness in handling inclusive education, the study found that 62% of the head teachers indicated that the regular schools were not prepared for the pupils with LD.

The study found that the main challenges to inclusive education was the covering the syllabus. They gave the reason that pupils with LD slowed down the teaching/learning process. This was particularly when the teacher wanted to ensure that the pupils with LD had fully grasped the content which the teacher was teaching at that particular moment. This mostly resulted in pulling the other pupils behind and resulted in the syllabus not being adequately covered. The solutions offered by respondents included teaching all the pupils in class but offering remedial classes to the pupils with LD after class time was over. The head teachers also mentioned that schools should provide the teaching-learning resources to ensure the success of inclusive education. The respondents indicated that the schools invited visitors with the knowledge to give an insight to the teachers on how to handle pupils with LD.

From the interviews and observation, it was revealed that regular schools were prepared for pupils with learning disabilities and that one of the challenges facing the teaching of Inclusive Education was the inadequacy of trained teachers to handle pupils with learning disabilities. Another challenge to the teaching of inclusive education in schools was attributed to the large number of pupils per class since the introduction of Free Primary Education.
5.3 Conclusion

The study established that the teachers were aware of inclusive educations in their schools. The study also found out that teachers had different interventions and teaching strategies in ensuring the success of inclusive education e.g. use of corrective approaches, direct instructions, systematic phonics and using connectivity with pupils’ individual learning needs. It was further established that teachers were of the opinion that pupils with LD should be left to adapt to the arrangements prevailing in the regular school set-up. The study also established that teachers were not prepared professionally to handle inclusive education. This was supported by the fact that only 29% of the teachers interviewed have trained in handling pupils with LD. The study also concluded that the main challenge facing inclusive education was covering the syllabus in time. The researcher finally concluded that teachers were aware of inclusive education in primary schools and that there were interventions in place to ensure the success of inclusive education in primary schools in Makadara division.

5.4 Recommendations

The study recommends that more awareness be created in order to ensure that all the pupils with LD benefit from education just like their non-disabled peers.

Secondly, even though the school administration seems to be doing everything possible to ensure that the teachers acquire the necessary skills through in-service training, the study recommends that the government should come up with a policy whereby the teachers are mandated to attend refresher courses to enable them acquire more skills to effectively handle pupils with LD.

The study recommends that teachers should come up with other intervention measures on how to handle pupils with learning disabilities to ensure the success of inclusive education.
Lastly, the study recommends that schools should ensure that they are equipped with teaching/learning resources for the teaching of inclusive education for pupils with LD as this will help the teachers teach without much difficulty.

5.5 Recommendations for Further Research

This study was carried out in the primary schools in Makadara Division, Nairobi Province, Kenya only. The study recommends that similar studies should be done in other primary schools in other regions in Kenya, with an aim of assessing teacher awareness and intervention for pupils with LD in inclusive education. It was recommended that similar studies should be carried out in other African countries. This is because the researcher believes that pupils with LD in other African countries are experiencing the same problems in inclusive education. This should be done with the aim of comparing the teacher awareness and interventions for pupils with LD in inclusive education in African countries to the teacher interventions for pupils with LD in inclusive education in Kenya and the entire world.
REFERENCES


Consultation and Collaboration in Special Programs (2nd ed.).
Merrill, Columbus, OH.


http://www.thecanadianencyclopedia.com/index.cfm?

Dear Madam/Sir,

RE: PERMISSION TO CARRY OUT RESEARCH IN YOUR SCHOOL.
I am a Master of Education (M.Ed) student at Kenyatta University. I am required to submit as part of my research work assessment, a thesis on "Assessment of teacher awareness and intervention of inclusive education for pupils with learning disabilities in Makadara Division in Nairobi". To achieve this, you as the principal of this institution together with your teaching staff have been selected to participate in the study. I kindly request you as the head of the school together with one regular teacher and one special education teacher, to fill the attached questionnaire to generate data required for this study. This information will be used purely for academic purposes and will be treated in confidence and will not be used for publicity. Neither your name nor the name of your institution will be mentioned in the report. The findings of the study, shall upon request, be availed to you.

Your assistance and cooperation will be highly appreciated.

Thank you in advance.

Yours faithfully,

Agnes W. Gateru.
APPENDIX II: QUESTIONNAIRE FOR REGULAR AND SPECIAL EDUCATION TEACHERS

Section A: Respondents Bio-Data

2. Name of your school ____________________________

3. Name of the Interviewee (optional) ____________________________

4. What is your gender? Male [ ] Female [ ]

5. What is your highest academic qualification? (Please tick as appropriate).
   (a) Form four [ ]
   (b) A-Level [ ]
   (c) College [ ]
   (d) Undergraduate [ ]
   (e) Postgraduate [ ]
   (g) Other, specify. ____________________________

6. What is your highest professional qualification? (Please tick as appropriate).
   (a) P2 [ ]
   (b) PI [ ]
   (c) SI [ ]
   (d) Diploma [ ]
   (e) Approved Teacher Status (ATS) [ ]
   (f) B.Ed Graduate. [ ]
   (g) P.G.D.E. [ ]
   (h) Other, specify. ____________________________

6. Which subject(s) in the school curriculum do you teach?
   (a) ____________________________
7. Which classes are you currently teaching?
(a) ____________________________
(b) ____________________________
(c) ____________________________

8. For how long have you taught in your current school?
   - Below 5 years [ ]
   - 6-10 years [ ]
   - 11-15 years [ ]
   - Over 15 years [ ]

Section B: Teacher Awareness of Inclusive Education

9. What do you understand by the word inclusive education?

10. Are you aware of the practice of inclusive education in your school?
   - Yes [ ] No [ ]

11. Have you identified any pupil with learning disabilities among your pupils?
   - Yes [ ] No [ ]

Section C: Teacher Intervention of Inclusive Education

12. Does the school administration support the teachers involved in Inclusive Education for pupils with learning disabilities in terms of?
   - (a) Teaching-learning resources? (Please tick as appropriate) Yes [ ] No [ ]
   - (b) Field trips? (Please tick as appropriate) Yes [ ] No [ ]
(c) If your answer to (a) above is 'Yes' please give details.

