IMPLEMENTATION OF INDIVIDUALIZED EDUCATIONAL PROGRAMME ON LEARNERS WITH LEARNING DISABILITIES IN TAITA-TAVETA COUNTY, KENYA.

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A Research Thesis Submitted to theSchool of Education and Social Sciences in Partial Fulfillment of the Requirements for the Confermentof the Degree of Master of Education in Leadership and Educational Management of the Kenya Methodist University

October, 2020

DECLARATION

This research thesis is my original work and has not been presented in any other university or institution of higher learning for any award.

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We confirm that this thesis has been submitted for examination with our approval as university supervisors.

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DEDICATION

To my husband Aleck Mwagodi Mwabili, our children, Isabella Naomy Ughanga, Roselyne Mbeke, Jemimah Nzale, Julius Baraka, Hannington Dawson Mwabili and my grandson, Jonathan Gift Kituri, whose support, patience, encouragement and prayers made it possible for me to complete this Thesis.

ACKNOWLEDGEMENT

I thank God for His grace and mercies throughout the study. With gratitude, I'd like to thank my supervisors, Professor Nephat Justus Kathuri and Dr. Beatrice Owiti for their professional advice, encouragement and support on this long journey. My gratitude is extended to the head teachers and teachers of the sampled primary schools who readily volunteered information during data collection. My appreciation to my colleagues, KISE lecturers for their moral and professional support, Alex Ngunjiri Wang'ombe of ICT Department and the librarians for their invaluable support. My appreciation to my masters classmates, especially, Carolyn Kyalo and Ben Muriuki of KeMU, for their encouragement throughout my study. My gratitude to my brothers Charles Maighacho, Emmanuel Mwakisha, Andrew Mathews Mwachofi the late Nicholas Mwakachola and David Mwawai, for their love and support. Finally, my appreciation to Viulance Mwakachola for her immense support throughout this project.

I honour my late mother Roselyne Mbeke who taught me thevirtuesof life and for her prayers and blessings. My late father Julius Mjawasi, desired for a daughter but could not live to see me in my prime. My late father in-law Hanningtone Dawson Mwabili and mother in law Isabella Naomy Wughanga, for their encouragement support. God rest their souls in peace.

Almighty God bless you all

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ABSTRACT

The growing number of learners with Learning Disabilities (LD), prompted the Researcher to carry out this study to assess the implementation of individualized educational programme in public primary schools in Taita-Taveta County, Kenya. This study employed the Constructivist Theory of Instruction by Bruner, (1966) and the conceptual framework on variables in the study. The results of this study revealed that teachers used appropriate IEP strategies for identification, teaching and collaboration respectively. However, teaching materials were few and mainly teacher-made. Computers were few andthey were not mainly used for remedial with LD learners. The study used teachers trained in special needs education and their respective headteachers as the custodians of the school.Descriptive survey design was used to enable the researcher determine and report the way things were in their natural environment. The study population comprised 226 teachers trained in SNE, spread in 46 public primary schools, resulting to 46 head teachers from which the 20% sampling was sought.20% of the 226 made the teachers sample, resulting to 45 teachers and nine head teachers, respectively. Purposive sampling technique was used for selection of the sample to ensure similar characteristics of the respondents. Questionnaires with open ended questions were used to adequately provide information on the research objectives and help to achieve meaningful conclusions on the topic of study.Content validation ensured that all content of the variables was included in the research questionnaire. Information analyzed was presented using tables and charts, accordingly. The study revealed that there were more female teachers trained in SNE as compared to male teachers but overall, there were few teachers trained in SNE. It was established that teachers employed IEP and that it was successful with LD learners. Also, collaboration was employed between the teachers and educational assessments and resource center personnel. Research results revealed that teaching materials were inadequate and were mainly teacher made, affecting effective implementation of the IEP for/no learners with LD. Further, where computer laboratories were in existence, they were not used for remedial teaching. The Ministry of Education to sponsor the training of more SNE teachers, to cater for the increasing number of children with LD in schools. In this regard, more trained male teachers as compared to female teachers need to be deployed to schools to ensure gender balance. The Ministry of Education need to make a deliberate effort to provide teaching materials for learners with LD since currently, only the teacher made are in useand are inadequate.

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ABBREVIATIONS AND ACRONYMS

ACARPs	Adaptive computer-assisted remedial programmes
CBM	Curriculum Based Measurement
CWPT	Class Wide Peer Tutoring
DANIDA	Danish International Development Agency
DI	Direct Instructions
DL	Distance Learning
EARS	Education Assessment and Resources Services
EFA	Education for All
H/TRS	Head Teachers
IDEA	Individuals with Disabilities in Education Act
IE	Inclusive Education
IEP	Individualized Education Programme
IFSP	Individualized Family Services Plan.
KeMU	Kenya Methodist University
KIE	Kenya Institute of Education
KICD	Kenya Institute of Curriculum Development
KISE	Kenya Institute of Special Education
LD	Learning Disabilities
LRE	Least Restrictive Environment
MoE	Ministry of Education
NACOSTI	National Commission for Science, Technology and Innovation
PL	Public Law
SLD	Specific Learning Difficulties
SNE	Special Needs Education
SPSS	Statistical Package for Social Sciences
TIQET	Total Integrated Quality Education and Training

TRS	Teachers
UAE	United Arab Emirate
USA	United States of America
WHO	World Health Organization

CHAPTER ONE INTRODUCTION

1.1 Introduction

Every child learns at a different speed and has a different learning style, effective for different aspects of learning. Where such a situation is extreme and more significant, the primary educational methods fail to satisfy, hence, Individualized Educational Programme (IEP) is needed or, according to Debbağ (2017) this scenario calls on teachers to use special needs services offered in a general classroom. Asakai (2017), states that the educational support that learners with LD receive at school affects them directly and positively and he advocates for school personnel as persons who may help learners overcome both primary (difficulties in a classroom) and secondary effects (problems outside the classroom), such as, communication problems and or, bullying) to lead a rewarding life. Teachers can conduct the learning activities through team teaching or cooperative teaching, in the resource room, and or, use educational counseling.(Halder & Sacks, 2017). The teacher's ability to select appropriate teaching and learning materials should be guided by the findings of the assessment team. it is important that teachers are able to select teaching and learning resources that match the needs of the learner and a particular instructional model on which the IEP will be based and direct the learning activities towards the learner's strengths, interests' and needs (Hallahan et. al, 2014).

The United States defines special needs education as individually designed instruction for learners with disabilities. It includes the adaptation of content, presentation of information, and assessment methods. The Individuals with Educational Disabilities Act (IDEA) 2004-2009, of the United States of America

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(USA). American special education attends to learner's difficulties beyond academics and add related services, such as physical, occupational, speech & therapies, psychological counseling, orientation and mobility language training. This became operational in 1975 after the United States Congress acknowledged learning disabilities as a condition that needed attention and assured free and appropriate education for all the affected children. As a result, the federal government accepted the definition of Specific Learning Disabilities (SLD) and included it in the Education for All Handicapped Children's Act Public Law 94-142, of (1975). It became apparent that teachers would have to develop IEPs for all learners in schools hence, roughly 6.5 million children, 13% of learners in US public schools started receiving special education services (IDEA, 2004-2009). In US therefore, apart from ensuring access to general education, Special education services may be provided in the classroom, home, hospital, and other settings (Lia et al., 2017).

Affected Parents in USA, whose adolescent boys had difficulties learning how to read, noted that the boys had learnt to read when they were taught individually, and the boys managed to reach their potential later on in life and function successfully within their communities. (Educational Disabilities Act [IDEA], 2004), of the United States of America (USA), mandates that all learners with identified disabilities have an IEP (Bachrach & Steven, 2016). Report by the World Health Organization (WHO) estimated at least 15% of every country's population lives with some kind of disability (Juma, 2016). Juma notes therefore, it can be assumed there are at least 4 million Kenyans living with disability. This further, shows the need for teachers to use IEP with learners in regular setting. Report by the WHO indicated that there is

very little information available about other types of disabilities especially learning difficulties, probably explaining the reason why there are too few institutions that offer children with LD opportunities to study. It is important to note that persons with special needs have greater challenges accessing education, employment, community engagement opportunities, housing, and leisure and recreational activities than ordinarily advancing citizens.

Kaur, (2017) noted that Special Education Policy of Ontario Canada, recommends that learners and their learning needs are identified and IEP plans made to address their difficulties. Further, Kaur describes how the Faculty of Liberal Arts and Professional Studies of Ottawa, Canada, pride itself of persons in a Bridging Programme for International Educated Professionals, Newyork University, who became successful through individualized learning and have since acquired high offices in different organizations and continue to utilize their experiences and skills gained in Newyork University.

Japanese government through the Ministry of Education, Culture Sports, Science and Technology of made attempts to implement policies to support learners with LD. They gave guidelines in January 2004 that provided a direction for educational administrations, hence, specialists, parent's learners and schools in general, received guidelines in respect to using IEP. People with Developmental Disabilities Support Law of 2004, aimed at extending the social welfare services for persons with LD, enabling the national and prefectural government declare support for learners with LD (Sacks & Halder 2017). This law recommended learners to be identified at school level and to prepare conducive learning environments, and support for employment after school. This has led Japan, Tokyo, to have a support system for all learners with special needs in regular schools, including specialized education coordinators, external advisors and individualized educational support plans for each learner.

In India the local authorities a charged with the responsibility of establishing special education schools and to ensure that learners with disabilities are assimilated into general education schools. Approximately, 1.4% of the learners with disabilities in India have access to education in either self-contained or inclusive setting. About 78% of Indians population live in rural areas, children who reside in these areas miss special education programmes that are run by the government, private organizations or non-governmental organizations in urban centers (Sacks & Halder, 2017).

As regards individualized educational plans, tools needed for diagnosis, assessment and training for the implementation are said to be expensive (Barbaro & Halder, 2016). Currently, they do not have a standardized method to assess learners resulting to wrong diagnosis and cases that are not identified, leading to a number of challenges in IEP implementation. Parents pay for evaluation services that are done by private psychological centers instead of professionals in the school setting (Sacks & Halder, 2017).Education Department of South Africa put emphasis on curriculum differentiation in the year 2005 that involved curriculum adaptation and modification according to the learner's ability and by so doing, teachers provide meaningful learning experiences (Katz, 2016).

According to Dark (2018), Nigeria, with the highest number of children out-of-school in theworld, it would be almost impossible to address the needs of learners with disabilities. The researcher explains there is lack of awareness concerning learning difficultiesto an extent that teachers and parents almost expect miracles when

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confronted with unexplained learner's difficulties in the classroom.Oladoyin Idowu former student confesses how it felt to be called 'stupid' and how that affected her self-esteem recalling her experience as astudent with dyslexia. Today, she runs "One Word Africa", an NGO helping those with dyslexia to overcome their challenges and also, creates awareness about learning difficulties.Nigeria's policy on inclusive education is yet to be implemented by the government.

However, other non-governmental organizations are also, creating more awareness about learning difficulties in Nigeria.Uganda's practical adoption of the laws has made it possible for people with disabilities to be included in all levels of political life from the village to parliament. This making Uganda one of the countries with the highest numbers of elected representatives with a disability in the world (Abimany-Ochom & Mannan, 2014). Other African nations should learn and emulate Uganda which has led by example, ensuring total support to the less fortunate members of their society. Policies are very necessary, but if they not ae implemented, they lose their value.

Kenya has no enforceable laws concerning identification procedures, care or support for learners with LD such as dyslexia, dyscalculia and others, as echoed by the Ministry of Education press release, (2011). Kenyan, teachers are therefore, likely to pay more attention to learners who are able academically and neglect those with learning difficulties as narrated by James Kahonge (2017) of the Daily Nation.Stories of impatient teachers and frustrated learners, as narrated by Ruth Karanja a parent whose daughter Nyawira could not learn to read and write as expected.Nyawira was neglected and mistreated by impatient teachers, revealing the inadequacy of teachers who lack training in SNE, when faced with learners unexplained difficulties. Nyawira transferred from one school to another, until finally, she was enrolled in a school where teachers understood her predicament and planned individualized learning through which, she became competent and mastered learning thereby, boosting her self-esteem. Looking at this, it can be understood that most of the teacher'sexperience difficult moments when confronted with learner's unexplained difficulties. Furthermore (Murat, 2017), similarly indicates that most classroom teachers are not qualified to achieve inclusion teaching. Juma (2016) noted, lack of information and poor policy planning in Kenya, has created openings within the system that have left children with learning difficulties deprived of their right to education. Despite that they are often misjudged as slow or poor learners while those who are appropriately identified, still have to cope with few places and learning environments that are not conducive as well as, lack of enough teachers trained in SNE (Blackwell &Rosset 2014).

Kenya Institute of Special Education (KISE), which was established in 1986 under the Ministry of Education, is among the institutions that spearheaded the development of special needs education in Kenya, by offering Diploma and certificate courses in SNE to prepare teachers to support learners with LD (Oketch, 2009). However, both private and public Universities have also continued to offer degree courses in special needs education to teachers in Kenya. Uwezo Kenya in 2011, cited by Otieno (2013), revealed that nationally, 70% of class 3 learners could not read a standard two level story book, a number of class 8 learners could not solve a class two mathematical problem, 20% of the learners transiting to class 6 and 8, respectively, could not tell the meaning of colours of the national flag of Kenya. These revelations indicate that

some of the learners in Kenyan schools could indeed be having learning difficulties andTaita-Taveta County is not an exemption to this predicament.

Records at the Kenya National Examination Council (KNEC), reveals that learners in Taita-Taveta County have not done so well in the national exams between the years 2010 to 2018. This is a pointer, learners coul d be having difficulties in learning because only a few transit to form one each consecutive year, implying they could require intervention using IEP.Since teachers in Taita-Taveta County have been undergoing training in special needs education, it gives them legitimacy to practice IEP in schools. A report by Renson Munyamwezi of the Standard newspaper of Thursday, June 12th 2014 at 10.42 am, cited comments made by the High Court Judge, Justice Msagha Mbogholi who commented on the declining education standards in the county. He warned that this may in future compromise the region's development agenda. The branch secretary general Kenya Union of Post Primary Teachers (KUPPET), voiced concern over the same issue. Over the past seven years and presently, Taita Taveta County has remained almost, at the bottom of the 47 counties nationally in national examinations. Further, that none of its top five schools have recently appeared in the top 100 schools nationally raises a concern. In view of this, the researcher intended to assess the implementation of individualized educational programme on learners with LD, by SNE teachers in public primary schools in Taita-Taveta County, Kenya.

1.2 Statement of the Problem

A good number of learner's experience learning difficulties in schools for unknown reasons that cannot be explained, leaving teachers and parents wondering how these learners could be supported, a case of Taita-Taveta County. A task force was appointed by the previous Governor of Taita-Taveta County, John Mruttu, between the years 2013-2017, after he noted with concern, the declining educational standards in Taita-Taveta County and the growing number of learners who could not transit to form one after completing class eight. This task force cited various challenges that might have contributed to this decline, other than the possibility of the development of learning difficulties in learners (Munyamwezi, 2014). The emergent of learning difficulties would call for the use of individualized educational programmes with these learners. This calls for teachers to begin lookiing out for the signs of learning difficulties in learners and possibly start the process of IEP intervention. This also, showed a lack of knowledge on the members of the task force about learners with LD and use of the IEP to support these learners. Since some of the teachers in this region have trained in special needs education they have the legitimacy to practice the IEP process. This study therefore, was carried out to assess the implementation of IEP on learners with learning difficulties by SNE teachers, in public primary schools in Taita-Taveta County, Kenya.

1.3 Justification of the Study

According to Hallahan et. al (2014), an IEP is a management tool that provides teachers with skills and knowledge in classroom instructions, to support learners with learning difficulties. The success of this programme is dependent on the teachers' training in Special Needs Education (SNE). In view of this, the Ministry of Education (MoE) has continued to sponsor teachers for training in both certificate and diploma courses in SNE, while others are self-sponsored to undergraduate studies on the same. Teachers' Service Commission (TSC) equally recognizes by upgrading teachers

with SNE training, awarding them a monthly responsibility allowances, once they start working with learners with special needs. A number of teachers in Taita-Taveta county have undergone training in SNE and it was assumed that they have the ability to develop and implement individualized educational programme effectively. It was in this light that the researcher decided to conduct a study to assess the implementation of IEP on learners with learning disabilities by SNE teachers in Taita-Taveta County, Kenya.

1.4 Purpose of the Study

The purpose of this study was to examine the implementation of individualized educational programme on learners with learning difficulities in public primary schools in Taita – Taveta County, Kenya.

1.5 Objectives of the Study

The study was guided by the following objectives:

- Find out how teachers identify a learner with learning difficulities for implementation of individualized educational programme in Taita-Taveta County, public primary schools.
- ii. Identify the teaching methods SNE teachers use to supplement forin the implementation of individualized educational programme for learners with learning difficulities in Taita-Taveta County, public primary schools.
- Determine collaboration practices used by professionals in the implementation of individualized educational programe for learners with LD by SNE teachers in Taita-Taveta County, public primary schools.

 iv. Establish the availability of teaching/learning resources for implementation of individualized educational programme for learners with LD in Taita-Taveta County, public primary schools.

1.6 Research Questions

Based on the objectives, the following research questions are postulated:

- What methods do teachers use to identify learners with LD for implementation of individualized educational programme in public primary schools, in Taita-Taveta County, Kenya?
- ii. What teaching methods do SNE teachers use to supplement for, in the implementation of individualized educational programme for learners with LD in public primary schools, in Taita-Taveta County?
- iii. Do professionals participate in the process of implementation of the individualized educational programme for learners with LD in public primary schools, Taita-Taveta County?
- iv. What teaching and learning materials do you usein the implementation of individualized educational programme in public primary schools, in Taita-Taveta County?

1.7 Significance of the Study

The research results are expected to provide to both present and future teachers, school administrators and parents, useful information on IEP strategies that will enable learners conceptualize what they learn in school. The MoE will make and also, improve on policies that will facilitate training of more teachers in SNE to fill in the gaps in schools.Teachers' Service Commission will ensure that an equal number of

teachers trained in SNE are posted in public primary schools to benefit more learners. Kenya Institute of Curriculum Development (KICD) will generate materials that will be used for the benefit of the learners with learning difficulities.In addition, KICD will have a basis for reviewing the curriculum and ensure that LD issues are addressed to manage learning difficulties in and after school.Likewise, all the stakeholders will collaborate with school administrations to encourage teachers in their quest to support learners having challenges in academics. This will help learners overcome their learning difficulties and empower them to master learning independence and reduce over reliability on the teachers.

1.8 Scope of the Study

This study involved teachers trained in special needs education and their respective head teachers, because of their role as managers and custodians of those schools. The study was considered appropriate in this countybecause, some teachers had undergone training in special needs education ansd were believed to be competent to handle the IEP process. The study therefore, focused on the assessment of implementation of individualized educational programme on learners with learning difficulties n public primary schools in Taita-Taveta County.

1.9 Limitations of the Study

Due to the nature of the research problem, the sample size was quite small, thereby, limiting statistical tests ability to identify significant relationships within the data sets. Also, since the researcher focused on the most contemporary and evolving research problem, lack of adequate previous studies on the topic, denied the researcher the foundation to build upon, to fully achieve the research objectives. These limitation simply that any generalization of the results of this study should be done cautiously and may need modifications.

1.10 Assumptions of the Study

The major assumption of the study was that teachers were effectively trained in special needs education and understood the concept of individualization. It was therefore, assumed they would be able to differentiate IEP from other programmes and apply it appropriately during implementation, to support learners with learning difficulities, inpublic primary schools in Taita-Taveta County, Kenya.

1.11 Operational Definition of Terms

The following terms took these definitions in this study

Accommodation

A change made to the teaching or testing procedures in order to provide learners access to information and tocreatean equalopportunity to demonstrate knowledge and skills. It does not change the instructional level, content or performance criteria for meetingstandards.

Adaptations

Adaptations are changes that may be made to the school, classroom Environment, teaching and learning materials, and associated teaching method, inorder to support learners to access and respond to the school and classroom curriculum.

Collaboration

Used interchangeably with "team teaching".In this study, it refers to a strategy where groups of teachers may choose to work together to identify and provide the best opportunity in education for learners in need of special interventions. It is asituation in which teachers plan and work together in making decisions, as opposed to the traditional way of working individually.

Direct instruction (DI)

Refers to an approach in which the teacher controls learning following a straight forward technique where the teacher guides instruction and ensures that learners participate through question and answer method.

Educational Assessment

The term is used here to refer to assessment that involves gathering of Information that may be used to make educational decisions concerning a student'slearning.

Inclusive Education

This term was used here to refer to a process of addressing the learners' needs Within themand stream education using all available resources thus, creating opportunities for learning in preparing them for life. This process involves Placing all children in the general classroom regardless of their exceptionality With curriculum odifications and a daptations to support each learner Individually.

Individualized Education Programme (IEP)

This term used here-in, to refer to a document that is developed for each learner with learning difficulties, who needs special education services. It is created through a team effort where possible, reviewed periodically.

Itinerant Teacher

A teacher who travels to several different schools to work with learners with disabilities. Itinerant services are provided to learners with mild or moderate disabilities.

Learning Disabilities

It refers to a disorder in one or more of the basic psychological processes Involved in understanding or using spoken or written language, which can result to difficulties in reading, writing, listening, speaking, thinking, spelling, or mathematics. The term is used interchangeably with learning difficulties or specific learning difficulties, torefer to difficulties a learner may experience in specific areas in academics.

Specific Learning Difficulties

Used here to refer to a difference or difficulty with a particular aspect of Learning. The most common LDs are dyslexia, dyspraxia, attention deficit-Hyperactivity disorder, dyscalculia and dysgraphia

Learning difficulties

The term is interchangeably used with learning disabilities in this study, to refer to difficulties inacquiring knowledge and skills to the normal level expected of those of the same age, especially because of cognitive disorder or to describe conditions that cause a learner tohave learning problems in a conventional classroom learning.

Modification

The term here, refers to change of the delivery of instruction or what a learner is expected to learn or demonstrate, without changing the Content or conceptual difficulty or curriculum. The subject area remains the same as for the rest of the class.

Mnemonics

Used here to refer to "a specific reconstruction of target content Intended to tie new information more closely to the learner's Existing Knowledge Base and therefore, facilitate retrieval. Using memory-enhancing cues to help a Learner remember what is learnt.

Placement

Used in here to refer to the act of finding appropriate school for primary service delivery to learners. This can be in either in special classes, inclusive environments, or regular classrooms.

Special Education

A customized instruction programme designed to meet the unique needs of an Individual learner as used in this study.

Least restrictive environment

This is a legal term referring to the fact that exceptional children must be Educated in as normal an environment as possible.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, relevant literature to the study has been reviewed. The chapter covers reviewed literature on the implementation of Individualized Educational Programme (IEP) on learners with LD. The review covers the concept of IEP, ways in which teachers identify learners for IEP, the teaching method sused to supplement IEP, collaboration practices employed and the availability of teaching/learning resources in implementation of the IEP. The reviewed literature is based on the stated objectives of the study.

2.2 The Concept of Individualized Educational Programme

Kothari and Garg (2014), describes Individualized Educational Programme (IEP) as a management tool or planning vehicle that is specially designed for instruction and is a team-driven process by a multidisciplinary team. Special needs education can be explained as a synthesis of educational services planned for an individual learner aiming to maximize the learners' chances and potentials to live independently. These services are offered to learners who demonstrate cognitive, behavioral, socialemotional, physical or emotional inadequacy (Aytekin & Bayhan, (2015). It is necessary to have individualized education offered in inclusive settings. Aytekin and Bayhan further insinuate that education and training programmes that do not consider individual differences are not successful. Individualized instruction calls for more creativity, functional and long-term education applications in special needs training, to ensure that every learner benefits from this education (Hallahan et. al, 2014). Further more, learners in general classrooms experience a number of difficulties and likewise, there is a big gap between the education that these learners require and how well their needs are met (Murat 2017). If teachers wereto use appropriate accommodations, programme modifications, specific instructional and assessment strategies success of the programme may be realised. This callsfor preparation of Individualized learning for learners who may not benefit from the existing education opportunities due to difficulties experienced in learning and for those whose grades are seriously influenced by this inequality. Blackwell and Rosset, (2014) explain that individualized educational programme as the starting point, guides teachers and other professionals for intervention. Right from the beginning, the IEP process requires a multidisciplinary team that comprises the regular teachers, special education teachers, the EARCs, parents, therapists as need arises. It is a collaboration effort involving the multidisciplinary team that endevours to support both learners and teachers with special means.

This calls for general and special needs education teachers working together in planning, applying and evaluating the teaching process as they learn from each other (Murat 2017). IEP can be described as a plan of services the learner will receive, who, how, where and when they will be delivered. Hence, collaboration provides teachers an opportunity to capitalize upon the unique, specialized knowledge and skills of their colleagues, bringing about creativity and innovation in delivering education. In contrast, when there is no collaboration, teachers work in isolation, resulting into loss of meaning of the school culture, paving way for individualistic and thereby, achieving none or little professional growth (Mattatal & Power, 2014).The multidisciplinary team carry out assessment to find out whether the learner is legible for special education services and this forms the basis for decision making about the

learner's plan, based on his/her strengths and needs. The IEP has a time limit, focuses on child-centered objectives and the content (Asakai, 2017).

