Analysis of The Capacities Needed by Business Teachers to Work with Students Who Have Disabilities. (A Case Study of Selected Schools in Luanshya District).

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ABSTRACT-The study aimed at analysing the Capacities needed by Business Teachers to work with Students who have Disabilities. The study also sought to establish the professional qualifications of teachers educating learners with LD. It also sought to establish whether teachers are able to identify and assess learners with learning disabilities and establish whether there were collaborative structures and support put in place when educating learners with LD. Stakeholders who could benefit from this study are head teachers, teachers. The study adopted both qualitative and quantitative research approaches. The study embarked on interviews for headteachers by use of structured interview schedule, semi-structured questionnaires for teachers and finally a lesson observation schedule for learners with LD and materials utilized in classroom. The study was conducted in Luanshya. Purposive sampling was used to select the district, schools, classes 1-4, head teachers and teachers. Learners with learning disabilities were randomly selected after being identified through the use of an identification tool containing characteristics of LD. The sample size comprised 4 headteachers, 26 teachers and 70 learners making a total of 100 respondents. Data collected were analysed both quantitatively and qualitatively. The results were obtained and presented based on the objectives and questions formulated for the study. The study found that all teachers had professional qualifications to teach classes 1-4 but majority had not specialized in the area of LD. However, though headteachers had special education training, there was no evidence of support of LD. The study also found that teachers did not have any identification tool for LD in class. The study also found out that the teachers used a variety of teaching methods but they experienced difficulties helping the learners. In collaboration, the study found out that teachers worked together in identification, instructing and assessing learners with LD among other areas but needed more training to enhance their skills in collaboration. The study concluded that inadequate knowledge for identification of LD and failure to use an identification tool in class could be the possible reason why teaching and learning strategies used by teachers could not work. This is because individual learners with LD were not identified and the skills deficit were also not identified hence appropriate intervention not done. The study recommended that the Ministry of General Education facilitate workshops and in-service training for teachers to enable them acquire modern teaching and learning methods. Teacher Commission of Zambia to ensure that standardized identification and assessment tools and modified teaching materials are developed.
CHAPTER ONE: INTRODUCTION

1.1 Overview

The aim of the study was to analyze teachers’ competencies, teaching and learning strategies teachers use to educate learners with LD. This chapter presents background to the study, problem statement, purpose of the study, research objectives, research questions, significance of the study, delimitations, limitations of the study, assumptions of the study, theoretical framework, conceptual framework and operational definitions.

The right of the child to quality education is at the centre stage of every nation. This is so because education is perceived as a right in itself and as a means of promoting peace and respect for everyone. Education is also seen as a means of fostering peace, democracy and economic growth as well as improving health and reducing poverty. At the international front, education has been recognised by the United Nations Universal Declaration of Human Rights of 1948 as a basic right for every child in its article 26 (1).

Education for children with special educational needs (SEN) has been in existence in Zambia for over 100 years. The first attempts to educate children with Special Educational Needs were made by missionaries in 1905, when Mrs. Ella opened the first special school for the blind in Magwero. Later the Zambian government took over the responsibility of educating children with special needs and the Ministry of Education was mandated to take up the portfolio of special education in 1971. The first major educational policy document in Zambia pertaining to special education (Educational Reform GRZ, 1977) stated that all handicapped children like any other children are entitled to education and should receive basic and further education by full- time study. Learners with special educational needs need education of high quality to compensate for difficulties they experience. Ministry of Education, (1996:68) states that, ‘while much depends upon the nature of the exceptionality, as well as on the facilities and resources available, the Ministry of Education is committed to ensuring that children with special educational needs can attend schools which are well resourced with adequate qualified teachers’. The relevance of Business Studies education to humanity and economic growth cannot be overemphasized considering its developmental incentives in the well-being of an individual and promotion of economic activities. The acquisition of skills through Business Studies education to a large extent creates self-employment and job opportunities for members of a society. Business Studies education could take the form of technical education, business education, computer application, fine and applied arts amongst others. Business Studies is not just skill acquisition for acquisition sake; it is an acquisition of skills and ideas for the sake of creating employment for one’s –self and also for others. The students living with disability in various communities that need to be educated and taught different skills for self-reliance and economic survival. Special education caters for this particular set of Students equipping them to be at par with their non-handicapped counterparts within the economic realm. In Zambia today, the increasing rate of poverty, unemployment, corruption and so many other social problems have become worrisome to the government and the citizenry and the former appears to be clueless on the way forward. Employment, either part-time or full-time, or even underemployment can be said to have eluded Zambian youths with Zambia said to have one of the highest unemployment rates in the industrialized world. Therefore, the need for entrepreneurial education to be incorporated into special needs education curriculum for this category of Students becomes a salient issue. This is because Business Studies education will help unlock their potentials and pave way for their
financial independence and sustainability in the face of the large-scale unemployment in Zambia. However, political instability and inconsistencies in the social-economic policies of successive governments led to the emergence of high-level unemployment in Zambia. A factual indicator of the poverty and unemployment level is reflected in the results of the Harmonized Zambia Living Standards Survey (HNLSS) conducted by the National Bureau of Statistics (NBS) which puts the Zambian poverty profile at 69% - this indicates that poverty and income inequality in the country has increased since.

Learning disability means: “a disorder in one or more of the basic psychological processes involved in understanding and in using language, both spoken and written, which may manifest itself in imperfect ability to listen, speak, read, write, spell or do mathematical calculations. Such terms include perceptual abilities, brain injury minimal brain dysfunction, dyslexia and developmental aphasia. Such does not include learning problems that are primarily the result of visual, hearing or motor disabilities, mental retardation, and emotional disturbance, environmental, cultural or economic advantage.