13. The following are some of the teaching strategies used by teachers in inclusive education. Indicate the extent of the use of each strategy in your school.

<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Not At all</th>
<th>Very little</th>
<th>Sometimes</th>
<th>Quite a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrective approaches for reading and/or math</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct (explicit) instructions for maths and/or reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systematic phonics for the teaching of reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy Instruction approaches for reading and maths</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher 'connectivity' with pupils' individual learning needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher 'connectivity' with pupils as 'valued persons'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructivist approaches for reading and/or maths</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole-language approaches to literacy, and especially to reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. What are the interventions by teachers to ensure successful inclusive education?
15. (a) How often do your teachers attend in-service courses in preparation?

(b) When did they attend the last in-service course on implementing Inclusive Education for pupils with learning disability?

16. What comment can you make about the preparation given to teachers to handle Inclusive Education for pupils with learning disability?

17. What has the school done anything to minimize the barriers to implementation of inclusive education?

Section D: Teachers Opinion towards Inclusive Education

19. In your opinion, should pupils with learning disabilities be given special treatment or should they be left to adapt to the arrangements prevailing in regular/mainstream schools?

20. Can you consider the preparations given to the teachers to handle inclusive education adequate?

Yes [ ] No [ ]

21. What would you suggest to be done to ensure successful inclusive education?
Section E: Teachers Academic and Professional Preparedness for Inclusive Education

22. Do you have any special training on how to handle pupils with learning disabilities?  
   Yes [ ]  No [ ]

23. If no, would you like to be trained to teach them?  
   Yes [ ]  No [ ]

24. What preparation is given to teachers who handle Inclusive Education for pupils with learning disabilities?

25. (a) How often do your teachers attend in-service courses in preparation?  

(b) When did they attend the last in-service course on implementing Inclusive Education for pupils with learning disability?

Section F: Challenges to Inclusive Education

26. a) Are there challenges to inclusive education?  
   Yes  No

b) If yes, what are the challenges to Inclusive Education in Schools?  

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
APPENDIX III: QUESTIONNAIRE FOR HEAD TEACHERS

Section A: Respondents Bio-Data

1. Name of your school ________________________________

2. Name of the Interviewee (optional) ________________________________

3. What is your gender?  Male [ ]  Female [ ]

4. What is your highest academic qualification? (Please tick as appropriate).
   (a) Form four [ ]
   (b) A-Level [ ]
   (c) College [ ]
   (d) Undergraduate [ ]
   (e) Postgraduate [ ]
   (g) Other, specify ________________________________

5. What is your highest professional qualification? (Please tick as appropriate).
   (i) P2 [ ]
   (j) P1 [ ]
   (k) SI [ ]
   (l) Diploma [ ]
   (m) Approved Teacher Status (ATS) [ ]
   (n) B.Ed Graduate [ ]
   (o) P.G.D.E. [ ]
   (p) Other, specify ________________________________

6. For how long have you been a head teacher?
   Less than 5 years [ ]
5-10 years [ ]
11-15 years [ ]
Over 15 years [ ]

7. For how long have you been head teacher at your current school?
Less than 5 years [ ]
6-10 years [ ]
11-15 years [ ]
Over 15 years [ ]

8. In your own opinion are the regular schools prepared for the pupils with learning disabilities? Yes [ ] No [ ]

Explain further ____________________________________________________________
________________________________________________________________________
________________________________________________________________________

9. (a) How often do your teachers attend in-service courses in preparation?

(c) When did they attend the last in-service course on implementing Inclusive Education for pupils with learning disability?

________________________________________________________________________
________________________________________________________________________

10. What comment can you make about the preparation given to teachers for handling inclusive education for pupils with LD?

________________________________________________________________________

11. What has the school done anything to minimize the barriers to implementation of inclusive education?

________________________________________________________________________

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APPENDIX IV: INTERVIEW SCHEDULE FOR HEAD TEACHERS

1. Name of your school

2. Name of the interviewee (Optional)

3. What is your gender
   - Male [ ]
   - Female [ ]

4. Are mainstream schools prepared for the pupils with learning disability?
   - Yes [ ]
   - No [ ]

   Explain further

5. a) How often do your teachers attend in-service course on implementing inclusive Education for pupils with disability?

   b) When did they attend the last in-service course on implementing Inclusive Education for pupils with learning disability?

6. What comment can you make about the preparation given to teachers to handle Inclusive Education for pupils with learning disability?

7. What are the challenges to Inclusive Education in Schools?
8. Has the School done anything to minimize the barriers to implementation of Inclusive Education?
Appendix V: OBSERVATION SCHEDULE

Lesson Observation

School:

Class:

Subject:

Objective:

Teaching and learning resources:

Number of pupils per stream:

Availability of scheme of work:

Availability of Lesson Plan: