TEACHER ATTRIBUTES INFLUENCING ACADEMIC PERFORMANCE OF LEARNERS WITH SPECIFIC LEARNING DIFFICULTIES IN MAINSTREAM PUBLIC PRIMARY SCHOOLS IN KOIBATEK SUB-COUNTY, BARINGO COUNTY

JEPKOECH KIMUGE

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2021

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DECLARATION

DECLARATION

I, Jepkoech Kimuge declare that this thesis is my own original work, and has not been presented for research leading to an award of a Degree or Diploma in this or any other university.

Sign:

Date:

JEPKOECH KIMUGE

EM09/S/1000/2013

APPROVAL BY THE SUPERVISORS

This thesis has been submitted for the examination with our approval as university supervisors.

Sign:

Date:

Dr Florence Mobegi Department of educational psychology, School of Education,

Maasai Mara University.

Sign:

Dr. Lilian Milimu Department of educational psychology, School of Education,

Maasai Mara University.

Date:

DEDICATION

I dedicate this work to my loving husband Sammy Rutto, for his foresight in education and constant encouragement which has brought me to this far. Our loving children Vincent Kiptoo, Victor Kiptoo and Ben Kiptoo as well as my sister Rosael Kimuge for their unending moral support, encouragement and understanding during my entire study period.

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ABSTRACT

Teacher attributes on mainstream education and their capacity to teach learners using SLD in mainstream classrooms influence learners with SLD. Learners with SLD develop more slowly intellectually than other learners of the same age due to difficulty with basic processes that are applied in understanding or using spoken language. Therefore, learners with SLD lag behind in academic performance. Performance of learners with SLDs from 2011-2017 in Koibatek has been persistently poor with majority of them scoring below 200 marks in K.C.P.E. The government advocated for mainstreaming classrooms in public primary schools. However, of learners with SLDs is below that of other learners. There are many factors which may contribute to poor performance; however, the objective of this study was to determine some of teachers' attributes influencing academic performance of learners with SLD in mainstream public primary schools in Koibatek Sub-County, Baringo County. Specifically, the study sought to establish the influence of teachers' perception on academic performance on learners with SLD, to find out the influence of teaching methods on academic performance of learners with SLD, to examine the impact of teacher training on academic performance of learners with SLDs and to find out challenges teachers face in teaching learners with SLDs in mainstream public primary schools in Koibatek Sub-County. This research was guided by the position theory. The researcher adopted a survey research design since it helps explain the existing situation, of ubiquity of learners with SLD. The target population for this study consisted of 77 head teachers and 80 class eight teachers from 77 public primary schools. A purposive sampling technique was adopted to identify the divisions with the highest number of learners with SLD. It was also used to select 8 head teachers, 10 class eight teachers and 20 class eight learners with SLDs from the two divisions of Koibatek Sub County. A pilot study was conducted in two mainstream primary schools in Koibatek sub-county which were not included in the final study to test the validity and reliability of the data collection instruments. A correlation coefficient of the items was calculated by determining Cronbach alpha coefficient. A Chronbach alpha coefficient of 0.81 was found. Primary data was collected using questionnaire as the main tool for teachers and interview schedules for head teachers. Document analysis schedule was used to collect information on learners' joint examinations for the year 2018 academic performance and their general information as in the questionnaire in the appendix. Quantitative Data analysis was done through descriptive statistics in frequencies and percentages easy interpretation and understanding. Qualitative data was analysed through categorization of data into themes according to research objectives. Thematic analysis was done through discussion and was presented in form of narratives. The study found that teachers do not have the required knowledge and expertise to teach learners with SLD in mainstream education affecting their performance in the examinations. Teachers in mainstream schools lack teaching and learning resources for learners with SLD. The study recommends the training of all teachers to be able to teach learners with SLD, and support well in terms of administrative support, planning time and disability-specific teaching skills and resources. The study suggests further research to be conducted on an investigation of preservice teachers' attributions for learners with SLD.

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ACRONYMS

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APDK	Association for the Physically Disabled of Kenya
CWSN	Children with Special Needs
E.F.A	Education For All
ECD	Early Childhood Education
GER	Gross Enrolment Rate
KCSE	Kenya Certificate of Secondary Education
KISE	Kenya Institute of Special Education
KNEC	Kenya National Examination Council
LRE	Least restrictive environment
MDGS	Millennium Development Goals
MOE	Ministry Of Education
MOES	Ministry of Education and Sports
NGO	Non-Governmental Organizations
SEN	Specific Educational Needs
SLD	Specific Learning Difficult
S.S.A	Sub-Saharan African

U.P.E Universal Primary Education

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Specific learning difficulty (SLD) refers to a neurodevelopmental difficulty which disrupts learning basic skills such as reading, writing or Mathematics and in some cases, all of the above-mentioned skills. In other cases, SLD leads to long-term or short-term memory interference and other skill -based learning. SLD is commonly observable at early school life. The signs and symptoms are often diagnosed during the early years. The teacher is among the significant factors in the successful mainstreaming of learners with SLD (Woodcock & Vialle, 2015).

Specific learning difficulties may occur in all fields of learning activities. The known theme is unexpected under-performance in a unique academic niche that is not observed in any other field. Even though there exist different specific learning difficulties, distinguishing one from the other is not as easy due to overlaps. A particular learning difficulty is attributed to an impairment in one or more psychological processes involved with learning. The learner experiences difficulties with specific learning difficulties are unexpected with respect to their existing skills. Intervention may prove to be impervious to the existing problems and can continue to reflect in future. (Reid & Everatt, 2016).

The western Australian Government predicts, around 20% of learners currently enrolled in school in western Australia may fail to attain the appropriate educational level due to learning difficulties. Among these learners, the hinderance to their learning may be short-term. Some learners can completely miss the opportunity of school learning, while others may have gone to school, but did not receive the appropriate learning experience. (Woodcock & Vialle, 2015). However, SLD and its effects on learning progress of

students in mainstream primary schools in Koibatek Sub County has not been effectively researched on in order to determine learners' difficulties so as to cap the conundrum.

Kavkler, Babuder and Magajna (2015) in their study determined that averagely, learners with SLD perform about 38% points when related to learners without SLD who score above 50% points. The differences that primary school teachers perceive in their results and learning progress of learners with SLD and those of their peers is considerably lower with an average grade of 2.70 compared to their counterparts who get an average grade of 3.98. Learners with acute SLD had the lowest average grade progress, at 2.05. Teachers also observed that learners with acute SLD were prominent because of pessimistic self-image. Learners with mild, modest or acute SLD, sum up around 10% of all the learners, comprise among several groups of learners with SEN. It is for this reason the current study investigated teacher attributes influencing their academic performance of the learners with SLD in Koibatek Sub-County.

In Koibatek Sub-County, learners with SLD tend to have acute problems in oral and written expression, reading and listening comprehension, basic reading skills and mathematical reasoning (calculation). Table 1 indicates a summary of learners with impairment from the year 2011 up to 2017 and learners with SLDs records the highest (115 in 2017) in number among the impairments.

Table 1: SUMMARY OF LEARNERS WITH IMPAIRMENT SCREENED AT EARC,

KOIBATEK SUB COUNTY, BARINGO COUNTY.

CATEGORIES OF LEARNERS WITH

IMPAIRMENT/ YEAR	2011	2012	2013	2014	2015	2016	2017	TOTAL
Learners With Visual Impairment	5	7	4	6	4	2	0	28
Learners With Hearing Impairment	10	12	14	8	11	9	10	74
Learners Physical Impairment	15	5	9	13	9	7	12	70
Learners With Mental Impairment	3	1	2	0	2	4	0	12
Learners With Specific Learning Difficulties	45	57	60	87	99	103	115	566
TOTAL	78	82	89	114	125	125	137	750

Source: Sub County Director of Education Koibatek Sub County, January 2017

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Neurodevelopmental and psychological problems were found to be present. The shortfall of significant functions like; emotional maturity, attention, coordination and social skills influence the cognitive function. This affects the neurological processing of both verbal and non-verbal information. As such, it triggers a huge hinderance in acquisition of new skills, as well as acquiring general knowledge. To an extent the social behavior of the learner is also influenced. These factors are internal and are not in anyway affected by inappropriate teaching as well as other environmental factors. But these difficulties may occur with impairment features at the same time (Kavkler & Magajna, 2008 cited in Kavkler, Babuder & Magajna 2015).

Learners with SLD are characterized by their strengths and specific difficulties, causing significantly lower academic performance. Such defects may occur among gifted learners as well, and can be recurrent even though hard work and regular training is being followed. They deter learning in particular academic niche like mathematics, in the case of learners with socially and culturally disadvantaged backgrounds as well as of learners with sufficient support and understanding. When detected early and offered differentiated learning, learners with SLD can curb for their problems by means of an effective learning technique to a successful level and need no further guidance and additional professional guidance (Kavkler, Babuder & Magajna, 2015).

The score in Kenya certificate of primary education (K.C.P.E) determines the secondary school a learner can attend. The highest-grade score secures a position in the most prestigious national school while the lowest score attends day schools or drops out of school. Learners with SLD do the same examination regardless of their needs. Learners' academic performance is one of the current education problems especially in mainstream public primary schools in Koibatek Sub-County. Even though the 77 public primary schools within Koibatek Sub-County having already implemented special needs education policy (Sub-County Education Office, 2017), there are various reported cases of primary school drop outs, mainly the learners with SLD due to poor academic performance.

Rasugu (2010), researched on the nature and predominance of SLD among standard three pupils in Starehe. The study assessed that there could be students with SLD and the major population had an acute difficulty in the tests administered in English and Math of 100% and about 60% failure respectfully. In Mathematics, most learners were completely

unsuccessful in items that tested their skills in social and personal management niche. In as much as teachers appeared to know what SLD is, and reports done by use of various methods together with mitigation measures. However, this was a theoretical approach and not a practical if the findings of evaluation are anything to go by. Based on the KCPE performance results from the year 2011-2017, it is clear that poor performance is noticed in learners with SLD as indicated in table 2 below.

Ndumi (2011), conducted a case study, employing survey methods, on the instructional challenges facing learners with SLD in Kibwezi District, Makueni County. The objectives of the study included examining the attitude of teachers towards learners with SLD and finding out the attitude of the learners with SLD towards education. The study on teacher's attitude revealed that 69% of the respondents would wish to have the government post more SNE, build classes that match the needs of the learners based on their nature of disability. In the current study, 60% of the teachers reported that learners with SLD be taught separately.

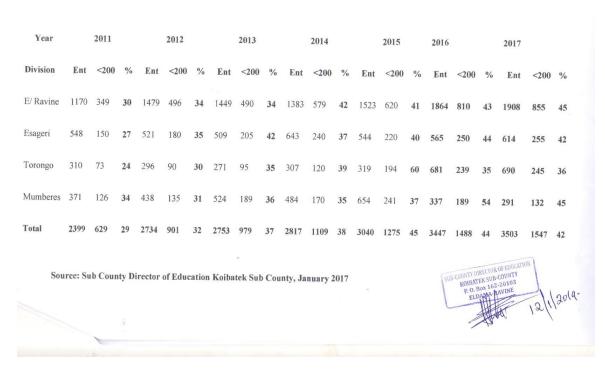
Chomba, Mukuria, Kariuki, Tumuti and Bunyasi (2014) in the article entitled, "Education for students with intellectual disabilities in Kenya: Challenges and prospects", reported that in Kenya, learners with SLD are indiscriminately mainstream. The misguided assumption here is that learners with SLD will ultimately join the community without giving them the heads nor any preparation for the possible outcome. The current study revealed that teachers had negative attitude towards learners with SLDs.

From the table 45% of the learners with SLD scored less than 200 marks out of the 500 marks in Eldama Ravine and Mumberes divisions an indication of low performance by these learners. This is worrying trend that calls for concern. The current study sought to

find out teacher attributes influencing academic progress of learners with SLDs in mainstream public primary schools in Koibatek Sub-County, Baringo County

Table 2 KCPE Results Analysis of SLDs per Zone in Koibatek Sub-County

Table 2: Summary of KCPE results analysis of Learners with Specific Learning Difficulties per zone in Koibatek Sub- County, Baringo County.



Sub County Director of Education Koibatek Sub County, (2017)

1.2 Statement of the Problem

Education should help a learner to be self- independent, self- reliant in life and to earn a living. All learners irrespective of their difficulties should be assisted to attain lifelong education. Every learner legally qualified to attain quality education and "quality" can only be achieved through improved performance of individual learner regardless of the difficulty.

Despite the provision by the government to improve the quality of education in public primary schools through funding, creation of supervision and assessment centres ie Educational Assessment and Resource Centres (EARC), learners with SLD lag behind in academic performance across the country.

With respect to the school mapping data set, there are approximately 3000 special needs institutes in Kenya with over 2000 mainstream institutes and 751 special schools (Republic of Kenya, 2016 cited in Odongo & Davidson, 2016). This data depicts that access and participation of learners with SLD is comparatively low all over the country. Significant number of learners and youth with difficulties are vastly ruled out from academic chances for primary schooling. The demand for services for learners with learning difficulties has risen at various levels. This is attributed to the government's commitment to adopt universal primary education. The special schools and units under primary schools only accommodate for learners with VI, HI, autism and PD. This implies that not all learners with SLD can participate.

Despite of the 77 public primary schools within Koibatek Sub-County having already implemented special needs education policy (Sub-County Education Office, 2017), there are various reported cases of primary school drop outs by the learners with SLD due to poor academic performance. Based on the KCPE performance results from the year 2011-2017 in table 2, it is clear that poor performance is noticed in learners with SLD as indicated with 45% of the learners scored less than 200 marks out of the 500 marks in Eldama Ravine and Mumberes divisions. The question is why are learners with SLDs not performing well in mainstream public primary school?

There are many factors deemed to influence learners' academic progress. However, the current research sought to find out teacher attributes influencing academic performance of learners with SLDs in mainstream public primary schools in Koibatek Sub-County, Baringo County.

1.3 Purpose of the Study

The purpose of this research was to find out teacher attributes influencing academic performance of learners with specific learning difficulties in mainstream public primary schools in Koibatek Sub-County, Baringo County.

1.4 Objectives of the Study

The study was guided by the following research objectives:

- i. To establish the influence of teacher's perceptions on academic performance of learners with SLD in mainstream public primary schools in Koibatek Sub-County.
- ii. To find out the influence of teaching methods on academic performance of learners with SLD in mainstream public primary schools in Koibatek Sub-County.
- iii. To examine the impact of teacher training on academic performance of learners with SLD in public primary schools in Koibatek Sub-County.
- iv. To find out challenges teachers face in teaching learners with SLD in mainstream public primary schools in Koibatek Sub-County.

1.5 Research Questions

The study sought to answer the following research questions:

- i. What is the influence of teacher perception on academic performance of learners with SLD in mainstream public primary schools in Koibatek Sub-County?
- Does teaching methods influence academic performance of learners with SLD in mainstream public primary schools in Koibatek Sub-County?
- iii. Does teacher training influence academic performance of learners with SLD in mainstream public primary schools in Koibatek Sub-County?
- iv. What challenges do teachers face in teaching learners with SLD in mainstream public primary schools in Koibatek Sub-County?

1.6 Significance of the Study

The study would help in assessing how teachers' attributes influence the performance of learners with SLD in mainstream public primary schools. The results from this study are expected to assist the development of teacher education programmes in teaching learners with SLD. Engaging with learners without SLD also encourages cooperation and peer support, which exposes all learners to diversity in friendships. The findings of this study are useful to the school administrators in improving the academic performance of learners with SLD. It would help the school administration to have a clear direction on how to approach the teachers and the pupils as they plan for implementation of mainstreaming on a wider scale. This study findings are expected to help spread awareness and encourage policy makers, and stakeholders on these particular challenges that teachers face in the mainstream academic institute after implementation of mainstream education in Kenyan schools. The findings and recommendations of this study would help in designing teacher preparation and development schemes. For this, it is envisioned that the report will provide insights on teachers' provision and necessity in regards to the development of mainstream academics in Kenya.

1.7 Scope of the Study

The study was conducted in mainstream public primary schools in Koibatek Sub-County, Baringo County. It focused on teacher attributes influencing academic performance of learners with specific learning difficulties in mainstream public primary schools in the sub-county. The study targeted the head teachers and teachers in the 77 primary schools and was conducted within the months of March -Aug 2019. Also, this is an area of interest due to the cultural and societal stereotypes held against learners with SLDs in the region.

1.8 Limitations of the Study

The empirical results conveyed herein should be considered with the light of some limitations. Since non-probabilistic sampling technique was used, given that Baringo County, is just one county among the 47 counties in Kenya, the outcomes might not be generalized to the rest of the country. In some of the mainstream schools, very few teachers were trained for SLD but most of them generally trained to handle learners all learners. Also, some of the teachers are experienced and can tackle the challenges of SLDs better than others. Therefore, the general findings of all schools need to be assessed with respect to possible diversity.

Data collection of this study relied much on questionnaires which included selfassessment measures for the teachers. Individuals then to over-rate themselves on desirable traits and under-rate themselves on undesirable traits. One major limitation in this study that can be addressed in future studies is an investigation of pre-service teachers' acknowledgements for learners with SLD.

1.9 Assumptions of the Study

The study was carried out on the basis of the following assumptions:

- i. Teachers employ the appropriate teaching methods on learners with SLD in mainstream public primary schools in Koibatek Sub-County.
- Teacher training impart skills necessary for learners with SLD in public primary schools in Koibatek Sub-County.
- Teachers face challenges in teaching learners with SLD in mainstream public primary schools in Koibatek Sub-County.

1.10 Operational Definitions of Terms

- Challenges
 The barriers teachers face while teaching learners with SLD in a mainstream classrooms.
- MainstreamEducation that addresses the necessity of learners within the regular schoolsEducationusing all available resources and advocates for all learners regardless of their
physical impairment, intellectual, social, emotional, linguistic disorders
among other needs.
- **Perception** Teacher's evaluative response about learners with SLD as a result of personal beliefs.
- Specific learning It is a disorder in one or more of basic psychological processes involved in processing or using language, spoken or written, that may reveal itself in an imperfect capacity to hear, think, speak, read, write, spell or tackle math problems.
- **Teaching Method** Methods are used to disseminate knowledge from the teacher to the learner with SLD by techniques that area applicable everywhere and has variance in accord with leaners' learning style.

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

This chapter presents literature review under the following sub-headings; perception of teachers about learners with Specific learning difficulties, teaching methods, Teachers training on Learners with Specific learning difficulties and challenges faced by teachers working with learners with Specific learning difficulties, the theoretical framework and the conceptual framework to the study.

2.2 Teacher Perception

Teacher's perceptions of mainstream education can influence the efforts of teachers toward to effectively teach learners with SLD. Teachers with positive perception toward mainstreaming have a notion that learners with SLD belong in classes same as the rest, they can learn with the rest of the students there, and that the teachers are equipped well enough to teach them (Berry, 2010).

Specific learning disabilities cases may be present at any learning niche. The known theme is expected under-performance in an area of academic skill which is uniquely comparable to other areas. Even though there are several specific learning disabilities, distinguishing between each is not as simple because there are often overlaps. The kind of all SLDs is that the problem is acute, persistent, occurs even though there are appropriate educational opportunities, and is in variation to other areas of strength in educational performance (Reid & Elbeheri, 2016).

According to Favre and Ax (2011), SLD is a neurologically based disability in which the nerve-cell connections fail to function as it should. The learning disorders occur as a result of no coordination in processing information. The condition results in unanticipated under-performance of learners whose aptitude is on another level. Poor performance

depiction at an early stage or a huge difference in conduct and rational capacity may lead to pronunciation with SLD for the learner. An inexperienced individual may have a conclusion that a learner with a SLD is 'sluggish, weary or inattentive. For instance, the individual may not come to terms to the fact that the learner with SLD is not fully capable of reading comprehension as well as proficiency in verbal communication. Also, there would be a huge disparity when comparison of reading ability and writing skills is tested. Another disorder thought to affect about 10% of the population is dyslexia. Out of this 10%, around 4% have acute dyslexia. This is the most known type of SLD, and is hereditary transferred form the parent to the child. In this type of disorder, the leaner can depict signs of mixing up sentences and whilst reading. Also, spelling out words when writing may prove difficult for them, and in most case scenarios, reversing letters are quite common.

Even though, weakness in literacy is the most common observable trait in this type of disorder, it is never just about literacy. The disorder has an impact on information storage, processing and retrieval. The loopholes here being; memory loss, slow processing of information, time lapse perception, sequencing and organization. In other cases, navigation may prove to be a problem, the directions right and left challenge them and they are solved by identification and accommodation (Kenyon, 2003).

Another disorder is dyspraxia; developmental coordination deficiency as it is commonly known affects the motor coordination in learners. Here, the learners may exhibit different types of traits; there are those that may change due to environmental demands and past recurrence which build its way into the future. This coordination disorder may impact on the learners' participation and performance of day-to-day life activities in academics, or at work. The learner may have hardships in personal care, calligraphy, and other physical activity in the recreational niche. (Kaykler & Magajna, 2015).