The role of the teacher while using IEP, is to guide and to assist each individual learner personally in his/her journey towards self-realization. According to Ford, (2013), the IEP system of instruction is based on the following accepted educational principles namely: active responding, positive conditions and consequences, specification of objectives, organization of learning materials, mastery before advancement, objective congruence, frequent evaluation, immediate feedback, self-spacing and personalization. Asakai, (2017), emphasize that the IEP process requires a step by step evaluationas in diagnostic prescriptive method during the implementation process. During this process, the teacher assesses his/her teaching methods and also, the learner's understanding of the content, allowing for modifications and or, total change of the programme if necessary.

Teachers are expected to make instructional arrangements for the learner that include seat work of learners in the classroom, small groups, and or, peer tutoring. The teacher matches the learner, the task and instructional interventions to ensure maximum growth. Individualized education programme should be connected to coregeneral classroom activities through Direct Instruction (DI). Therefore, teachers should select teaching approaches that match the learners' individual differences and the learning stylesto supplement DI (Bachrach & Steven (2016). It is importantfor the teachers to note that due to these individual differences, what works for one learner, may not necessarily be appropriate for another as each learn at their own pace.Some learners may require additional time to learn new information or testing and others need the task to be broken down into smaller and more manageable chunks because of the differences in their learning styles.

2.3 Identification of Pupils with Learning Disabilities for IEP

The use of the Individualized educational programme is regarded as a major tool of inclusive education. IEP is the tool that guides instruction, assessment, and progress monitoring of learners with difficulties in their least restrictive environments. Once a learner is suspected of having learning difficulties and is referred for consideration of special needs services, a diversity of assessment takes place that includes parent evaluation, observations and formal assessments are done to establish the learner's is legibility for special educational services. The assessment results are interpreted to find out if the learner's present levels of performance correspond with specific criteria of one or more of the disability categories,(United Nations Children's Fund [UNICEF], 2014).

Identification begins when the learner is suspected to be at risk of developing Learning Difficulities (LD). Identification involves assessment by gathering information on theof the learner's historical background and progress in class to assess his/her potential that provide the learning strengths (Hallahan et. al, 2014). The learner's strengths and needs form the criteria for eligibility of special needs education services and serve as the basis for making the instructional plan.Teacher-made or informal tests are used to assess the learner in class, focusing on the learning area of the core curriculum already taught. Errors and wrong diagnosis of the learners' needs may lead to inappropriate placement and faulty IEP (Mielke, 2017). Identifying the

learning needs is necessary for the success of the programme. Teachers should look out for indicators of LD in the teaching process such as, oral expression, reading, written expression, comprehension, mathematical calculation and reasoning (Mielke, 2017). In the case of late identification and intervention, this could impose limits on what a teacher expects from a learner.

2.4 Teaching Methods for IEP

The teaching methods selected to supplement the IEP influence the level and quality of participation of the learner and effectiveness of the programme. The selected methods for IEP implementation should be infused with Direct Instruction (DI) for the success of the programme (Bachrach & Steven, 2016). Hence, using DI without the IEP approaches may likely disadvantage the learners who may require more time to fully understand the content being delivered. However, Katz (2016) note that teachers'positive attitude towards the learners is of utter importance for the success of the IEP programme. The use of various teaching methods gives learners a wide range of experience thereby, create independence in learning andenable the learner develop the ability to generalize their skills and behaviours to new demands.Learners are unique with different abilities such as, their capacities, interest, attitudes, aptitudes and other personality traits.

The different educational interventions and teaching methods are designed to meet learners' unique academic, social, and behavioural needs.Bachrach and Steven (2016) observed that successful IEP depends on the teacher's ability to match the needs of the learner to a particular instructional approach on which the IEP would be based and knowingthe entire curriculum so one can switch back and forth as they support each other's efforts in collaboration. The teacher who has the ability to do this, would be able to plan and direct the learning activities towards the learner's strength and interests before focusing on the needs and ensures the success of the IEP. Methods employed should be learner centered to promote thinking on curricular contexts and enhance cognitive acceleration.

2.4.1 Task analysis

Task analysis involves breaking down the content into smaller steps to be presented to the learner in a sequence from the easiest to the most difficult. Cognitive ability is a critical agent in determining how information is processed, identified, interpreted, organized and utilized and helps the learner to master learning more easily. According to Mocko et.al (2017), this strategy is used for encoding new information in memory in such a way that it can be more easily retrieved. This may be achieved through the teacher's guidance in self-instruction by using mnemonic strategies that consciously improve memory of learner's with LD.Using effective cues that are simple has the probability of reminding the learner of the target information and ensure cognitive attempts used to manipulate or modify the way a learner thinks, reasons and perceives information, bringing change that can be observed in learning (Mocko et. al, 2017).The teacher is guided on the range of the task to be presented by the objectives in order to meet the goal.It is important that teachers ensure the learner does not get frustrated, by having the difficulty level of the task that matches the learner's strengths and needs.

2.4.2 Diagnostic prescriptive teaching

Diagnostic prescriptive-teaching also known as clinical teaching or teach-test teachtest approach, is learner centered and bases teaching on the pupil's learning allowing a step by step evaluation (Mocko et. al, 2017). In this approach, the learner is evaluated on skills already covered in the curriculum and the teacher assesses the methods employed as well as, the learners progress.Evaluation will allow for decisions, whether to move to the next task or modify the plan and teach the specific skill again. The progress learners make, may be observed in the changed behaviour of each learner in reasoning, thinking, and activity (Mocko et. al, 2017).Teachers therefore, should endeavour to test the learner at every step to reflect on both the learner's difficulties, teacher's methods and the teaching materials. It should be noted that this approach allows for early intervention as changes and modification of instructional approach is made at every step of learning.

2.4.3 Curriculum based measurement (CBM)

According to Hallahan et. al (2014), Curriculum based measurement (CBM) may be used to determine whether a learner is making progress toward a specified goal, using short probes that require only minutes to administer. It involves direct and frequent samples of performance on items from the curriculum in which learners are being instructed, performance here is linked with challenges in learning. According to Meed (2014),the strategy uses multiple forms of equivalent difficulties that are administered at regular intervals, by which the teacher evaluates the learner, methods and learning materials used to make decisions on the next move. This method may not allow adequate time for the learner to fully understand because the teacher may not have ample time to repeat due to the demand of syllabus coverage.

2.5 Collaboration Practices for IEP Implementation

Individualized Educational Programme (IEP) is the common tool for both the parents and educators that encourages them to collaborate on educational plans for the learners. Therefore, allthose interested and are responsible for the education of learners with LD, must actively participate in the process of IEP (ilik1 & Konuk, 2019). Collaboration and team teaching allows all interested parties to participate in the IEP process from evaluation implementation of the programme. Generally, schools use three approaches of collaboration to help learners with LD participate in the general education classroom that include team teaching, cooperative teaching and co-teaching (Bachrach & Steven, 2016). This calls for teachers to plan and work together in making decisions, as opposed to the traditional way of working individually. Through collaboration, teachers will share ideas and diverse skills, training bringing perspectives to the team and combine resources to strengthen teaching, learning opportunities and methods as they all focus on achieving a common goal (Mattatal& Power, 2014). These techniques include, focusing on the problem and not the people, being open to new ideas, asking clarifying questions for more information, find a common ground and work on solutions that all members agree upon.

Through collaboration, learners are provided with appropriate classroom and homework assignments making sure that all are learning, challenged, and participating in the classroom process. It involves time, support, resources, monitoring, and determination and calls for commitment by the teachers and the school administrators in order to bring success for the LD learner, lack of which may prove otherwise. Mattatal and Power, (2014) point out that collaboration among teachers and parents results into a fine-tuned, carefully timed approach that incorporates assessment strategies, specific teaching methods and daily classroom practice takes place and ensures effectiveness of the programme. When members work together as a team, it increases cooperation among professionals for the benefit of the learners. Engaging in collaboration during the teaching process involves teamwork, consulting one another and consulting the curriculum. This cooperation work better where teachers consult more often, plan and teach together.

2.6 Teaching and Learning Resources Used for IEP

Teaching materials is a generic term used to describe the resources used by teachers to deliver instruction. Learning materials support and increase learner's success, while providing meaningful and productive knowledge, skills, experiences, attitudes and stimulate the learners' senses (Hallahan et. Al 2014). These are particularly useful for learners with LD due to the learning challenges they face in academics, hence, SNE teachers should prepare concrete or manipulatives learning tools or games that help learners gain and practice facility with new knowledge such as using counting blocks (Aytekin & Bayhan, 2015). Every SNE teacher should be aware that engaging learners with activities that stimulate learning, leave a lasting impression and understanding, hence, learning materials come in handy in the education of learners with learning difficulties (Aytekin & Bayhan, 2015). The traditional teacher centered approach, does not encourage creative thinking and most often produce short-term results. It is also risky in the event that the teacher is inadequately informed on the subject or is not adequately trained in the art of communication. In such a situation, using appealing learning materials would fill that gap and help learnerscapture their attentionand turn the lesson and results into a more valued time spent in school. Learning materials help learners torelieve anxiety and boredom and, equally, helps teachersto follow common principles of teaching such as, concrete to abstract, known to unknown and learning by doing which is more useful to learners with LD (Katz,

2016). Hence, teachers should note that employing a variety oflearning and teaching materials, helps the learner to experience success, hence, achieve the goal of the IEP.

According to Mattatal and Power (2014), the learning materials produced by teachers can be revised or adapted as needed, giving them greater flexibility than commercial ones. These resources increase learner's motivation and interest when combined with interesting tasks, unlike where, the teacher takes control of the classand the learners passively listen, causing themto lose interest. This would be disastrous for learners with LD who are believed to have poor memory and short attention span. Teachermade learning materials become an investment for future use in a similar unit while saving time and money.

Some countries have adopted the use of assistive technology to compensate for barriers to learning Asakai, (2017). United States of America passed a law, PL 105 – 17, that required educators to consider the appropriateness of assistive technology as a tool of intervention for every learner under an IEP. Technology provides several free learning materials that teachers can use with learners with LD, aside from making their own. Computers or electrical assistive devices are cognitive aids that help learners with memory and attention deficits, thereby, enabling them to become more effective in learning Asakai, (2017). Video discs, CD – ROMS, and the internet can be used to deliver instructions to LD learners. According to Shabandi (2017), the uses of interactive computer programmes that incorporate various media, enhance the mathematical problem-solving and improved performance in spelling. Presently,

learners are using technology in several aspects of their lives, except when they are in school.

Advancement of technology has presented new opportunities where learners can learn throughout from any place and at their own pace and this demand requires new ways of integrating current and future technological innovations into education Shabandi (2017). Shabandi observed that to serve learners better technology should be used as an ongoing part of the learning process, rather than a separate activity. Parents and teachers are urged to guide learning, smart device use and access to content due tochallenges arising from ICT use (Shabandi 2017). A success story, is of young learners at the Indian curriculum school in Abu Dhabi, who are using tablets in class, while older learners access content through laptops.

The Sessional Paper No. 1 of 2005 on "Policy Frame Work for Education, Training and Research", Kenya, advocated for Information and Communication Technology (ICT) use in the education sector. The policy recommended universal access to ICT infrastructure, by providing power equipment and improved connectivity in all institutions of learning, in both the formal and non-formal education sectors, including ASAL areas, rural and urban-poor schools (Ministry of Education Science & Technology, 2016). The Koech Report (1999) directed former, Kenya Institute of Education, now Kenya Institute of Curriculum Development (KICD), to develop standardized assessment tools, and to oversee the development of instructional materials for learners with specific learning difficulties. In line with the international declaration of Education for All (EFA), Kenya Institute of Special Education and Universities, both public and private expanded training for teachers in special needs education to ensure that most learners with LD get special education services in public primary school in Kenya.

2.6.1 Human resources

There is a difference between teaching material and learning material. Teaching materials include more intangible elements, such as, essays, support from other educators like itinerant teacher, SNE teachers EARCs and other professionals according to the learners needs (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2015). Through differentiation of instruction, lessons and instructions are tailored towards the different learning styles and capacities of learners. Learning materials such as, worksheets, group activity instructions, games, or homework assignments are applied to best activate each individual learner's learning style. Thus, professionals believe that a clear understanding of learning, arise from maximum use the senses evoked by the manipulation of learning resources the teacher employs. This calls for the head teachers' and teachers' competence in the selection of learning materials that will assist LD learners achieve the IEP goals.As Hallahan et. al (2014) points out, strengthening the education force with relevant skills in material development would go far in enabling the education of learners with LD. This would therefore, call for the Government and the ministry of education to do more in this area, to fill the gap in manpower, where teachers in special needs education are inadequate.

2.7 Theoretical Framework

This study employed the Constructivist Theory of Instruction by Bruner (1966), one of the most influential constructivists. He was influenced by Piaget's ideas about cognitive development in children. Bruner's theoretical principles focus on some of the following ideas: nature of learning, Instructional scaffolding, and the intellectual development of the learner. The Constructivist Theory foresee learners who are able to construct new knowledge, a process that involves categorizing every aspect of learning, interpretation of information and experiences, conceptualization and making decisions by using similarities and differences. Bruner's constructivist theory is a general framework for direct learning instruction based upon the study of cognition in which, according to Bruner, instruction must be concerned with the experiences and contexts that make the learner willing and able to learn (learning readiness) (Mattatal & Power, 2014). He emphasizes that instruction should also be designed to facilitate extrapolation and or fill in the gaps going beyond the information given, for learning to take place. Bruner emphasized four characteristics of effective instruction emerging from his constructivists theory such as, personalized, implying instruction should relate to learners' predisposition and facilitate interest in learning, structuring the content to be more easily grasped by the learner, sequencing the material to be presented from easy to most difficult and use of reinforcement, rewards and punishment that is selected and paced appropriately.

Bruner's characteristics of effective instruction require that teachers develop meaningful, measurable goals and objectives of the IEPin order to facilitate direct instructional learning. The intention is to provide a long-range direction to a learner's individualized learning asitis presumed that most learners with LDdo not have adequate skills and knowledge to direct their own learning, hence, the need for planning and guidance by teachers or peers (if need be), is necessary. To facilitate instruction, Bruner noted the importance about acknowledging the learner's predispositions that influence learning, toenable the teacher to plan instructions, decide on the strategies, accommodations, curriculum adaptations and the teaching/learning materials. These results are consequent to assessment by the multidisciplinary team revealing these underlying problems contributing to the learner's failureto learn and guides theIEP planning once the learner's strengths and needs have been identified. Hallahan et. al (2014), maintained that effective assessment should be done by a multidisciplinary team of professionals that include teachers, parents and guardians and where necessary, a psychologist, therapists, social worker and other relevant professionals depending on the needs of the learner. Collaboration is necessary for the success of IEP implementation. Mattatal and Power (2014), point out, collaboration is highly advocated in special needs education as a means of improving teachers' instructional activities and subsequently, strengthen learning. Accommodations and curriculum adaptations allow a gradual improvement of concepts moving from simple to most difficult.

Bruner also, affirms that any child can be instructed inany subject, in some intellectually honest form, at any stage of development. This notion led Bruner to present his concept of the spiral curriculum which states that curriculum should revisit basic ideas- (prerequisites), building on them until thelearner grasps the full concept. Applying theseprinciples will enable learners master the concepts taught more easily. These includeactive responding, positive conditions and consequences, specification of objectives, organization of learning materials, mastery before advancement, objective congruence, frequent evaluation, immediate feedback, self-spacing and personalization. MacLeod (2019) agree with Bruner's postulated three stages of intellectual development in his constructivist theory. That is, Enactive representation (action-based), Iconic representation (image-based) and, Symbolic representation (language based).Bruner's constructivist theory suggests it is effective when faced with new material to follow a progression from enactive to iconic to symbolic representation, this holds true even for adult learners.

Bruner's work also suggests that a learner even at a very young age is capable of learning any material so long as the instruction is organized appropriately, in sharp contrast to the beliefs of Piaget and other stage theorists. Hence, success in thelearning process is largely dependent on the teacher'scompetencies in planning, organizingmaterial and the learning environment to make it conducivefor for the learner.

According to Bruner, when a learner is faced with new knowledge, a combination of concrete, pictorial and symbolic activities may lead to more effective learning. These strategies are modes of representation that are integrated, and only loosely sequential as they translate into each other (MacLeod, 2019). The most part of the learning field has responded by adopting a direct instructional teaching approach, while, IEPinvolves individualization and structuring of learning instruction to strengthen academic difficulties of a learner. This ensures that the learner is able to access general

education curriculum with accommodations and adaptations to overcome the learning challenges.

Educational researchers have echoed sentiments that IEP improves learners' accomplishments substantially. Individualized educational programme is flexible, varied and personalized to the learner's needs. Froebel, 1782-1852 compared the role of educators and teachers to that of a gardener who continuously nurtures plants to grow in a healthy manner. Structuring the instructions makes for economy in teaching and learning, and fosters retention and transfer, while boosting the learners' intrinsic motivation (Hannam, 2017). Hence, during planning for instructions, the teacher should focus on what he/she wants the learners to know, do and transfer after the lesson.In comparison, learners are viewed likethe plants that require to be natured to bloom. Bruner's theory can be likened to plants being natured, comparing with what the farmer would do, prepare the land, add manure, plant and water the plants and keep on checking out for diseases and other issues that would require attention until the plant matures, exactly what teachers would do with IEP forlearners.

In this case, Bruner tried to show that with constructive planning and structuring instruction of the subject matter in terms of basic themes, fundamental ideas, principles, relationships and the teachers continued support, learners should be able to conceptualize information they learn more easily. Teachers are encouraged to structure learning instruction with an attempt to incorporate cooperation and collaboration, according to Mattatal and Power (2014), it results into a fine-tuned, carefully timed approach incorporating assessment strategies, specific teaching methods while daily

classroom practice takes place and ensures effectiveness of the programme. In this study, the researcher attempted to conduct assessment of implementation of the IEPon learners with LD, by special needs education teachers, in public primary schools in Kenya.

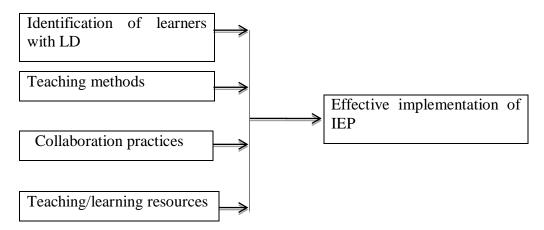
2.8 Conceptual Framework

The Conceptual Framework in this study attempts to show the relationship between the independent and dependent variables in the assessment of implementation of the Individualized Educational Programme (IEP) on learners with learning difficulties by teachers with SNE.

Figure 2.1:

Conceptual framework on variables in the study

Independent Variables dependent Variables



In this study, the researcher attempted to assess implementation of individualized educational programme, on learners with learning difficulties by teachers with SNE. The effectiveness in the implementation of individualized educational programme, therefore, is the dependent variable this implies that this is the quality the researcher

intended to measure. According to Kothari and Garg, (2014), a variable is a factor that can assume different values. In this study, the researcher carried out the study to assess the implementation of individualized educational programmeon learners with learning difficulties in public primary schools in Taita-Taveta County. A number of learners with LD have already precursors or signs of learning disabilities before they enter school, such as, language delays, difficulties rhyming, counting or fine-motor skills, or behavioural manifestations (Zhang, et al, 2018). Early screening, identification and interventions are important in determining whether a pupil's learning difficulties may be due to learning disabilities or otherwise.

The success of the programe may be achieved by manipulating the independent variables. The independent variable is the predictor/explanatory variable, the factor that explain variation in the dependent variable (Kothari & Garg, 2014). To measure the dependent variable therefore, would be determined by the teachers' knowledge in the process for identifying learners with LD. Likewise, the choice made by teachers to supplement direct instructionby infusing other methods, this would determine the effectiveness of the programme. The ability of teachers, the school administration, parents and other professionals to delegate and support each other provides a measure of the variable for collaboration practices. Also, the choice of the learning resources that teachers make may be used to measure the dependent variable.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the researcher outlines the methodology used in carrying out the study. It therefore, describes the location where the study was carried out, research design, target population, determination of sample size and sampling procedure, data collection and the data analysis procedure. Ethical considerations observed during the study have also been outlined.

3.2 Research Design

This study adopted a descriptive survey design which is appropriate for determining and reporting the way things are in their natural environment (Kothari & Garg, 2014). The design was structured in a manner as to collect information from the teachers and the head teachers in order to assess the implementation of individualized educational programme with learners with learning disabilities by SNE teachers in Taita-Taveta County, Kenya.

3.3 Location of the Study

This study was carried out in Taita-Taveta County, in the Southern part of Kenya. It lies northwest of Mombasa and southeastof Nairobi city of which, a bulk is within Tsavo East and Tsavo West National parks. Its headquarters is presently situated in Wundanyi. Other major towns in this location includes Voi, Mwatate and Taveta, respectively. This location was considered appropriate because a number of teachers in public primary schools in this region have undergone training in SNE. They are therefore, considered competent in delivering the IEP and that their opinions would be important and relevant to this study.

3.4 Target Population

Population, refers to an entire group of persons or elements that have at least one thing in common. Hence, this study focused on teachers who are trained in Special Needs Education (SNE) and their respective head teachers. Target population is that population to which a researcher wants to generalize the results of the study (Mugenda & Mugenda, 2010). Therefore, thetarget population of teachers with SNE in Taita-Taveta County public primary schools, were 226. These teachers are distributed in 46 public primary schools in the county.Since the study targeted teachers trained in SNE, it used only head teachers where the SNE teachers were placed, making atotal of 46 head teachers. This made a total of 272 potential respondents.

3.5 Sample Size and Sampling Techniques

Purposive sampling was used in this study to obtain a more detailed information regarding the opinions of special education teachers and head teachers in regular primary schoolsto assess the implementation process of the IEP and the success.Criteria was used to obtain a sample group of homogenous teachers with common qualities whose opinions are believed to be reliable for the study (Kothari & Garg, 2014).Only 226 teachers specialized in Special Needs Education (SNE) were sampled for this study. These teachers were placed in 46 public primary schools. Hence, the study used 46 head teachers, who came from the respective schools where SNE teachers were teaching. This made a total of 272 respondents for sampling. According to Mugenda and Mugenda, (2010), a sampling percentage of 10-30% is considered adequate for a descriptive study. Therefore, in this study sample of 20% of both the teachers and head teachers was considered appropriate, resulting to 45 teachers and nine head teachers, respectively, making a total sample of 54 respondents

as shown on Table 3.1. The Head teachers were used because of their administrative and custodial role and because they are immediate supervisors of these schools.

Table 3.1

ze in Relation t	o Target P	Population
	ze in Relation t	ze in Relation to Target F

	Target	Sample
Sampled respondents	Population	
Teachers trained in SNE	226	45
No.of H/Tin schools with SNE teachers	46	9
Total	272	54

3.6 Research Instruments

Research questionnaires for both respondents were used to collect data. The questionnaires had both structured and open ended questions. Open ended questions gave the respondents the liberty to provide their opinions where applicable. Open ended questions allow respondents an opportunity to express their thoughts freely by answering questions willingly and with an open mind, thus eliciting honest comments (Kothari, & Garg, 2014). Further, for this study, questionnaires were designed to provide genuine answers to questions and allow uniformity of answers, hence, simplifying the researcher's analysis of data. The advantage of using questionnaires was to enable the researcher to gather a large amount of information within a reasonable space of time. Two sets of instruments were considered appropriate because of the nature of each respondent. The head teacher is the school administrator and manager, while the teacher works under the head teacher's supervision.

Therefore, some questions asked would require answers from one set of the respondents and not the other.

Each questionnaire had five sections, section A, B, C, D and E. Section A was about the demographic information of the respondents, section B, concerned itself with how professionals identify learners with LD for IEP implementation, section C sought to determine the teaching methods teachers use for IEP implementation, D sought to find out collaboration practices used for IEP implementation and, sought to find out teaching/learning resources that teachers used for IEP implementation.

3.7 Pilotingof Research Instruments

The researcher carried out piloting in Nairobi public primary schools. The choice of the schools was considered because they presented the same case scenario as some of the public primary schools in Taita-Taveta County, for example, the poverty level and hardship experienced by learners and their parents. The results wereused to establish clarity, meaning and comprehensibility of each item in the instruments, also, to ensure no item was repeated more than once. This was done by cross checking their validity and reliability. According to Mugenda and Mugenda (2010), piloting provided the researcher the administrative experience in conducting the research before the actual study, thereby, gaining confidence.

3.7.1 Validity of the research instruments

The questionnaire was availed to research supervisors to give their critical comments. This helped in assessing whether the items included in the questionnaire were adequate in form and clarity. Content validation was also as certained by ensuring that all the objectives were comprehensively covered by the test items. Data from the pilot study was used to ensure that the items were clear to the subjects. During pilot testing the researcher observed the time takento administer each of the two sets of the questionnaires.

3.7.2 Reliability of the instruments

Kothari and Garg(2014), defines reliability of an instrument as the consistency of measurement, or degree to which, an instrument gives the same results each time it is used under the same conditions with the same subjects. Test-retest method was used in this study to estimate the degree to which the same results could be obtained with a repeated measure. The instruments were administered twice with a time interval of two weeks. The respondents used during testing and re-testing exercise were not included in the final sample. The responses obtained during testing and retesting were analyzed whereby a correlation (reliability) coefficient was computed between results of the two administrations. A correlation coefficient of \geq 0.70for the two questionnaires was considered reliable,(Kothari & Garg, 2014). In this case, a reliability coefficient of \geq 0.70.

3.8 Data Collection Procedure

The researcher obtained an introductory letter from Kenya Methodist University (KeMU). The introductory letter was used to apply for aresearch permit from the National Commission for Science, Technology and Innovation (NACOSTI). The research permit was used to seek for local authorization to carry out the research. The researcher made personal visits to the schools in order to seek appointments as to the convenient times to administer the questionnaires. Later on, the researcher visited the schools at the agreed times andduring the data collection everyone involved in the

study was given instructions and assured of confidentiality. The researcher waited for the respondents to complete the questionnaire on the spot. Upon completion, the instruments were collected immediately. The latter was necessary in order to ensure high response rate and also limit any consultations among the subjects. Due to the hilly terrain and owing to the large area Taita-Taveta covers, data collection took three months, from May 2016 to August 2016.

3.9 Data Analysis

The questionnaires were cleaned of vague responses and any incomplete questionnaires after the data collection. Responses were then coded to facilitate entry into the computer. After coding, the data was entered into a computer andanalyzedusing SPSS Version 22. The results assisted in the tabulation of frequencies and percentages. Descriptive statistics, such as, percentages and means were used in the analysis. The quantitative data used percentages and means. The qualitative data which had open ended questions separated answers into themes and categories. Therefore, responses were put into categories that involved explanations and separated answers into themes and categories. The responses were put into categories and explained. The analyzed data was presented using frequency tables and charts as considered appropriate.

3.10 Ethical Considerations

According to Kothari and Garg, (2014) protecting the rights and welfare of the participants is a major ethical obligation of all the parties involved in a study. Explanation of the research process to the subjects was done in advance as part of

obtaining informed consent, and ensuring that they would all participate voluntarily. The researcher observed confidentiality, privacy and anonymity by ensuring that the respondents did not write their names in the questionnaire and also, instructed them to complete the questionnaire individually and privately for privacy and anonymity. Respondents were also made to understand that the analysis was not for individual.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.1 Introduction

This study aimed at assessing the implementation of individualized educational programme, on learners with learning difficulties in public primary schools in Taita-Taveta County, Kenya. This chapter contains the presentation and discussion on the findings. The findings are systematically organized on the basis of the study objectives. The study targeted teachers trained in special needs education and the head teachers of their respective schools. Two sets of questionnaires were used. The first set was administered to the teachers while the second set was administered to the head teachers.

The researcher, therefore, obtained responses from teachers and their respective head teachers of the sampled schools. Forty-five (100%) of the teachers responded to the questionnaire, while nine (100%) of all the head teachers responded. This shows that the two categories of respondents targeted, were fully represented in the study as expected. The responses, therefore, formed adequate basis for data analysis presented in this chapter. Descriptive statistics such as frequencies, mean, standard deviations and percentages were used in the analysis.

4.2 Demographic Information

The first step in the data analysis was to investigate respondents' background information. These included the teachers, head teachers, their teaching experiences

and training in special needs education. The results of this analysis are presented in Tables 4.1 - 4.2.

4.2.1 Areas of specialization in SNE

The study sought to establish the teachers and head teachers'specific areas of specialization in relation to special needs education. To achieve this, both teachers and head teachers were requested to indicate the areas in which they had been trained, in relation to SNE. In this case, head teachers' total N was 'nine' and the teachers total 'N' was 45 making a total of 54 respondents, equivalents to 100% respondents. Table 4.1 contains these areas of training.

Table 4.1

	Frequency	Percent	Frequency	Percent
Specific Training in SNE	(N)Trs	(%)	(N) Htrs	(%)
Learning disabilities	9	20	2	22
Gifted and talented	2	4	0	0
Autism	2	4	1	11
Emotional and behaviour				
Disorders	4	9	1	11
Hearing impairment	12	27	3	33
Mental handicap	12	27	3	33
Physical impairment	2	4	0	0
Visual impairment	2	4	0	0
Not specialized	0	0	0	0
Total (N)	45	100	9	100

Areas of Specialization for Teachers and Head Teachers

The findings in Table 4.1 reflect that more teachers and head teachers were trained in Hearing Impairment and Mental Handicapped as indicated by 27% teachers and 33% head teachers, respectively, while 20% teachers and 22% head teachers had been trained in learning disabilities. This clearly showed that, there was need to have more teachers and head teachers trained for learners with LD in order to increase expertise in this area. There were no head teachers specialized in gifted and talented, physical and visual impairements. Only, (4%) of teachers were trained in those areas. This study established that there is a need for further training to increase expertise in these and other areas with fewer specialized personnel. It is equally of importance that the teachers are trained in several areas of specialization because when an SNE teacher is posted to a school, he/she is expected to handle a diversity of special needs.

4.2.2 Teachers and head teachers experience

The study sought to establish the experiences of the teachers sampled and their head teachers, respectively. Key attributes investigated included teachers and head teachers teaching experience including their training in Special Needs Education (SNE).

Table 4.2

Demographic							
Characteristics							
of teachers &	of teachers & Frequency Percent Frequency Percent						
head teachers	Categories	(nTRS)	(%TRS)	(nHTRS)	(%HTRS)		
Teaching experience	1 - 5 years	3	7	0	0		
	6 - 10 years	4	9	0	0		
	11 - 15 years	5	11	3	33		
	Over 15 years	33	73	6	67		
	Ν	45	100	9	100		
Training in Special Needs	Yes	38	84	6	67		
Education	No	7	16	3	33		
N		45	100	9	100		

Teachers and Head Teachers Experience

The findings presented in Table 4.2 show that 84% and 67% of the teachers and head teachers respectively, were trained in Special Needs Education (SNE). This shows that most of the teachers and head teachers in the targeted schools were professionally trained in SNE and had adequate teaching experience as indicated by 73% and 67% of the sampled teachers and head teachers, respectively. Both categories had over 15 years of teaching experience, meaning that they were well positioned and informed on the issues influencing learning of learners with learning difficulties in the schools.

The findings in Tables 4.2 show that high number 84% teachers were trained in SNE, as compared to 67% of the head teachers. Also, more teachers 73% had a longer teaching experience in teaching learners with SNE, than the head teachers, as shown by 67%. This implies that more teachers than head teachers had undergone training in SNE, and that teachers had more experience in dealing with LD learners than the head teachers, however, their differences in experience was not so big.

The findings concerning teacher's teaching experiences and their training in SNE, revealed that most of the teachers and head teachers were trained in SNE. Majority had adequate teaching experience mostly of over 15 years. This implies that they were conversant and well informed on the issues affecting learners with learning dificulties in the schools; andthat most head teachers were well positioned to understand the IEP process. However, most teachers and head teachers are specialized in Hearing Impairment and Mental Handicapped, while only a small percentage, 20% teachers and 22% head teachers had specialized in learning difficulties. Therefore, there is need to have more teachers and especially, male teachers trained in SNE to increase expertise in the area of LD. Equally, fewerteachers were trained in areas of gifted and talented, physical and visual impairments, hence, more teachers should also, train in these areas to fill in the gap. It is equally of importance that the teachers are trained in several areas of specialization because when an SNE teacher is posted to a school, he/she is expected to support a diversity of special needs. Hallahan et. al (2014), describes the IEP as a management tool that provides teachers with skills and knowledge in classroom instructions, hence, theneed for the teacher's specialization in SNE so they can support learners with LD in the classroom. This study revealed that head teachers were also trained in SNE, though initialy this study had not considered this factor, it was found to be a plus for the schools.

In order to meet the demand for training, KISE and the Universities, both public and private, started to offer training teachers in SNE as well. The success of this programme is dependent on the teacher's ability to articulate the IEP and having a thorough knowledge of the process. To date, the MoE continues to sponsor primary school teachers for training in both certificate and diploma courses in SNE.

4.3 Identifying Learnerswith LD in Schools

The first objective sought to establish various ways professionals employ toidentify learners with learning difficulties for the implementation of Individualized Education Programme (IEP) in Taita-Taveta County, public primary schools. The key sections investigated in this objective included methods of identifying learners with LD, involvement of other personnel in the identification process, learners' assessment, referrals and placement by EARCs and teachers likewise, and challenges teachers experienced in identifying learners with learning difficulties in schools.

4.3.1 Methods for identifyinglearners with LD

The study sought to establish the teacher's knowledge of the methods used to identify learners with learning difficulties. To achieve this, teachers were asked to indicate ways in which they identify learners with LD and involvement of other personnel in the identification process. The responses are indicated in Table 4.3 - 4.5

Table 4.3

Methods of identification	Frequency	Percentage
	(N)	(%)
Physical appearance	3	7
Speech and behaviour	8	18
Taking questions and receiving answers from them	7	15
Performance	3	7
Writing	6	13
Reading	9	20
Comprehension	9	20
Total (N)	45	100

Methods for Identifyinglearners with LD in Schools

According to the responses, majority of the teacher's (20%), indicated that they had knowledge on how learners with LD were identified. They cited reading and comprehension as methods used for identification. This was an indication that SNE teachers were knowledgeable as concerns identification of learners with LD. Others cited 18%, 15% and 13%, speech and behaviours, taking questions and receiving answers and writing, respectively, as methods used for identification of learners with LD. Mielke (2017), concedes that during the assessment process, teachers provide their learners with activities to perform and rate them accordingly, depending on how each performs. Mielke further noted that the result of the performance on a given assessment test, provides important information to a teacher about the present level of functioning of each learner, his/her strengths and needs. Accurate identification of learners is important, if incorrectly done, it may lead to wrong planning of the

programme as well as, wrong placement of the learner and delay in carrying out early intervention as is the case.

4.3.2 Involving other personnel in identifying learners with LD

The study sought to establish from the teachers and head teachers whether other personnel were involved in identifying learners with LDand if so, the personnel involved in the identification process. The findings are displayed in Table 4.4.

Table 4.4

Responses	Frequency	Percentag	Frequency	Percentage
	(N) Trs	e	(N) H/trs	(%)
		(%)		
Personnel involved Yes	39	87	6	67
in identifying				
learners with LD No	6	13	3	33
Total (N)	45	100	9	100
Those involved				
Special Education Teachers	25	56	5	56
Parents	10	22	2	22
Classmates/peers	4	9	1	11
Itinerant teachers	0	0	0	0
Doctors	6	13	1	11
Total (N)	45	100	9	100

Involvement of other Personnel in Learner's Identification

According to the responses, most 87% teachers and 67% head teachers agreed that other personnel were involved in the identification process of learners with LD. The respondents listed the categories of other personnel who were involved in the process. Both agreed that special education teachers were mostly used, as indicated by 56% of the teachers and 56% of the head teachers, respectively. This is in agreement with Mattatal and Power (2014), who observed that in a collaboration model, each of the professionals bring their skills, training and creativity to the team. Parents, class peers, doctors, are less involved as indicated by less than 22% by both teachers and head teachers, respectively. The results showed that itinerant teachers were not used at all; a pointer that such teachers may not have been available. This implied that schools that lacked teachers trained in SNE would not receive the much needed intervention to alleviate the learners learning difficulties, thereby, continued development of learning difficulties in learners. It is necessary to employ itinerant teachers who would assist teachers and learners especially, in schools without teachers trained in SNE.

4.3.3 Assessment and placement recommendation by EARCs personnel

Teachers and head teachers were asked to state whether they referred learners to be assessed by personnel in assessment centres and if personnel in assessment centres referred pupils for placement to schools, as shown in Table 4.6.

Table 4.5

Learners	Response	Frequency	Percentage	Frequency	Percentage
assessment		(n) Trs	(%)	(n) H/Trs	(%) H/Trs
Referred learners to be Assessed by personel in	Yes	33	73	5	56
assement Centers	No	12	27	4	44
Total (N)		45		9	100
assessment Centres reffered learners for Placement to	Yes	31	69	7	78
Schools	No	14	31	2	22
Total (N)		45	100	9	100

Assessment and Placement Recommendation by EARCs Personnel

The findings on Table 4.6 show that most of the respondents answered these two questions on the affirmative as accounted by 73% teachers and 56% head teachers, respectively that the school personnel referred learners to assessment centres to be asssessed by the EARCs. Likewise, both agreed, as indicated by 69% and 78% of the teachers and head teachers, respectively, that the EARCs personnel reffered learners for placement to schools. This shows that there was a strong cooperation between the schools and personnel in assessment centres. This was a step forward in identifying and helping learners with learning difficulties in schools. These findings agree with Hallahan et al. (2014), who argued that learners with special needs are best served by collaboration of professionals. In addition, the findings agree with Mead, (2014), who concedes that collaboration takes place when groups of individual teachers work together, to identify and provide the best opportunity in education for learners in need

of extraordinary interventions. The team approach is the strategy of choice for addressing the problems of learners who are struggling with learning in school and this, ensures success of the programme.