1.2 Problem Statement
Children with learning disabilities are found in all nations, language groups, and cultures of the world. Accumulative research shows that in all cultures there are children who seem to have normal intelligence but they have severe difficulties in learning oral language, acquiring reading or writing skills or doing mathematics. It is a condition that is identified after a learner has entered school and starts performing poorly in academic subjects. It is one of the newest classifications and it presently constitutes a number of special needs category and continues to grow at an alarming rate (Runo, 2010). Further, a study conducted by Runo indicates that children with learning disabilities account for well over half of the children served through special educational programmes. They are made to repeat classes while others drop out of school. They develop low self-esteem due to repeated failures. Research studies indicate that early identification and intervention leads to a seventy recovery of the children at risk. Early intervention makes the child a productive member of the society who is a tax payer and not a tax receiver (Lerner, 2006). The big question is, are these achievements translating into concrete improvement in children’s competencies and particularly those with learning disabilities?

1.3 Purpose of the Study
The purpose of this study was to analyse the Capacities Needed by Business Teachers to work with Students who have Disabilities.

1.4 Specific Objectives of the Study
1. To establish professional qualifications of teachers educating learners with LD.
2. To investigate whether teachers in regular schools are able to identify and assess learners with learning disabilities in the classrooms.
3. To establish teaching, learning strategies and materials used by teachers when educating learners with LD.

1.5 Research Questions
1. What are the professional qualifications of teachers educating learners with LD?
2. How do teachers in regular schools identify and assess learners with learning disabilities?
3. What teaching and learning strategies and materials are used by teachers educating learners with LD?
1.6 Significance of the Study
The findings of this study are likely to be used by the government through the Ministry of General Education (MOE) to formulate and implement ideal policies that would support education for learners with learning disabilities so that they can learn and complete their education. The Teaching Commission of Zambia (TCZ) is likely to use the findings of the study to develop modern teaching and learning strategies, modified materials and activities, introduce standardized identification and assessment tools to help learners with learning disabilities. TCZ is also likely to focus on LD component in the training syllabus. Teacher training colleges are likely to put more emphasis in special education component when training student teachers who will later handle children with learning disabilities in regular schools. The study will also inform parents and other stakeholders on the importance of providing appropriate learning materials and modified curriculum that would help teachers assist learners with LD. School heads are also likely to be encouraged by the information gathered to provide adequate materials, support and enabling environment for collaboration among teachers.

1.7 Delimitation of the Study
The study confined itself to classes 1-4 of 4 schools in Luanshya District. The classes were selected for study because the condition of LD can be identified as early as pre-school years and the teaching and learning strategies that work in these classes would also work in upper classes. Further, identification for learners with LD in these classes is also possible. District schools were selected because of the diversity nature of the condition of LD. The schools in this district accommodate learners of diverse cultural and language groups. Therefore, information acquired was representative of the larger group.

1.8 Limitations of the Study
The study was carried out in regular public primary schools and not private schools. There was also limited literature in the area of study especially in Zambia since very few studies have been done in the area of LD. Finally, learners selected for the study had diverse learning difficulties and therefore, the study did not address a specific learning difficulty.

1.9 Assumptions of the Study
The investigator made the following assumptions when carrying out the study.

i) There were teachers with special needs education training either at diploma or degree level in schools selected.

ii) Teachers with special needs education (SNE) were able to use appropriate teaching strategies when handling children, with LD unlike their counterparts who had no knowledge and skills to identify, assess and provide required intervention.

iii) Teachers trained in special needs education comfortably handled pupils in the lower primary classes and the level of professional qualification did not dictate the class they handled and particularly degree holders.

1.10 Theoretical Framework
The study was guided by cognitive theory of instruction by Brunner (1971). He looked at role of strategies in the process of human categorization and more generally the development of human cognition. Brunner in his two books: “The process of education; Towards a theory of instruction” and “the relevance of education” (1961- 1971), respectively puts forth his evolving ideas about the ways in which instruction actually affects the mental models of the world that students construct, elaborate on and transform. He further makes a case for education as knowledge getting process by saying: To instruct someone is not a matter of getting him to commit results to mind, rather, it is
to teach him to participate in the process that makes possible the establishment of knowledge, (Brunner, 1966:71). Among the highlights in his texts are the role of structure in learning and how it may be made central in teaching, readiness for learning and motives of learning. On the role of structure in learning, he says that teaching and learning should be practical than just mastery of facts and techniques, if the earlier learning is to render later learning easier. This is relevant to children with learning disabilities whose memory is impaired and are less able to grasp abstract concepts. These learners also fail to make an active role in their own learning and fail to devise strategies that would help them accomplish tasks more efficiently. Practical approach would be made possible by providing children with a variety of objects (materials) to manipulate and this act as a sensory boost. On readiness to learning, Brunner argues that schools have wasted a great deal of pupils” time by postponing teaching of important areas because they are deemed too difficult. He hypothesizes that any content can be taught effectively in some intellectually honest form to any child at any stage of development. Readiness to learning can be established through proper assessment of children with learning disabilities which will enable the teacher to establish and present level of functioning of children to make proper instructional decision. For the motives of learning “ideally”, Brunner says “interest in the material to be learned is the best stimulus to learning, rather than such external goals or grades or later competitive advantage. Children with learning disabilities are always demotivated because of continued failure in classwork; they are always ridiculed and hallowed by classmates. The child performs poorly in class due to low self-esteem. The child will also be forced to require special education services in future which will not only cost the parents a lot of money but also the society (Chadha, 2001). This theory was ideal for this study because according to cognitive psychologist, learners with learning disabilities must learn complex concepts and fundamental problem-solving skills of the content areas in the general education curriculum. Teachers handling children with learning disabilities will borrow Brunner’s views on the learning process. They will take a practical approach when teaching in order to help these learners generalize information acquired which is a very big challenge for learners with LD. Teachers will also stimulate learners through selection of a variety of materials, modification of materials, use of varied teaching strategies and giving immediate feedback to the learners. This will make learning interesting and act as stimulus to learning.