Another predicament within the SLD group is dyscalculia; here the learner faces problems in understanding mathematical approaches and terms. It is a tenacious issue that impacts the capacity to attain academic math skill even with the proper instructions. The symbols of calculation may be hard for the learners with this disorder to comprehend and may also not possess the intuitive understanding of numerals and calculations using procedural methods. There is lack of confidence in their performance of mathematical formulas and confirmation of use of the appropriate answer (Zerafa, 2011).

Learners with dyscalculia have no "feel for numbers" whatsoever. Even small estimation of quantities and amounts is problematic for them. They have little confidence in solving arithmetic problems and are sure of their operations. Moreover, these learners lack the capacity to discern without summation operation of small amounts, ineptitude of carrying out estimation of reasonable arithmetic answers, defect in counting backwards reliably, visual as well as orientation of their surroundings, directional disorientation. They also have both short and long-term memory (Bird, 2009). More defects in areas of easy pattern recognition, delayed response in time perception as well as lack of organization skills.

Characteristics of attention deficit disability (ADD) are; negligence, anxiety, impulsivity, erratic, unpredictable and inappropriate behaviour, blurting out inappropriate comments. A section of learners come across unintentionally as aggressive. Most fail to make effective use of feedback. Learners have specific problems remaining focused or attention shifting and most of the time seem to be in their own worlds. These types of learners are easily distracted by other things. Lack of attention breeds inability to grasp certain concepts and this can also be seen in cases of Dyslexia.

This type of disorder causes lack of social communication skills, dependence on certain routines depiction of unusual behaviour as a result of immutable thinking capacity (Babuder & Magajna, 2015)

Gastaldi and Longobardi (2016) carried out a study to determine the differences perceived by teachers in their relationships with learners SLD. In particular, the sample comprised of 108 learners (age: Mean = 100.03 months; Standard Deviation = 6.29), 63 males and 45 females of which all subjects originated from Italy. The sample was further placed into three subgroups: an experimental group formed by 38 learners with a SLD (i.e., were diagnosed or had a pending diagnosis); a first control group, composed by the same number of classmates (N = 38) that did not depict SLD but had similar scholastic performance as the learners in the experimental group, and a second control group, that was composed of 32 learners who had opposite scholastic performance compared to experimental group members.

Furthermore, SLD can sometimes hamper the teacher's perception specifically in terms of emotional support, act as protective factors because they can motivate learners to participate more in scholastic activities and influence their learning abilities in a positive manner. Learners with SLDs, thus, represent vulnerable points that can lower the quality of the learner-teacher relationship. However, there is still the need to analyze the way in which the learners with SLD (both type and extent) affect the teacher's perception of the quality of the relationship, (Pasta *et al.*, 2013).

Elvira, Tiziana, Giovanna and Claudio, (2016) found that teachers' perception on their relationships with learners with SLDs as characterized by lower levels of closeness and higher levels of conflict, but these differences are not statistically relevant. However, the difference between the perception of the relationship with learners from the EG and those from the CGs (considering both CG1 and CG2) was statistically relevant when

considering the dependency dimension (t-distribution = 4.54; df = 117.585; p < .001). The Dependency score of the EG is statistically higher than the one obtained by CG1 and CG2 (F(2,106) = 14.252; p < .001), Therefore, the highest level of dependency is associated with SLDs and not with learners who have poor academic performances. However, learners' performances seem to influence the levels of closeness and conflict perceived by the teachers, even though the differences are not statistically relevant. In fact, teachers tend to perceive a more affectionate and less hostile relationship with learners who have better academic performance.

Vaz, Wilson, Falkmer, Sim, Scott Cordier and Falkmer(2015) reveal in their study whose aim was to identify the factors associated with primary school teacher's perceptions towards learners with SLD in mainstream education. A total of 74 primary school teachers participated in a cross-sectional survey conducted in Western Australia. Teachers' perceptions toward mainstreaming of learners with SLD were measured using the opinions relative to integration of learners with SLD scale and Bandura's teacher perception scale respectively. When the results were analyzed, preparatory screening was done analysis of the residuals. An examination of the plot of residuals against predicted values was done at each stage of the multiple regression operation.

There were no observed multiple outliers at any of the operations steps. Also, no erroneous patterns were detected from the scatter plots. The value of R differed significantly from – at the finish of each step. There were no significant interactions observed and eliminated from the models.