Concerning ways professionals used to identify learners with LD, the results revealed that teachers were aware of the indicators to lookout for to identify learners with LD, these included reading and comprehension shown by 20% each, respectively, speech 18% and writing 13%, implying that SNE teachers were effective as concerns identification of learners with LD.Bateman and Barbara, (2015), cite the (Individuals with Disabilities Act [IDEA], 2004) of the USA that specifies identification as the process of singling out suspected cases of learners with SNE. Itensures that learners are given academic support only when it is necessary after confirmationthat they are legible for special education services. Accurate identification is critical, because indiagnosis may likely lead to wrong placement and programme planning for the learner. Likewise, other personnel were involved in identification of learners with LD reflected by 87% teachers and 67% head teachers, respectively. Learners'referrals and placement in schools and assessment centers by both the teachers and Educational EARCswas evident reflected by 73% and 56% accordingly.

4.4 Teaching Methods Used in Implementation of the IEP

The second objective sought to determine teaching methods that teachers use, to supplement Direct Teaching (DI) during implementation of the IEP for learners with learning difficulties in Taita-Taveta County, public primary schools.Under this objective, key areas investigated included, the use of IEP to teach learners with LD, teaching methods used to supplement DI these include task analysis, diagnostic prescriptive teaching and curriculum based measurement. The frequency of evaluating learners with LD in class. The findings of this objective are discussed in the sections that follow.

4.4.1 Use of IEP to teach learners with LD

The study sought to determine whether teachers and head teachers used individualized educational programme to teach learners with learning difficulities and whether the programme was successful. Table 4.6 - 4.9

Table 4.6

		Frequency	Percent	Frequency	Percent
		(n) Trs	(%)	(n) H/trs	(%)
Ever	Used Yes	40	89	6	67
IEP	No	5	11	3	33
	Total (N)	45	100	9	100
Success IEP use	ofYes	26	58	5	56
	No	19	42	4	44
	Ν	45	100	9	100

Use of IEP to Teach Learners with LD

From the results, most 89% and 67% of the teachers and head teachers had used IEP to teach learners with LD. The findings further show that out of those who had used IEP to teach learners, 58% and 56% of the teachers and head teachers, respectively agreed that the programme had been successful. This implies that IEP had been averagely adopted in teaching learners with LD and this was to an average extent successful, hence effective to a great extent. These findings agree with Hallahan, Kauffman and Pullen (2014), who observed that individualization of instruction could

be the key to meeting the instructional needs of learners with LD, explaining that what works for one learner would not necessarily be appropriate for another. Some learners would simply need additional time for testing, while others may require the task to be broken into smaller and more manageable segments generally known as task analysis. Others may require the privacy of study carrels or overlearning. Success of the programme is dependent on how conversant the teacher is with the IEP techniques and the ability to focus on the problem and not the individual learner; one who is open to new ideas, seek clarifications, find common grounds and pick solutions agreed upon by all the members.

4.4.2 Teaching methods to supplement direct instruction

The respondents, both teachers and head teachers, were asked to state the teaching methods they used to supplement direct teaching instruction during implementation of the IEP. Results are displayed on Table 4.7

Table 4.7

Teaching Methods	Frequency	Percent	Frequency	Percent
	(Trs)	(%)	H/Trs	(%)
Task analysis	33	73	5	56
Diagnostic prescriptive				
Teaching	5	11	1	11
Cognitive training	3	7	2	22
Curriculum based	4	9	1	11
measurement				
Total (N)	45	100	9	100

Teaching Methods to Supplement Direct Instruction

The findings indicate that most73% of the teachers and 56% of the head teachers respectively, had used task analysis, making it the most popular. This implies that

most SNE teachers have a good knowledge of normal child development and are able to match the task appropriately to achieve success. It can also be deduced from these results that majority of the respondents were more familiar with task analysis which, according to Mocko et. al, (2017) involves breaking down, simplifying and presenting the task into smaller steps, making it easier for learners to conceptualize information to be learnt. This is a positive indication and implies that learners receive help from their teachers through task analysis and also, that teachers use other strategy to supplement direct instruction while implementing the IEP.Other methods, cognitive training, curriculum based measurement and diagnostic prescriptive teaching, were less popular as indicated by 22% and 11% by both teachers and head teachers, respectively. This implies that there is need for the teachers to be better equipped with the rest of the methods that could be used to supplement direct instruction during IEP implementation.

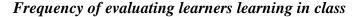
From these results, it can be postulated that some of the teachers might not have grasped how other methods worked, hence, they were not very popular. The choice of an appropriate teaching method(s) to use with a learner with LD, will flow easily into another, all within the same lesson. As noted in Kaur (2017), using these strategies help learners with LD to learn independently and generalize their skills and behaviours to new demands, especially those that become increasingly difficult to meet, as learners progress from grade to grade. These learners require a diversity of educational interventions and teaching approaches designed to meet their unique academic, social and behavioural needs. The choice of methods such as task analysis and diagnostic prescriptive teaching help learners enhance their own learning, which is important for developing communicative competence. Teachers need to be aware of diversity of educational interventions and teaching methods designed to meet the learner's unique academic, social, and behavioural needs.

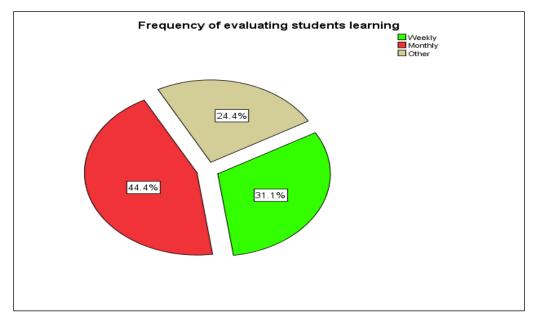
4.4.3 Evaluating pupils' learning in class

The study sought to establish the frequency of evaluating learners with LD in class.

The findings were as presented in Figure 4.1.

Figure 4.1.





The findings show that majority of the respondents evaluated learners with learning difficulties monthly as accounted for by 44.5%. Weekly and other responses accounted for 31.1% and 24.4%, respectively. This shows that most learners with LD were evaluated monthly as opposed to the teach-test, teach-test, approach where they were evaluated at every step of their learning. This implies that the teacher would not be able to identify the academic difficulties the child is experiencing at each step or

day, to carry out early intervention in good time to ensure the learner is making progressive improvement.

Results showed that learners with LD were evaluated once per month as accounted for by 44.5%, as opposed to the teach-test, teach-test, as in diagnostic teaching approach where learners with LD were evaluated at every step of their learning. A delay in evaluation may compound the learner's academic difficulties leading tolow selfesteem, loss self-confidence and learned helplessness. Such a learner feels like she/he has no control over his learning outcome in challenging tasks and feel powerless which contributes to poor self image and depressive feelings when their efforts are not rewarded (Parish, 2015). Such learners do not develop the perseverance to stick with difficult task; they give up and are likely to drop out of school.

On the teaching methods to supplement direct teaching (DI) during implementation of the IEP, results revealed that most respondents used IEP to support learners withLD, as indicated by 89% and 67% of the teachers and head teachers, respectively. Further, they agreed that the programme had been successful as shown by 58% and 56% of the teachers and head teachers, respectively. Only a few rated the programme as unsuccessful. Task analysis also, emerged as the most popularly used method as indicated by 73% and 56% of the teachers and the head teachers, respectively. This was a positive indication, implying that learners received help from their teachers through task analysis and also that teachers use other strategies to supplement DI, (thought at a smaller percentage) while implementing the IEP.This is in agreement with (Bachrach & Steven, 2016), who maintain that what works for one learner may not necessarily be appropriate for another due to their individual differences and paceof learning, hence, the need to vary the methods used to capture every pupil's learning style.

From these results, it can be postulated that teachers were not familiar with the teaching methods that they used minimally such as the diagnostic prescriptive teaching and Curriculum based measurement. Selecting appropriate teaching method(s) to use with a learner with LD, result into the transfer of knowledge from one subject to another. This implies that the learner develops the ability to use knowledge and generalize their skills and behaviours to new demands especially those that become increasingly difficult to meet as they progress from grade to grade Mead (2014). It is therefore important that teachers use a diversity of teaching methods and approaches designed to meet the learner's unique academic, social and behavioural needs, thereby, enabling learner's achieve independence in learning. According to Kaur (2017), the use of various teaching methods by teachers gives learners wide experiences enabling the learners create independence in learning.

4.5 Collaborative Consultations in IEP Implementation

The third objective sought to determine whether there was collaborationamong professionals and the parents in the implementation of IEPfor learners with learning difficulties in Taita-Taveta County, public primary schools. Under this objective, key areas investigated included working with other persons or professionals in IEP implementation, parental concern about their child's school work andreasons for inviting parents or guardians to the schools and collaboration between teachers and head teachers concerning pupil's academic problems.

4.5.1 Working with other professionals in IEP implementation

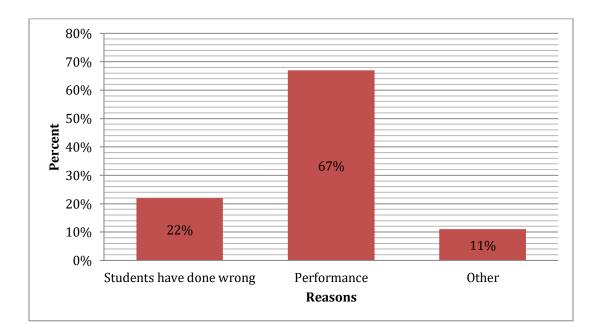
The study sought to establish whether the schools were working with other persons or professionals in supporting learners with learning difficulties. The results indicated that most (64%) of the teachers, were working with other persons or professionals in supporting learners with LD. This shows that schools generally collaborated with other professionals in helping learners with LD. This was a step forward in boosting learner'smorale hence, increasing their self-esteem. As Mattatal and power (2014) point out, in collaborative model, each professional brings their skills, training and perspectives to the team, thereby, combining resources to strengthen teaching, learning opportunities, methods and ensure the success of the programme. Professionals also work together to ensure that curriculum and standards are relevant to learners' lives and local conditions. The emphasize is on the teacher's ability to match the needs of the learner to a particular instructional model on which the IEP would be based (Parish, 2015).

Using a variety of accommodations and modifications are necessary for the learner to experience success in the classroom. Teachers must also, be conversant with the IEP techniques such as focusing on the problem and not the individual learner, be open to new ideas, seek clarifications, find common grounds and pick solutions agreed upon by all the members. The findings agree with Kauffman and Pullen (2014) who noted that teachers and other professionals work together to ensure that curriculum and standards are relevant to learners' lives and local conditions. Learners require diversity of educational interventions and teaching strategies designed to meet their unique academic, social, and behavioural needs. Mead, (2014) observed that successful IEP depends on the teacher's ability to match the needs of the learner to a particular instructional approach on which the IEP would be based; and knowledge of the entire curriculum so that teachers can switch back and forth as they support each other's efforts.

4.5.2 Collaboration with parents/guardians

The study sought to establish whether teachers/guardians were collaborating with teachers in the IEP process. Questions asked included why teachers/guardians were invited to school. The results are presented in the Figure 4.2.

Figure 4.2



Reasons why parents/guardians were invited to schools

The findings in Figure 4.2 show that the main reason why the parents or guardians were invited to the schools was to discuss the academic performance of the learners with difficulties indicated by 67% of the teachers implied that the schools were very much concerned about heir learners. Equally, inviting parents to schools was one way of encouraging collaboration between parents and their respective school personnel. The findings were consistent with those for Mattatal and Power, (2014) who posits that, no matter which particular approach one uses, success of the programme is to an extent also, determined by how well parents work together with the teachers. Providing the learner's achievements to the parents, ensures continued support for their children at home, thereby, working in collaboration with the teachers to enhance their children's learning. Mattatal and Power, (2014) point out that collaboration among teachers and parents results into a fine-tuned, carefully timed approach to incorporating assessment strategies, specific teaching methods and daily classroom practice takes place and ensures effectiveness of the programme.

4.6 Availability of Learning Resources for IEP Implementation

The fourth objective sought toestablish the availability of the teaching/learning resources used in the implementation of IEP for learners with learning disabilities in Taita-Taveta County, public primary schools. Hallahan et. al (2014), note that educational resources provide learners with meaningful and productive knowledge, skills, experiences and attitudes. The key areas discussed under this objective included, teachers training in SNE, support of learners with LD by an itinerant teacher and other professionals, teaching materials for learners with LD and availability of computer laboratories for learners with LD.

4.6.1 Availability of Learning Resources for IEP Implementation

The study sought to establish the human resource available in terms of the teachers trained in Special Needs Education (SNE) on the basis of gender, in public primary Schools in Taita-Taveta County. The responses are narrated below.