1.11 Teaching a Child with LD
Identification and assessment (Independent variable). Skills Ability to identify learners with learning LD, Ability to assess learners using correct tools, Provision of on-going assessments.
Teaching and learning strategies (Independent variable)
Modification of teaching strategies, Selection of appropriate materials, Modification of materials

Teachers’ collaborative effort & support (Independent Variable)
Share information and knowledge, Plan together, share materials, Evaluate together.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction
The aim of this chapter was to review some of the works that have been documented by various authors and researchers. It consists of qualifications of teachers teaching children with LD, identification and assessment of children with LD, classification and characteristics of LD.
2.1 Qualifications of Teachers Teaching Children with LD
Knowledge is what teachers acquire from colleges, skill; however, is something one acquires as they practice that knowledge. It is possible therefore, for teachers to be knowledgeable about the subject matter but not to be skillful in how to apply the teaching methods, how to handle class management, how to correctly interact with the pupils for better results in the classroom, how to involve pupils in participation. Mbozi (2006) looked at the appropriateness of training received by the teachers. She found that the training of teachers was adequate though the observation made was that teachers were trained in special education and not vocational skills training. Kalabula (2007) pointed out that there was need to train more human resource in special education, particularly those to handle learners with intellectual disabilities. A large body of academic research has produced strong evidence that teacher quality is positively related to student performance (chait, 2010). Neville and Allyson (1989) study found that qualified special education teachers were guided by the professional and ethical practice standards and required on-going attention to legal matters, along with serious professional and ethical considerations. They further stated that special education teachers who had undergone training were usually engaged in professional activities and participated in learning communities and that benefited individuals with exceptional learning needs, their families, colleagues, and their own professional growth. Quality teachers transfer knowledge of their subject matter and the learning process through good communication, diagnostic skills, understanding of different learning styles and cultural influences, knowledge about child development, and the ability to marshal a broad array of techniques to meet student needs and set high expectations and support students in achieving them.

2.2 Teacher training barrier to effective teaching and learning
According to Bagree and Lewis (2013:2), “teachers are often simply not trained or supported to teach children with LD, which makes these children among the most marginalised in terms of educational opportunity and attainment.” Teacher training for regular teachers also rarely prepares teachers for working in diverse classrooms and in particular does not equip them with the confidence, knowledge and skills to effectively support learners with disabilities. This is a key reason why so many children with disabilities remain out of school or excluded from the learning process within school. Bagree and Lewis (2013:4) further argue that, “if we are to reignite progress towards quality basic education (early childhood, primary and lower secondary schooling) for all, then regular teachers need to be prepared to meet the learning and participation needs of children with disabilities.” To do this they need to be given appropriate initial training, on-going training and professional development, and on-going access to adequate high-quality support and advice from specialist personnel.

A study by Mahlo (2011:161) reiterates that most classroom teachers indicate that they need intensive training in inclusive education so that they are able to support learners with special educational needs (SENs) in their classes. The classroom teachers were frustrated by situations that they were unable to handle, such as abuse children had experienced. Sometimes educators, often through inadequate training, use teaching styles that may not meet the needs of some of the learners. Some learners are excluded from certain aspects of the curriculum by some teachers as a result of ignorance or prejudice. For example, learners with physical disabilities are often prevented from playing sports or are not given the opportunity to do so.
2.3 Identification and Assessment of Learning Disabilities
The classroom teacher is usually the first to notice signs of learning disabilities and refers students for special education assessment. This poses the need for both the special and regular teachers to have knowledge on classification and characteristics of LD in order to identify the learners. In addition, the teachers assist in gathering assessment information and in coordination of special services. Learners may be identified disabled at any age, but mostly are noticed during the elementary years. There are two major indicators of learning disabilities. First, students appear capable but experience extreme difficulties in some areas of learning. This is a discrepancy between expected achievement and actual achievement. For example, a young child may appear bright but, very slow to learn and to say the alphabet, write his/her name and count to twenty. The second indicator is variation in performance, where there is a discrepancy among different areas of achievement. A class four student may perform well in mathematics but read and spell poorly (Lewis and Doorlag, 1983).

2.4 Early Identification
According to Lerner (1981), there are four separate but related phases of identification of children with learning disabilities. First, there is the child find, which refers to ways of pinpointing that there is a child with learning disability in class and this is done by the regular teacher. Second, there is screening which attempts to identify children who need further study. Screening is a short, low-cost assessment of children’s vision and hearing, speech and language, motor skills, self-help skills, social emotional skills and cognitive development. Third is diagnostic stage that consists of determining the extent of developmental delay and devises an intervention programme. The emphasis is on methods of comprehensively examining a child through formal and authentic measures to determine whether the child’s problems warrant special services. A multi-disciplinary team determines the nature of the problem, its severity and the intervention and placement that the child needs. Lastly, it’s the evaluating stage, which concentrates on measuring progress and judging whether a child remains in a special education programme and planning for transition. This stage of assessment helps determine whether the child needs special education services, what skills the child has learned and still lacks, and what new placement will be needed. Early detection of high-risk cases will permit plans to be made to stop further development of learning disabilities. Research studies by Lerner (2006) have demonstrated that early comprehensive and intensive intervention after identification is beneficial for children with disabilities, their families and society. Many difficult conditions are alleviated, disorders are overcome and other problems managed to control the occurrence of secondary problems for better educational outcomes of the child in future. Substantial community finances are saved by reducing the number of children in need of special education and reduce both family economic and social stress of coping with a child having LD and reduce dependency. Further, when a child’s problems are recognized early, school failure can be to a large extent prevented and reduced (Guralnick, 1997).

2.5 Classroom Instructional Assessment of Learners with Learning Disabilities
According to Lerner and Kline (2006), there are two major reasons for conducting assessment in special needs education. These are classification and planning instruction. To be eligible for special education, a pupil must be identified or classified. The second important reason is to obtain information that can be used to plan ways to help the pupil learn. The closer the connection between
educational assessment and instruction, the more effective the teaching process that focuses on curriculum and teaching needed for guiding instruction.

Findings by Bagnato, Neisworth and Munson (1997) indicate that assessment typically includes an evaluation of cognitive, motor, communication, social emotional and adaptive development. Assessment on cognitive development involves evaluating child’s ability in thinking, reasoning, and planning and concept development. Tasks such as naming body parts, demonstrating place concepts like on, under, between and middle are given to the child. An assessment on motor development involves an evaluation of a child’s overall physical development, gross motor skills and fine motor development. A child is engaged in tasks such as jumping, skipping, building a four-block design, catching a ball or beanbag, matching and copying shapes. Communication development assessment includes speech and language skills and the abilities to understand and use language. Testers might assess articulation by having children say certain words, repeat numbers or sentences spoken by the tester. Social emotional development assessment is done by recording through observation on how a child relates with other children in class. Lastly, adaptive development assessment involves the testing of child’s self-help skills such as independent toileting, dressing skills, eating skills and generally ability to do things on his own.

2.6 Classification of Learning Disabilities and characteristics
Children with learning disabilities can be classified in three categories, namely; the neuropsychological/developmental learning disabilities, academic/achievement disabilities and social disabilities.

The neuropsychological model assumes that learning disabilities are due to something wrong with the child’s brain or perceptual systems, some type of neurological dysfunction, disturbances in perceptual motor functioning and imbalance of intelligence abilities (Kavale, Fornes & Bender, 1995). This neurological disorder causes difficulty in organizing information received, remembering it and expressing information and therefore, affects a person’s basic function such as reading, writing, comprehension and reasoning. Such children also experience memory and attention disorders.

Academic or achievement disability on the other hand manifests itself in school subjects such as reading, writing, spelling and mathematics. These problems are rarely detected before a child joins school because few serious demands are made at preschool (Wolery & Bailer, 2003). Socially, children with LD may demonstrate social or behaviour challenges. Some exhibit socially unacceptable behaviour with peers, they are unable to predict consequences of behaviour or misinterpret social cues or are less likely to adapt their behaviour to different social situations. They are sometimes rejected or neglected by their peers. Coupled with academic weaknesses, this experience can lead to lowered self-perceptions of competence or worth among older individuals with LD. Others who have LD have difficulty sitting at a desk for long periods of time in order to attend to classroom tasks and may develop social or behaviour problems in response to their frustration with learning tasks.

2.8 Teaching and Learning Strategies and Materials
The availability of age appropriate teaching resources and learning materials for use in the education of children with special educational needs has been identified as an area of concern. Teaching and learning materials can only be termed appropriate if they both meet the goals of the curriculum and assist the teacher in achieving set lesson objectives. In this way, the choice of
suitable teaching/learning materials ensures quality of education delivery (Ashworth 1982). Most primary schools and in particular special education units do not have adequate teaching and learning materials like books, rulers, maps, specialized equipment, charts and many other resources needed for the provision of education. Some special schools have developed materials and resource themselves or have successfully adapted commercial programmes for use with their children. There is a need to develop structures whereby this expertise can be shared. Carmody (2004), states that education without resources is like education without a future. Lay (1976) asserted that quality special educational needs provision in special units therefore, requires adequate and regular supply of textbooks, exercise books, pens and pencils there is need to equip the special units with special material and equipment.

2.9 Collaboration
According to Friend and Cook (2003), collaboration is an interactive process which enables people with diverse expertise to generate creative solutions to mutually defined problems. It involves direct interventions that characterize many types of processes and it is based on ongoing participation of more individuals committed to working with each other to achieve a common goal. Through collaboration, two or more individuals interact in a supportive manner that benefits each member, as well as the people they are supporting.

2.10 Summary of Literature Review
The literature reviewed indicates that children with learning disabilities are found within all cultures, language groups and nations. These children look normal but they may be unable to do what their peers of the same age are able to do. They experience difficulties in some areas of learning such as writing, reading, spelling, comprehension and arithmetic. Literature reviewed also outlined qualifications of teachers teaching children with LD, identification and assessment of children with LD, classification and characteristics of LD, teaching and learning strategies and materials of LD and finally teachers’ collaborative efforts when serving learners with learning disabilities. Existing research data that have been reviewed relate to learners in developed countries. As a result of clear policies and elaborate research activities developed in these countries, there are specific programmes for learners with learning disabilities. It is unfortunate that learning disabilities in developing countries is not well documented. Limited research has been conducted in these countries with the consequences that teachers may not have the knowledge on identification of children with learning disabilities. As a result, this hinders early and appropriate intervention. Most of the research conducted in Zambia is mainly on causes of LD, prevalence of LD and teacher-parent collaboration in curbing the condition of LD. Considering that LD is regarded as a complex emerging area in the country, teachers may not be well-equipped with proper knowledge of identification of LD and hence do not use those teaching and learning strategies that would address the needs of these learners. This proposed study is an attempt to analyze teachers’ competencies, teaching and learning strategies they utilize to educate learners with LD.

In the light of the above discussion, sustaining Business Studies education for Students with disabilities is a productive venture. This is because it gives ample opportunity to this category of Students to train and acquire skills for self-development which in turn promotes the nation’s economy. To this end, it is the position of this paper that educational programs for Students with disabilities at all levels of education should be tailored toward providing them with the needed entrepreneurial skills.
CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction
This chapter describes research design, study population, sampling technique and sample size, instrumentation, piloting, data collection procedures and methods of analysis that were used in the study.

3.1 Research Design
The study adopted a descriptive design that employed both qualitative and quantitative research measures to identify teaching and learning strategies used by teachers when serving learners with LD. Descriptive design attempts to describe characteristics of subjects or phenomena, opinions, attitudes, preferences and perceptions of persons of interest to the researcher, (Borg 1982). Moreover, a descriptive survey aims at obtaining information from a representative selection of the population and from that sample; the researcher is able to present the findings as being representative of the population as whole. Quantitative data were derived from questionnaires while qualitative data focused on oral questions and gave respondents a chance to state their problems and participate in seeking solutions to these problems.

3.2 Variables
Variables are key ideas that researchers seek to correct information to address the purpose of their studies (Creswell, 2005). Mugenda and Mugenda (2003) describe different classifications of variables such as dependent, independent, intervening, confounding and antecedent. This study considered the dependent and independent variables.
In this study, the dependent variables were improved learning outcomes and high rate of completion. Independent variables are those that cause change in the dependent variables (Bless, 1997). The independent variables of this research were identification and assessment of children with LD, qualifications of teachers teaching learners with LD, teaching strategies and materials used by teachers and teachers’ collaborative efforts and support provided when educating learners with learning disability.

3.3 Location of the Study
The study was carried out in Luanshya District in Copperbelt Province. Because of the heterogeneous nature of the condition of Luanshya District, it was selected for study since it accommodates learners across all cultures and languages. The location of the study was also chosen because of researchers’ familiarity and proximity to the schools’ locations.

3.4 Target Population
District has more than 17 primary schools. The schools that were selected for study had 26 teachers usually involved with handling learners with Learning Disabilities and 70 pupils. The study targeted classes 1-4 teachers, pupils with learning disabilities of these classes, and headteachers from 4 public primary schools, namely; Dagama, Mikomfwa, Buteko and Mipundu in the district. The 4 schools were purposively selected because of their accessibility.

3.5 Sampling Techniques and Sample Size
Sampling involves selecting a subset (portion of cases in order to generalize information gathered). A sample is a small part of the large population which represents the larger populations. The researcher purposively selected the schools to be studied within the zone. The schools were purposively selected because they accommodate learners of diverse origin and therefore, data generated would be representative. The headteachers in these schools were also purposively selected in order to provide the required information. Double streamed classes 1-4 were also purposively selected for study because
learning disabilities can be identified as early as pre-school years. These learners are also expected to have acquired skills in literacy and numeracy. Thus, identification for intervention was possible. Teachers who handled learners with LD were also purposively selected because they were instructors of these learners hence in a position to provide rich information required for the study. Four weeks prior to the study, the researcher had a session of 45 minutes with the sampled teachers in each of the 4 schools. The teachers were briefed on identification of learning disabilities using an identification tool. This tool contained 5 components of characteristics of LD and the components included:

1. academic disabilities,
2. perceptual motor difficulties,
3. language and speech disorders,
4. difficulties with the thought process,
5. behavioural and effective characteristics.

Teachers were supposed to identify learners in their respective classes who portrayed the characteristics.

The sample for the study comprised 4 headteachers, 70 learners from classes 1-4 and 26 teachers in the 4 schools as shown in the sample size table below.

<table>
<thead>
<tr>
<th>Schools</th>
<th>Head Teachers</th>
<th>Teachers</th>
<th>Learners</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mipundu</td>
<td>1</td>
<td>5</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>Dagama</td>
<td>1</td>
<td>8</td>
<td>30</td>
<td>39</td>
</tr>
<tr>
<td>Mikomfwa</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Buteko</td>
<td>1</td>
<td>8</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
<td><strong>26</strong></td>
<td><strong>70</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data, 2019

3.6 Research Instruments
Research instruments are tools that researchers use to enable them to gather information from the respondents. For the purpose of this study, the researcher used interview schedules for the headteachers, questionnaires for teachers and observational schedule for the learners and materials. An interview was used in order to cover all the dimensions of the investigations through probing the participants, in this case the School Heads. Questionnaires were used to obtain data from the respondents since they offer considerable advantage in the administration and analysis of gathered data. Large number of people was used simultaneously and the respondents were not likely to be manipulated by the researcher since they filled the questionnaires independently. Observation schedule was very useful in the study, the researcher observed pupils’ responses during instruction, materials used by teachers and learner’s participation during learning.

3.7 Validity
Validity shows how accurately the data obtained in the study represent the variables (Mugenda & Mugenda, 2003). In this study, the tools were validated during a pilot study, which took place at Muchinshi Primary School, in Luanshya District. One headteacher and 2 teachers who were used in the pilot study helped to clarify the items in the interview schedule and questionnaires. The teachers also advised the researcher to refine the checklist that was to be used by teachers to identify learners with LD. It was flowing without segmentation but after validation, it was categorized into 5 major components. Colleagues and supervisors also went through the instruments and corrected content validity and language clarity.

3.8 Reliability
Reliability is a measure of how consistent the results of a test should be to ensure reliability for the tools. The researcher used test-retest method;
in this case, it involved administration of the same instruments twice to the same group of sampled subjects in a span of 10 days’ time lapse between the first and the second one. Pearson Product Moment Correlation Co-efficient was used to establish reliability. Correlation coefficient of 0.75 was considered adequate to judge reliability of the instruments.

3.9 Data Collection Procedures

Data were directly collected with the help of two well-trained research assistants. The researcher had to personally carry out lesson observation in order to capture the data needed for the study. It was not possible for the researcher to carry out the lesson observation and at the same time collect data from the other respondents alone. This necessitated the need to train two research assistants to assist in administration of the questionnaires to the teachers and interview some of the head teachers. Before going to the field, the researcher obtained a research permit from the Ministry of Education for authority to carry out the research. Thereafter, the District Education Officer was contacted before commencement of the main study. A courtesy call was paid to the individual schools to talk to the head teachers and teachers who were briefed on how to identify learners with LD. The research assistants were later introduced to both the head teachers and the teachers. The teachers were assured of anonymity and confidentiality of any information they provided.