Vaz, et al. (2015) found that 4 teacher attributes; age, gender, teaching perception, and training all together explained 42% of the changeability in teachers' perception towards mainstreaming learners with SLD (F (7, 46) = 4.37, p < .001). The study further found that

male teachers had greater negative perception towards mainstreaming (Beta = -.26, p = .04) and older teachers aged 55 years and above had more negative perception towards mainstreaming in comparison to the 35–55-year-old subgroup (Beta = -.55, p = .002). Teachers with reduced levels of self-efficacy were more prone to uphold negative perception towards mainstreaming learners with SLD (Beta = -.38, p = .003).

Odongo and Davidson (2016) examined the approaches and concerns of the Kenyan teachers apropos the mainstreaming of learners with SLD in the mainstream education classroom through a mixed methods study. The study participants were 142 primary school teachers from 10 primary schools in a school district in Western Kenya deliberately selected from schools identified as actively implementing mainstream education programs. The overall findings indicate that teachers have a positive perception towards mainstreaming of learners with SLD in normal classrooms. Generally, the findings of the study showed that approaches and concerns of the teachers influence their acceptance and commitment to the implementation and success of mainstream education.

Odongo and Davidson, (2016) found out that administrative support and collaboration were indicators of positive teacher's perception toward mainstreaming. The role of school head teachers can enhance mainstreaming practices in schools, cultivate new implications about diversity and build relationships between schools and community, facilitate dialogue, adopt mainstreaming policy and incorporate whole school approaches and cultures. However, most of these studies looked at teacher's perception towards mainstream education. The current study looked at teacher's perception influencing academic performance of learners with SLD in Koibatek Sub County.

2.3 Teaching Methods

Teachers utilize various methods during a lesson to ensure the delivery of instruction in order to teach information in a variety of ways. Effective teachers believe that all learners can learn and be successful and usually develop a favorable environment for all learners to feel as part of the learning system. The teachers also believe that there is potential in each learner and so commit to looking for the key that would unlock that potential. The following are some of the teaching methods used by teachers in mainstream classrooms:

2.3.1 Restating a Problem

Learners with SLD perceive mathematics concepts as simply abstracts, and numbers are mere marks on a page. Communicating and trying to solve a problem or putting it down on paper can assist a great deal in enhancing the relationship between elements. Common practices as restating the sentence in a different tone can assist with organization of information and deducing the solutions. Mediation on the basis of direct integrated instructions and highlighting the procedural elements, with use of images, group discussion, and questions directly from the tutor can help. (Tuchura, 2016).

Writing down the problem can also help learners with SLD to visualize relationships and understand the basic ideas. learners can use images to describe the problems and reflect their own ideas of the problem and depict means on how to solve it. Overwhelming is a common feature among learners when the problems are complex, particularly if ti touches on what they have gone through in the past. Setting the problem into parts and solving each of them at a go can assist the learners with SLD maintain a certain level of focus. They can observe connections and avert overloading themselves. The art of problem solving especially for mathematical tasks is most common and is recognized as being dependent on reading as well as language competence. Comprehending and reading for learners with SLD may prove cumbersome, also, translating the word problem may be problematic and hard for them. Which is also the case when it comes to identifying an appropriate operation for solution (Rothman & Cohen (1989 in Zerafa, 2011).

2.3.2 Concrete Objects

Giving an account of mathematics to the real-life case scenarios can assist learners with SLD (Dyscalculia) to get a better understanding of the concepts and visualize the relation between numbers. settings like, measuring cups, measurement items, and objects that students can utilize to reduce the abstract of mathematics. Teachers use concrete objects to make the learners with SLD interaction's lively and use repeated demos and explanations. This is practiced by both learners and teachers for effective understanding of a concept. Equipment and material sought to be numerous and accessible to enhance teaching and learners can acquire certain knowledge in the process (Makumi, 2012).

Inadequacy of suitable math material objects builds up the problem of poor curricula implementation. Teachers require an ideal set-up for solving real world issues to enhance a great understanding for learners with SLD. They can use the concepts and generalize the case scenarios and create appropriate solutions for the problems.