The responses received from the teachers indicated that 83% female teachers and 78% male teachers had been trained in SNE. This implies that there were more female teachers trained in SNE as compared to the male teachers. A balance of teachers per gender is recommended as an effective strategyin the IEP implementation. This consideration would ensure that both gender boys and girls are taken care of during the IEP implementation process. Besides there would be enough teachers to act as role models for both girls and boys. In addition, if every primary school had at least two to three teachers trained in SNE, this would go a long way to ensure learners with learning difficulties receive the necessary support needed to strengthen their learning needs.

4.6.2 Support for learners with LD by itinerant teacher and other professionals.

The study sought to find outwhether there wassupportoffered by itinerant teachers and other professionals to learners with learning disabilities. The findings were as shown on Table 4.8–4.10

Table 4.8

Support of Learners	Responses	Frequency	Percent	
		(n)	(%)	
Support by itinerant teach	ers to Yes	2	4	
learners with LD	No	43	96	
	Total	45	100	
Support by professionals to 1	earners Yes	12	27	
with LD in schools	No	33	73	
	Ν	45	100	

Support for Learners with LD by Itinerant Teachers and Other Professionals

The findings in Table 4.8 indicate that most of the respondents agreed in the affirmative that itinerant teachers did not provide substantial support to learners with LD in schools. This is accounted for by 96% and 73% respectively, of the responses indicating there was no support by the itinerant teacher and other professionals, such as language and or, speech therapists. These findings are unlike those of Hallahan, et al. (2014), who observed the need for effective cooperation and collaboration with other personnel. The availability of other professionals and itinerant teacher, would provide support in planning and teachingto the regular teachers, especially in schools where capacity for teachers trained in SNE is insufficient or not available. Despite their differing roles, general and special educators should not function on independent or mutually exclusive educational tracks. This is because partnerships that involve relationships between professionals and other family members, help the learner see the importance of improving learning. Regular teachers who have no training in SME, will require the services of an itinerant teacher.

4.6.3 Teaching/learning materials for learners withLD.

These section sought to establish the adequacy of teaching materials for learners with LD and the source of these learning materials. The responses were as shownin Table 4.9.

Table 4.9

	Responses	Frequency	Percent	Frequency	Percent
		(n) Trs	(%)	(n) Htrs	(%)
Adequacy of teaching	-	5	11	2	22
materials for learner with LD	s No	40	89	7	78
Source of learning materials for learners	Teacher made	39	87	6	67
with LD	Commercial	6	13	3	33
Total (N)		45	100	9	100

Teaching/Learning Materials for Learnerswith LD

The findings show that the teaching materials for learners with LD were to a great extent inadequateas indicated by 89% teachers and 78% head teachers, respectively. The sources of the limited learning materials were mainly made by the teachers as indicated by 87% teachers and 67% of the head teachers, respectively. This implies that learners with LD had inadequate learning materials and this affected effective implementation of IEP for learners with learning difficulties. (Hallahan et al 2014), observes that the main objective of using educational resources is to provide learners with meaningful and productive knowledge, skills, experiences and attitudes through the manipulation of the learning resources. These provisions can be achieved by ensuring, that there is effective stimulation of the learner's senses through use of

appropriate learning materials. Teaching materials are crucial for effective implementation of IEP in schools and according to Hallahan et al (2014), appropriate teaching/learning materials ensure that there is effective stimulation of the learners' senses. The basic assumption underlying the use of educational resources is that clear understanding stems from maximum use of senses, which is important, particularly for learners with special needs in education because of their learning limitations. The responses are a clear indication that learners did not benefit from the indicated provisions under consideration; hence, the learners lacked an opportunity to have adequate stimulation that stems from interacting and manipulating learning resources.

4.6.4 Computer laboratories for learners with LD

Part of this study sought to establish whether there were computer laboratories in the schools, and if available, find out whether they were used for remedial classes for learners with LD. Adaptive computer-assisted remedial programmes (ACARPs) can be used to personalize each learners' skills development process especially in mathematical computing or reading comprehension.Consequently, teachers and head teachers were asked to say whether computer laboratories were available in their respective schools. The findings are shown in Table 4.10

Table 4.10

n(trs) 9	(%) 20	n(H)	/trs) (%)
9	20	2	
		L	22
36	80	7	78
45	100	9	100
3	33	1	11
6	67	0	22
		8	89
9	100	9	100
)	9	9 100	

Computer Laboratories for Learners with LD

The findings indicate most 80% and 78% of the teachers and head teachers, respectively, agreed that schools lacked computer laboratories. Only 20% of the teachers and 22% of the head teachers accepted that there were computer laboratories. Further, 67% and 89%, respectively, agreed that computers were not used forremedial classes for learners with LD. This shows that most schools had not adopted computer/digital technology and those who had, rarely used them for remedial classes for learners with LD. These findings are not consistent with to Katz (2016), who observed that schools need to use many forms of teaching aids for learners with disabilities, including computers. Computer remedial programmes are used to close the gap between what a learner knows and what he/she is expected to know. They often target math or reading skills Shabandi (2017). A number of learners need the

help provided through the remedial programmes, most of which offer individualized instruction than full class instruction. According to Katz (2016), teachers should engage learners with appealing learning materials that captures their attention and turn the lesson and results into a more valued time spent in school. Shabandi (2017) felt that the advancement of technology has presented new opportunities for learners therefore, there's need for new ways of integrating current and future technological innovations into education. Hence the school administration should note that employing a variety of teaching and learning materials, helps the learner to experience success achieving the goal of the IEP, hence the need to ensure each school has computer laboratory.

Results on the use of teaching and learning resources revealed that there was a small difference between the female and male teachers who had trained in SNE, reflected by 83% of the teachers and 78% of the head teachers, respectively. Abalance of teachers' gender is recommended as an effective strategy in the IEP implementation. This would give boys and girls an opportunity for having a role model, as their learning difficulties are addressed. However, the itinerant teachers and other professionals provided little or no support to learners with LD in schools as accounted for by 96% teachers and 73% of the head teachers. This is not consistent with Hallahan et. al (2014), who observed that there was need for effective cooperation and collaboration with other personnel. This is because; the itinerant teacher would come in handy, especially in schools, where capacity for teachers trained in SNE is insufficient or not available. Also the multidisciplinary team and other relevant specialists would

provide teachers and learners with services that a regular or special education teacher may not be able to offer the learners with SNE, such as speech or language therapists.

Also, the results showed that teaching materials for learners with LD were inadequate as indicated by 89% teachers and 78% head teachers, respectively, and that most materials weremade by the teachers, asindicated by 87% teachers and 67% of the head teachers, respectively. Likewise, schools lacked computer laboratoriesas indicated by 80% and 78% of the teachers and head teachers, respectively. The few computers that existedwere not used for remedial classes with learners with LD as shown by 67% of the teachers and 89% of the head teachers, respectively. This implies that most schools had not adopted computer/digital technology and those who had the computer laboratories, rarely used them for remedial classes for learners with LD.Asaki, (2017), observed that technology such as computers or electrical and assistive devices used as a cognitive aid may go a long way to help learners with their memory and attention deficits enabling learners with LD become more successful in learning.

Further, learners with LD had inadequate learning materials, resulting to lack of meaningful and productive learning, as well as, lack of stimulation of the learner's senses through use of appropriate and adequate learning materials. This affected successful implementation of IEP for learners with learning difficulties. The basic assumption underlying the use of educational resources is, that clear understanding stems from maximum use of senses, which is important particularly for learners with LD because of their challenges in learning. Resources are combined to strengthen teaching methods, learning opportunities, andensure success of the programme.

Teachers find teaching aids to be effective during teaching because when resources are combined with teaching, they strengthen teaching and learning opportunities, methods, and ensure success of the programme.

Further, there was a slow adoption of computer/digital technology, hence, there is need to explore the reasons to that because, with the adoption of computer/digital technology, IEP implementationwould greatly be enhanced. School administrators should purchase commercial teaching aids where necessary, to add on what the teachers make. The ministry of education should endeavour to train more teachers and especially male teachers, in special needs education (with specialization in the area of LD), to meet the shortage and ensure all schools have at least two or more teachers with SNE. There is need for private primary schools to have a similar study since learning difficulties affects people across all levels and ages. There is also, the need to conduct research to find out challenges the Ministry of Education is facing in implementing IEP in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 5.1 Introduction

This chapter details the summary of the findings, conclusions on the study, recommendations on research findings and for further research. The chapter also, summarizes information about the data collected in relation to Individualized Educational Programme (IEP) implementation for learners with learning difficulties (LD) in public primary schools in Kenya. The study aimed at assessing implementation of IEP on learners with LD. This sums up the study in relation to the literature review and the objectives identified for the study. The recommendations drawn were based on the success of programme.

5.2 Summary of the Study

The first step in the data analysis was to investigate the respondent's demographic information, their work experiences and areas of their specialization. The results of the study revealed that majority of the respondents, both teachers and head teachers had 15 years and above of teaching experience. Most (84%) of the teachers and 67% of the head teachers, indicated that they were trained in Special Needs Education (SNE). Hence, the study revealed that most of the respondents in the targeted schools were professionals in SNE (though initially, head teachers had not been considered because of SNE training it was a plus for such schools), and had adequate teaching experience to enable them use IEP with learners with learning difficulties successfully.

As a whole teacher's had been trained in nine areas of special needs education, with the majority trained in the area of hearing impairment and mentally challenged. A few teachers were trained in learning difficulties indicated by 22% of the teachers. This implies that there was need to train more teachers in the area of LD and other areas such as Gifted and talented, Autism, Visual impairment and Physical disabilities, which had indicated less number of teachers, specialized in those areas.

5.3 Conclusions

Conclusions are based on theset objectives and findings; ways used for identifying learners with LD, teaching methods used in the implementation of IEP, collaboration practices used in IEP, and availability of the teaching/learning resources for IEP implementation.

On identification of learners with LD, the study reveals that most teachers identify learners through writing, reading and comprehension reflected by 20% in these areas. Other teachers cite speech and behaviour, taking questions and receiving answers from them, their academics that includes hand writing, reading and comprehension. However, 7% of the teachers who cite physical appearance as a method of identifying learners with LD is a contradiction because, learners with LD appear as normal astheir peers, hence, cannot easily be identified through physical appearance. Such learners can be identified positivelyand proved eligible for special education services, when educational professionals are used for the purpose. This would ensure that the learners access academic support only when such assistance is absolutely necessary. Majority of the teachers and head teachers mostly use task analysis to supplement direct teaching during IEP implementation. Other aspects related to teaching such as curriculum based measurement and diagnostic prescriptive teaching are also, used though minimally. This implies that most teachers with SNE understand the importance of using a multiple of teaching methods which help to support learners experiencing learning difficulties. However there is need to inservice teachers to equip tham with more approaches that can be used to supplement direct learning methid to address the gap.

On collaboration, the study reveals that teachers, head teachers, assessment personnel, parents and other professionals are to some extent, involved in the process of identification. The study reveals that parents are concerned about their children's school work, and further attend meetings organized by the school to discuss about their children's academic problems. However, results also, indicate that the mothers' participation was rated higher than that of the fathers.

Concerning learning resources, most schools lack both human (SNE specialized teachers) and learning materials. Teaching materials are mostly teacher-made and that commercial materials are not available. There is a general agreement by both the teachers and head teachers that schools lack computer laboratories. However, a few who acknowledge computer laboratories exist agree that the computers are not used for remedial classes for learners with LD, an indication that most schools have not adopted computer/digital technology and those who have, rarely use them to support learners with LD

5.3.1 Ways of identifying learners with learning difficulties in schools

From the results, most (20%), of the teachers could identify learners with LD through reading and in comprehension. Other indicators were speech and behaviours, taking questions and receiving answers and writing, which were at 18%, 15% and 13%, respectively. However, 7% of the teachers who indicated that learners with LD were

identified by physical appearance was a contradiction since learners with LD appear as normal as any of their peers, hence, could not be identified through using this criterion.Therefore, accurate identification process is necessary, if the diagnosis is wrong, it may lead to inappropriate programme planning and incorrect placement of the learner.

The study further established that 87% teachers and 67% of the head teachers agreed that there was involvement of other personnel in identifying learners with LD. These included parents, doctors, special education teachers, learner's friends and classmates as possible sources of information on identification of learners. This meant that learners with LD received the support they needed in schools. It was revealed that teachers and head teachers referred learners to assessment centers for assessment, likewise, EARCs personnel, referred learners for placement indicated by 56% teachers and 78% head teachers, respectively. This showed there was a strong cooperation between the schools and personnel in the assessment centers.

Methods that were used to identify learners with LD in schools were mainlythrough assessing their prowess in reading, writing and comprehension, mathematics and speech and behaviour. Teachers also, use checklistsin specific areas. If the diagnosis and judgments is faulty it leads to inappropriate placement for the learner, compromising the learning plan and placement option.