3.10 Data Analysis

Kerlinger (1973) defines analysis as categorization, ordering, manipulating and summarizing data to obtain answers to research questions. Data collected from questionnaires, interview and observation schedule were carefully organized and analyzed. Data in this study were analyzed quantitatively and qualitatively. Qualitative analysis involved making inferences and conclusions from teachers’ responses from open-ended items in the questionnaires and responses from the interviews. Quantitative data were derived from questionnaires using the Statistical Package for Social Sciences (SPSS). Descriptive statistics for each scale and summary were compiled. Results were presented in form of mean, frequency, percentages and tabulations to show an analysis of teaching and learning strategies used by teachers serving learners with learning disabilities. Information gained through observation was further used to explain results got from the statistical data that were collected and analyzed.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

In this chapter, the results of the study are presented and analyzed. It is divided into two main sections. Section one presents the demographic data of the teachers and head teachers from the four schools studied for the purposes of sample description. The second section presents the results of the research questions formulated in the study and thematically discussed. The summaries of these analyses are presented in tables and figures for interpretation.

4.1 Demographic Data for Teachers and Headteachers

This section presents demographic data collected from 4 headteachers, 26 teachers and 70 learners with learning disabilities. The total population was 100 respondents.

Demographic data table for teachers and headteachers

<table>
<thead>
<tr>
<th>Variables</th>
<th>Teachers (Freq</th>
<th>Heads (Freq)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 35-40yrs</td>
<td>17 65</td>
<td>- 0</td>
</tr>
<tr>
<td>40-45</td>
<td>5 19</td>
<td>1 25</td>
</tr>
<tr>
<td>45-50</td>
<td>3 12</td>
<td>1 25</td>
</tr>
<tr>
<td>Over 50</td>
<td>1 4</td>
<td>2 50</td>
</tr>
<tr>
<td>Total</td>
<td>26 100</td>
<td>4 100</td>
</tr>
</tbody>
</table>
From the table above, headteachers and teachers age bracket ranged from 35-40 years to over 50 years. Majority of the teachers were between 35-40 years and majority of headteachers were over 50 years. This is an indication that majority of the teachers and headteachers have a wealth of experience in teaching and in administration respectively. Among the 26 teachers who were engaged in the study, 81% (21) were females and 19% (5) were males. The female headteachers comprised 75% and 25% were male. Coincidently, the 4 schools that were purposively selected, 3 headteachers were females and (1) was a male teacher. This can be an indication that most of the teachers who teach and head the schools in the district are females.

4.2 Professional Qualifications and Areas of Specialization of the Head Teachers and Teachers in sample schools.

Those teachers that had specialized in the area of LD and mentally challenged were only two (2) or 11%. This call for a proposal for improvement in teacher training curriculum so that teachers can be equipped with skills to handle learners with LD. Literature reviewed on professional qualifications for teachers educating learners with LD shows that teachers need to be equipped with appropriate skills and knowledge if they would teach these learners effectively.

4.3 Identification and Classroom Instructional Assessment of LD

This second objective sought to establish whether teachers have knowledge of identifying and assessing learners with LD and the Pie Chart below reveals the findings.

Knowledge of Identifying Children with Learning Disabilities

According to the data summarized in the Pie Chart above, 20(78%) of the teachers claimed to have knowledge of identifying pupils with learning disabilities while 6(22%) said they are not able to identify these learners. Headteachers in the study when asked to give their views on challenges experienced by teachers during identification of learners with LD, 50% said that teachers lacked adequate skills and knowledge on identification, 25% said that the large class sizes discouraged the teachers from sparing time for the child with LD. When further asked to give their opinions on what...
steps should be taken, 75% of the headteachers said that teachers needed to be equipped with skills and knowledge of identification of these learners in order to provide early intervention. Literature reviewed showed that when a child’s problems are recognized early, school failure can be to a large extent be prevented. (Guralnick et al., 2003). Wafula (2010) further asserts that teachers who have ability to identify learners with learning disabilities are able to provide early intervention and individualized attention according to the needs of the learners.

4.5 Classroom Instructional Assessment of Learners with Learning Disabilities

Objective two further sought to establish whether teachers were able to assess learners with LD during classroom instruction. Results are presented in graph below.

Classroom instructional assessment of learners with learning disabilities Graph

Source: Author, 2019

Out of the 26 teachers used in the study, the graph shows that 23(90%), have assessed learners with learning disabilities, while only 3(10%) have never assessed them. This assessment is done through individual teacher-made test, observation and an already prepared test. The high percentage of teachers who assess these learners is an indication that learners with learning disabilities are not neglected when it comes to assessment of learners and therefore, teachers are able to establish their weaknesses and remediate using appropriate teaching and learning strategies. Literature reviewed indicated that the closer the connection between the educational assessment and instruction, the more effective the teaching process Lerner et al. (2006).

4.6 Tools Used for Classroom Instructional Assessment

Classroom instructional assessment by teachers which were teachers made test comprised 13(41%) and already prepared test which are brought by school administration and comprised 6(18%). The study further found that 13(41%) assess learners through observation. It is important that teachers establish the learners’ weak areas so that the skills deficit in the learner can be addressed. Interestingly, none of the teachers had kept any observation checklist in class. Pinnel (1999) has argued that teachers need assessment tools that help them become noticing teachers, it is a matter of knowing what to attend to than a matter of having indefinite amount of time to work on one-on one. Lipson (1997) further says that casual conversations with children can also provide useful assessment information. The graph below reveals results found on the usefulness of the classroom instructional assessment.

Usefulness of Classroom Instructional Assessment to Teachers

Source: Author, 2019

As summarized in the graph above, 24(91%) of the teachers said that assessment is very helpful to
them while only 2(9%) felt that assessment is not useful. Teachers who view assessment being useful said that they are able to establish whether learners have understood the topic clearly and also identify slow and weak learners and give them special attention they require. Generally, assessment enables the teacher to design programmes that are responsive to the needs of learners with LD. The responses by majority of the teachers concur with Choate et al., (1992) who assert that direct observation which is a method of assessment enables the teacher to record the learners’ performance in school curriculum as a basis for determining learners’ instructional needs.

4.7 Teaching and Learning Strategies and Materials
The third objective sought to establish teaching and learning strategies used. Both teachers and headteachers gave several views, suggestions in the following areas, specific teaching and learning methods they used, difficulties encountered by teachers when helping learners with LD.

4.8 Teaching and Learning Methods Used
Teachers were asked to express their views on teaching and learning methods they used to help learners with learning disabilities. Among the responses given, 6(22%) said that they teach learners as individuals, 5(16%) said they use group teaching, 6% said they used remedial teaching among other responses. The teachers’ responses indicated that some of what they referred to as teaching methods may not actually be teaching and learning methods. This is because a teacher may individualize attention but if the right method of teaching is not used, learning cannot take place. For example, learners with LD experience problems when tackling complex tasks. These tasks need to be broken down to simple tasks and taught in step by step fashion. Literature reviewed indicated that there are very powerful strategies that can be used to help children with LD. For example, direct instruction is highly structured as a repetitive strategy in teaching basic skills to disadvantaged lower grade levels. It includes demonstrations, guided practice and giving feedback Rosenshine (1976).

4.9 Difficulties Encountered by Teachers when Teaching Learners with LD
Out of the 26 teachers and 4 headteachers who gave their responses on difficulties teachers encountered teaching learners with learning disabilities, 16(53%) and 25%(7) of the teachers said that they lacked time to teach since a lot of time is needed in order to cope with the speed of the learners. Twenty-five percent of the teachers said that learners are slow and may not cope with their speed in class. From the lesson observation, it was also found that 91% (64) of the learners were not able to complete given tasks while only 9% (6) attempted to finish. This is an indication that learners with LD require a teacher who understands them and is ready to move with their speed.

4.10 Teaching and Learning Materials used by teachers
The third objective further sought to establish the teaching and learning materials used by teachers. The Pie Chart below summarises my findings.

![Pie Chart](source: Author, 2019)
From the Pie Chart above, results indicate that, out of 26 teachers used in the study, 50% (13) stated that they used charts and maps as instructional materials to help learners with learning disabilities, 16% (4) used supplementary books and 9% (2) used visual aids among others responses. The use of a variety of materials by the teacher agrees with literature reviewed because according to Fisher (1995), it is the responsibility of the teacher to ensure that their classes are adequately resourced. Adequacy of teaching materials stimulates learning and encourages imaginative use. Further studies by Torgesen (1998) indicated that practical approach to learning would help the learners with LD. This is because these learners are less able to grasp abstract concepts since their memory is impaired. The practical approach would be made possible through provision of variety of materials for learners to manipulate and this act as a memory boost.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction
This chapter presents the summary of the findings, conclusions and recommendations of the study.

5.1 Summary
Demographic Characteristics of Teachers and Headteachers
The summary of the findings is based on the objectives of the study. Almost all the teachers who teach learners in the schools selected for study were young, they were in the age-group of between 35-40 years that is 65%, followed by those in age-group 40- 45 years, (19%) and those aged between 45-50 years and this comprised 4%. There are no teachers who are of over 50 years of age. Majority of the headteachers were over 50 years, and those aged between 40- 45, was only one.

Professional Qualifications of Teachers
Basically, all teachers had professional qualifications with ample teaching experience to teach children from grade one to grade four. The levels of education of teachers were P1, Diploma in education, ATSI and degrees, most of the teachers were P1 graduates who were about 58%, followed by university graduates who comprised 23%. Though teachers had professional qualifications and majority claimed to have knowledge in identification and assessment of LD, teaching and learning strategies to help the child, and collaborative skills, 89% had not specialized in any disability. This is an indication that there is dire need for additional training that would equip teachers with necessary skills to educate learners with learning disability. Most teachers taught classes with between 41 to 60 pupils which is relatively large class size. This can be a challenge because making an individualized education programme for the learners can be a problem.

Identification and Assessment of Learners with Learning Disabilities
The researcher found that, 78% of the teachers claimed to have knowledge of identifying pupils with learning disabilities while 22% were unable to identify them. However, with the introduction of an identification tool in class by the researcher, they were able to identify the learners. On assessment, 97% said they had ever assessed learners with learning disabilities, while only 3% had never assessed learners with learning disabilities. Assessment tools used included, teacher-made test which comprised 41%, observation 41% and an already prepared test which comprised 18%. Majority of the teachers assessed learners after covering every topic and that was 68%, 16% of the teachers who assess the
learners at the beginning of the term and 16% assessed at the middle of the term. Assessment methods that most of teachers used to assess learners with learning disabilities were by giving standardized tests, that is 42 %, 23% of teachers did it by asking the learners oral questions, 19% gave exercises during the lesson.

Teaching and Learning Strategies and Materials
It was found that most teachers mainly used individual teaching, demonstration, group teaching and phonics among other teaching and learning strategies to educate learners with learning disabilities. Twenty-two per cent of the teachers preferred teaching learners as individuals and 16% preferred the use of group teaching method. Out of the 26 teachers used in the study, only 31% of the teachers searched on current trends in LD instruction from the internet and other sources in order to equip themselves with the modern teaching and learning strategies. Sixty-nine per cent do not update themselves with the latest teaching and learning strategies. Further findings showed that 38% of the teachers were adequately equipped with skills and knowledge on how to teach learners with learning disabilities during their training while 62% were not well-equipped during training. Ninety-seven per cent of the teachers indicated that they were in need of in-service training and 3% said that they didn’t need any more training. Half of the teachers used charts and maps as teaching materials to help learners with learning disabilities. Other materials commonly used were visual aids, pictures and flashcard among others. Reasons that most teachers gave for teaching materials they selected were that they met a variety of objectives and that comprised 43%, 40% of the teachers said that they used those materials they were trained to use during training among other responses.