5.3.2 Teaching methods used in the implementation of IEP

The second objective sought to determine whether teachers and head teachers used individualized education programme and what teaching methods were used to supplement Direct Teaching (DI), in implementation of IEP to support learners.Results revealed that most 89% and 67% teachers and head teachers, respectively, use IEP. Majority of the respondents, 58% teachers and 56% head teachers, respectively, attest to the success of the use of the IEP, which implied the programme was largely successful.Results also, revealed that teachers used task analysis, diagnostic prescriptive teaching and curriculum based measurement to supplement direct teaching instruction. However, task analysis was the most popularly used method indicated by (73% and 56%), teachers and head teachers, respectively. Other methods, curriculum based measurement and diagnostic prescriptive teaching were less popular rated at 22% and below in each case. However, by employing at least one method for IEP, it showed that most sne teachers new the effect of using more than one method to support LD with learners. This implies, teachers were more familiar with task analysis as compared to the other methods, hence the need to equip teachers with knowledge in using these other approaches as well.

The study results also, revealed that evaluation took place once per month was accounted for by 44.5%, as opposed to the teach-test, teach-test approach where learners with LD are evaluated at every step of learning. Substantial attention offered to learners with academic problems early, would ensure early intervention thereby, prevent the learner from developing learned helplessness and or, dropping out of school due to overwhelming learning problems.

5.3.3 Collaborative practices used in the implementation of IEP

The third objective sought to find out collaboration practices used in the implementation of individualized education programme for learners with LD, in Taita-Taveta County, public primary schools. The study revealed that parents were very concerned about their children's school work as indicated by 67% of the teachers. This implies that the schools collaborated with parents in supporting their children. However, most 91% mothers showed more concern of their children's school work as compared to the fathers who accounted for only 9% of the teacher's responses. Professionals acknowledge the value of working with parents and recognize that the success of a programme is determined by how well parents and professionals work together to support the learner with learning problems.Parents were invited to school to discuss their children's performance as shown by 67% teachers and 80% head teachers, respectively. This was an indication that the schools were very much concerned about the achievement of the learners with learning difficulties. This is to say that collaboration between teachers and parents was important as the parent would supervise the learner at hometo ensure continuity from school.

5.3.4 Availability of learning resources for the IEP implementation

The fourth objective sought to establish the availability of the teaching/learning resources used in the implementation of individualized educational programme for learners with LD in Taita-Taveta County, public primary schools. The study established that most schools had 1-5 female teachers trained inSNE, in the schools as compared to only two male teachers trained in SNE an indication that more female

teachers were trained in SNE as compared to male teacher's counterparts in most schools.It was also observed that very few professionals came to schools to support learners with learning difficulties.The itinerant teachers were generally not at all available in schools.Overall, there were few teachers trained in SNE in schools, which was an impediment, this issuerequires to be addressed. Adequate number of teachers would increase access and retention of learners with learning difficulties.

On the question of teaching materials, which were a crucial component for effective implementation of IEP, this study established that the teaching materials for learners with LD were inadequate and those available were mainly made by the teachers. This would likely affect effective implementation of IEP for learners with LD.In addition, most schools lacked computer laboratories. The few schools with computer laboratories did not use them for remedial classes for learners with LD. This shows that learners with LD were disadvantaged when it comes to access to quality education in schools. Computer remedial programmes would be of a great help to learners in addressing gaps in their learning.

5.4 Recommendations on Research Findings

Special needs education teachers need to update themselves with the emerging issues in special needs education, especially on identification of the learning problems. Parents, counselors, speech and language therapists, peers, doctors, should be involved more in identifying learners with LD where need arises. Frequency of teachers updates to the head teachers should be increased to enable teachers carry out early intervention measures. Teachers should apply more than one method to supplement direct teaching approach. Approaches such as diagnostic perspective teaching and curriculum based measurement should be incorporated more to enhance learners' cognition.

The Ministry of education and county governments should sponsor more teachers for training in SNE. Fathers should be more involved in their children's school work. More assessment centers should be established in Taita-Taveta County in order to bring services closer to the people. Teachers and head teachers should discuss promptly concerning learners with LD. The Ministry of Education should provide schools with commercial teaching materials for learners with LD. More male teachers need to be trained in special needs education and be posted by the TSC to various primary schools in Kenya. The Ministry of Education (MoE) should establish more positions for itinerant teachers to enhance collaboration of professionals. The MoE should consider having computer laboratories in primary schools to encourage digital learning. Teachers should be adequately trained to incorporate technology into the daily curriculum and instruction.

5.5 Recommendations for Further Research

The researcher suggests the following areas for further research:

i. Explore why there is slow adoption of computer/ digital technology, which if well adopted, could greatly enhance IEP implementation in schools.

- Both public and private secondary schools need a similar study since learning difficulties affect people across all levels and ages.
- iii. Research should be done to find out challenges the Ministry of Education is facing in implementing IEP in Kenya.
- iv. Future researchers should consider including parents, other SNE personnel in the county, and or other stake holders as respondents.

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APPENDICES

Appendices I: Questionnaire for Teachers

I, Jeslinah W. Mwagodi Mwabili, EDU - 3 - 2510-1/2011, currently pursuing a, Degree of Master of Education in Leadership and Education Management, at Kenya Methodist University (KeMU), am conducting a study on; "Implementation of Individualized Educational Programme on learners with LD in public primary schools in Taita-Taveta County, Kenya. You are requested to complete the questionnaire provided regarding the subject.

Answer the questions provided by ticking ($\sqrt{}$) or writing a brief statement on the spaces provided as appropriate. The information you give will be treated with confidentiality, and will be used for purposes of this study only. **Do not indicate your name anywhere on the questionnaire.**

Thank you for your support.

A. Demographic Information

1. Are you specialized in Special Needs Education?

Yes [] No []

2. If yes, what is your area of specialization in special needs education?

Learning disabilities	[]
Gifted and talented	[]
Autism	[]
EBD	[]
Hearing impairment	[]
Mentally handicapped	[]
Physical disabilities	[]
Visually impairment	[]
Not specialized	[]

3. How many years have you served as a teacher?

Less than 1 year	[]
1-5 years	[]
6 – 10 years	[]
11-15years	[]
Above 15 years	[]

B: How Professionals Identify Leaners with LD for IEP Implementation

- 1. What indicaters do you look out for to identify a learner for IEP implementation?
 - i. Are there other personnel involved in identifying learners with LD?

Yes [] No []

ii. If yes, which personnel do you involve in the identification process of the learners?

.....

C. Teaching Methods Used for Implementation of IEP

2. Have used any of the methods listed to supplement for direct teaching

instruction for implementation of IEP

- i. Task analysis []
- ii. Diagnostic prescriptive teaching []
- iii. Curriculum Based Measurement []

3. Do you use IEP to support learners with LD in your school?

Yes [] No []

4. Has the use of IEP helped to reduce the learner's difficulties in your class?

Yes [] No []

5. How often do you carry out evaluation of learning in your school?

i.	Weekly	[]	
ii.	Monthly	[]	
iii.	Any other	[]	

D. Collaborative Practises used for Implementation of IEP

6. i. Do you work with other professionals to support learners withLD in your school?

Yes [] No []

ii. If yes, list down the professionals.

.....

7. Which parent consults you most about their children's learning?

Father [] Mother []

10. What are the reasons for asking parents/guardians to come to school?

When a learner is in the wrong	[]
To discuss learners' academic performance	[]

E. Teaching and Learning Resources Available for Implementation of IEP

11. Do you have adequate teaching/learning materials for teaching learners with

LD?

Yes [] No []

12. Are the teaching/learning materials commercially acquired or teacher-made?

Commercially acquired []

Teacher-made []

13. What is the number of teachers trained in Special Needs Education (SNE) in your school?

Female [] Male []

14. Do you have an itinerant teacher who comes to assist with learners with LD in your school?

15. i. Does your school have a computer laboratory?

Yes [] No []

ii. If yes, do you use the computers to support learners with learning difficulties?

Yes [] No []

Appendix II: Questionnaire for Head Teachers

I, Jeslinah Waleghwa Mwagodi Mwabili, EDU-3-2510-1/2011, currently pursuing a Degree of Master of Education in Leadership and Education Management, at Kenya Methodist University (KeMU), I am conducting a study on "Implementation of Individualized Educational Programme on learners with LD in public primary schools in Taita-Taveta County, Kenya. You are requested to complete the questionnaire provided.

Answer the questions provided by ticking ($\sqrt{}$) or writing a brief statement on the spaces provided as appropriate. The information you give will be treated with confidentiality, and will be used for purposes of this study only. **Do not indicate your name anywhere.**

Thank you for your support.

A. Demographic Information

1. Have you specialized in special needs education?

Yes	[]	No []	

2. If yes, what is your area of specialization?

Learning disabilities	[]
Gifted and talented	[]
Autism	[]
EBD	[]
Hearing impairment	[]
Mentally Handicapped	[]
Physical disabilities	[]
Visually impairment	[]
Not specialized	[]

3. How many years have you served as a teacher?

1-5 years	[]	
6 - 10 years	[]	
11 – 15 years	[]	
16 years and above	[]	

B. How Professionals Identify Students with LD for IEP Implementation

1. List any other personnel besides yourself, who you involve in identifying learners with LD in your school?

·····

2. Have you ever referred any learner to be assessed by the EARCs personnel at the assessment centre?

Yes [] No []

3. Have the EARCs personnel ever referred students with learning disabilities to your school for placement?

Yes [] No []

C. Teaching Methods Used for Implementation of IEP

- 4. Do you use any of the following methods to supplement direct teaching instruction for IEP implementation
 - i. Task analysis []
 - ii. Diagnostic prescriptive teaching []
 - iii. Cognitive training []
 - iv. Curriculum based measurement []
- 5. i. Do you use individualized education programme to support learners with

LD you school?.....

ii. If yes, explain whether IEP has been successful for learners

with LD or not

.....

D. Teaching and Learning Resources used for Implementation of IEP

- 6. Are the teaching/learning materials commercially acquired or teacher-made? Commercially acquired
 - [] Teacher-made []
- 7. i. Do you have a school computer laboratory in your school?

Yes [] No []

ii. If yes, is the computer laboratory used for remedial purposes to help the students with learning disabilities?

Yes [] No []

Appendix III: Letter of Research Authorization from NACOSTI



Appendix IV: Letter of Research Authorization from KeMU



Kenya Methodist University

P. O Box 267 - 60200, Meru, Kenya, Tel: (+254-020) 2118423-7, 064-30301/31229 Fax: (+254-064) 30162 Email: info@kemu.ac.ke , Website: www.kemu.ac.ke

March 03, 2016

10

TO WHOM IT MAY CONCERN

RE: MWABILI WALEGHWA JESLINAH EDU-3-2510-1/2011

This is to confirm that the above named is a student in the Department of Education, pursuing a Master of Education in Leadership and Education Management.

As a requirement, the student is expected to undertake an independent **primary research** in their area of specialization.

The purpose of this letter is therefore; to introduce the student to you and request you to allow her undertake the research in your organization.

The student has been advised to ensure that all data and information from the organization is treated with utmost confidentiality and only used for academic purposes unless otherwise stated.

Any assistance accorded to her will be highly appreciated.



ache Plaza, 4th Floor. P.O. Box 3654-20100, Nakuru, Tei +254-51-2214456 Fax 051-2216446, Email:nak er Oshwal Academy, P.O. Box 89983, Mombasa. Tel: +254 - 041-2495945 / 8, Fax 041-2495946. Email: Campus: Lware Building, 4th Floor. Tel: +254-61-2032904 Fax: 254-61-2034100 Email. nyericampus@ **The Future is Here!**

Apendix V: Letter of Authorization from the County Director of Education



MINISTRY OF EDUCATION STATE DEPARTMENT OF BASIC EDUCATION

Telephone: 0727425365 Email: <u>cdetaitataveta@gmail.com</u> cdetaitataveta@yahoo.com COUNTY DIRECTOR OF EDUCATION, TAITA TAVETA, P.O BOX 130 - 80305, <u>MWATATE</u>. 29th March 2016

When replying please Quote: Ref No. TTC/EDU/R.2/VOL.1/32

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION -JESLINAH WALEGHWA MWABILI

Circular **Ref. No. NACOSTI/P/16/95637/10234** by National Commission for Science, Technology and Innovation dated 24th March, 2016 refers.

Authority has been granted to carry out a research on *"Implementation outcomes of individualized educational programme on students' with learning disabilities in public primary schools in Taita Taveta County, Kenya,"* for the period ending 24th March, 2017.

On completion of the research, you are requested to submit a hard copy of the research report/thesis to our office.

FOR: COUNTY DERECTOR OF EDUCATION TAITA TAVETA P. O. Box 130 - 80305. MWATATE DATE:______SIGN:_____

Shage

NDUNGE KAMANGA For. COUNTY DIRECTOR OF EDUCATION TAITA TAVETA

C.c. The County Commissioner, TAITA TAVETA

Q.