During remediation of learners with learning disabilities, 57% of the teachers used the same materials they had been using during their normal teaching while 43% changed the materials. On what steps should be taken on inadequacy of materials, 37% of the teachers suggested that schools should be adequately equipped, 30% said that the government should intervene and provide, 35% said that teachers should be in-serviced on use of locally available teaching materials among other responses. It was also found that 75% of the teachers experienced difficulties when teaching children with learning disabilities. Teaching materials was cited to be the main challenge experienced when teaching children with learning disabilities and this comprised 75% and inability for the learners to respond accordingly made it hard for teachers to intervene and this comprised 25%.

Collaboration
The researcher found that, 63% of the teachers had a resource person whom they consulted when confronted with challenges when teaching learners with learning disabilities. Also, 66% of teachers had knowledge in collaboration while 34% did not have any knowledge. The main challenge encountered by teachers during collaboration was poor participation of some teachers and this comprised 44%, inadequate time for collaboration and this comprised 27% and 5% said that they lacked support from headteachers among other challenges. It was also clear that, 79% of teachers found collaboration as their own responsibility while 21% felt it was a bother. Areas where teachers mostly worked together were in screening, this comprised 36%, instruction and evaluation 29%, identification and assessment (14%) among other responses.

5.2 Conclusion
The study arrived at the following conclusions
5.2 Findings

Based on the research questions and research findings. On the question about professional qualifications, the study concluded that though teachers had professional qualifications, they lacked adequate skills and knowledge to teach learners with learning disabilities. There is therefore, need for teachers to acquire training in the area of special needs and particularly in LD because learners with LD are found in almost all regular public schools. On the question on ability of the teachers in regular schools to identify learners with learning disabilities, the study concluded that though teachers claimed to have knowledge in identification, there was no evidence of an identification tool that was used in class. However, they were able to use the tool that was introduced to them by researcher correctly. There is, therefore, dire need for all primary school teachers to be equipped with necessary skills on identification of learners with LD so that these learners are not left unattended on the basis that they do not want to learn. On the question on assessment, the study found that most of the tools used were appropriate because assessment has been integrated in the learning process and it was also on-going. However, teachers need to be encouraged to use assessment results for remediation purposes and improvement of teaching strategies. Regarding the question of the teaching and learning strategies and materials used by teachers serving learners with learning disabilities, the study concluded that most teachers used individual teaching, demonstration, group teaching and phonics among other strategies. These teaching and learning strategies can be very useful if geared towards the specific needs of an individual child. Further, the methods would work best if proper identification of the problem the child has is established and appropriate intervention done. Teacher training curriculum should adequately address the area of LD. Teachers already in the field should be encouraged to research on current trends in the area of LD instruction. This will equip them with modern teaching strategies. Materials commonly used are charts, visual aids, pictures and flashcards but modification of materials to cater for the child with LD was not evident. Regarding the question on collaborative structures that have been put in place, the study concluded that most of the teachers have knowledge on collaboration. Teachers have resource persons from outside with whom they share ideas on how to identify, assess and teach learners with learning disabilities. Headteachers as well assist teachers in collaboration. However, the study concluded that a few challenges like poor participation of teachers, inadequate time to plan, teach and evaluate learners together, some teachers lacking skills in collaboration and inadequate materials hinder partnership among special educators and regular teachers. Therefore, there is dire need to organize seminars to educate teachers on importance of collaboration. This will help address the challenges highlighted.

5.3 Recommendations

Based on the results, the following are the recommendations that require short-term and long-term address by different stakeholders:

1. **The Government**

Teaching and learning strategies are very critical in addressing the unique needs of learners with learning disabilities. Inability to use appropriate tools for early identification of learners with LD may hinder early intervention. Inappropriate teaching, learning strategies and materials can prevent a child with learning disabilities not realize his/her full potential in school. Consequently, this child fails to become a productive member of the society thus enhancing high dependency ratio. It is therefore; of paramount importance that the Government of
Zambia, put in policies and proper mechanism of ensuring that teachers are adequately trained and equipped with modern teaching and learning strategies that will enable them accommodate learners with LD. This will encourage learners to remain in school since they will not be demotivated and frustrated to an extent of dropping out from school. The government should also ensure that teachers handle small class sizes preferably at the ratio of 1:30 so that teachers can develop IEP for learners with LD. Adequate funding specifically for learners with special needs should be enhanced so that ample specialized teaching and learning materials can be provided. This would ensure that no child suffers in the hands of the teachers due to lack of specialized learning materials.

2. Teacher Commission of Zambia
Teacher Commission of Zambia should also focus on LD curriculum as a significant component in the training syllabus. This is because most teachers leave colleges without being fully equipped with skills and knowledge on how to handle learners with learning disabilities. It is also recommended that the area of special needs education especially in primary teachers’ college be taught by special needs education tutors who are well-grounded with knowledge and skills.

3. Headteachers and Teachers
Headteachers and teachers should work as partners with an aim of helping learners with LD so that they can realize their full potential. The headteacher should create enabling environment for both special needs education teacher and regular teachers to screen and identify learners with LD, plan together, assess together and share resources for the benefit of the child. In-service training, workshops should be encouraged at either school or zonal level so that teachers would be equipped with skills and knowledge on how to teach learners with learning disabilities. Head teachers should advocate for this when called for meetings by the district education officers so that they can get support from the office. Headteachers should recognize the presence of teachers who are specialists in the area of learning disabilities. These teachers should act as resource persons in their respective schools.

5.4 Areas of Future Research
Basically, though the study was a fair presentation of all the learners in public primary schools, it was limited to classes 1-4, a study can be carried out in the upper classes to establish whether there are other teaching strategies that can work with older children. A study is required to identify teaching and learning strategies that can address the specific skill deficits in learners with learning disabilities. Another study can also be carried out to establish the area of strength individual learners with LD have so that the potential in the child can be exploited and enhanced. This study also did not work on environmental modification for learners with learning disabilities and the activities that these learners should be engaged in so that they can learn. Therefore, another study is recommended.

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REFERENCES