. The teachers should choose teaching aids that: "help to support active learning of target skills, add interest to the lesson, are age appropriate, closely match the learners' ability level and lead directly to skill acquisition" (Njuguna, 2012). Learning facilities and items for practical sessions and applications to support the Chinese saying "What I hear I forget, what I see I remember, and what I do I understand". And with respect to Emerson and Babtie (2014), students ought to work with real resources visualize the scenarios. The researchers give strong affirmation that students require enough time with the concrete learning equipment to have enough experience discus about amounts and make links, as a result they can develop a relationship and implications of numbers.

Creating a program that can assist students with SLD can help train them in skill building. This can be achieved by use of multisensory experience, categorical instructions, reinforcements as well as repetition. Learners having difficult times in processing information can accomplish their writing tasks and extra class hours with the help of computers just as the standard word processor is a useful tool for students with SLD. The use of electronics can ease the learning process especially with math as the learners can use electronic speech coordination and problem-solving software. Organization can be trained through the use of mathematical sheets in aligning the workings of the solutions. A speech-controlled software can also help the learners with SLD process information and translate them into understandable terms on their own. The ideology of constructivism and socio-constructivism is the fundamental frame for the several means of mainstream teaching (Bjekic et al, 2012).

The use of technology is very crucial and significant in helping struggling learners with listening, memory, reading as well as writing skills. Learners with hardships of interpreting visual material can enhance comprehension and their capacity to determine and rectify errors when words are spoken or printed in large fonts. Electronic documentation can be utilized with enlarged characters and voice speech devices to facilitate better access for the learners with SLD. Technological assistance has a crucial part to play in bridging the gap of comprehension as well as performance on respective niche. It will also serve in helping evaluation of tests and provide enough solutions when the problem is complex.

Successful integration of technology in education system can assist in addressing the fundamentals and reduce the barriers that are felt by the learners with SLD. This will bring equity between learners with SLD with their counterparts who do not have (Ahmad, 2015).

20

With respect to the preferred channel of stimuli response, the learners with SLD can cultivate compensatory methods of learning. The tutors can assist the learners with SLD using various mnemonic strategies and useful teaching items. Use of images and visual illustrations by varying the fonts for easy readability, letters and use of speech support to give instructions can help a lot. With respect to Price, (2000), use of auditory learning means, videos, kinesthetic learning for students with SLD can have a huge impact on their performance and skill development.

These can include the use of tape recorders recording the learners voice, discussions, tunes, reciting information and explanations can prove to be very effective. Visual learning may incorporate colorful motion images, games, and posters. The strategy employed in teaching by teachers can be the use of real-life situation, people playing different roles, experiencing hands-on operations, describing them in their won words and feeling the learning rather than observing (Obradovic *et al*, 2014).

The employment of collaborative and cooperative work in groups of students integrated with social interaction where the learners with SLD can express their ideas and different ways of tackling problems. This is far much more significant than a reclusive academic program. This type of learning enhances their affirmation within their clusters and develop their self-confidence to higher levels and as such boosting their own self-respect. The great advantages of developing an e-course for students with SLD, are the great positive impacts on these students. E-learning and creation of e-environments gives them access to platforms that develop their academic levels and destroys the existing barriers that deter them from performing (Bjeki *et al.*, 2014).

Support provided by fellow colleagues who do not have SLD through computer mediated communication equipment provide opportunity for collaboration on a peer level to prevent

social isolation. E-learning system enables the students with SLD to be proactive and maintain a self-reliant status. They will be less dependent on others and at some point, become fully dependent on themselves. The ICT provides the students with SLD flexibility in space and time. it gives modalities that addresses the necessary requirements for students with SLD. It gives them the opportunity to study and learn at their own pace and use their own strategies of solving problems.

2.3.3 Remediation

Short term memory among students with SLD gives them a hard time in retaining information about what they have learnt in class, mastering the skills and strategies of solving the problems. Learners with SLD have short but frequent review sessions to assist in maintaining the memory. Having written references like diagrams can assist with frequent reviews of what has been taught. This helps in development of the cognitive sensory, however, this also depends on the mode of delivery and appropriateness of the delivery method. These methods ensure the efficient processing of information delivered to them (Berg, 2013).

Investigation done with Spanish youthful monolingual learners depicted that the performance of students with SLD concerning problem solving situations was created and required the use of short-term memory showed that it is lower compared to that of a control group. The conclusion from this study was that they had poor working memory and did not have the numerical or math solving capabilities. What's more, the research revealed that the ability to retrieve numerical facts from the long-term memory is flawed for learners with SLD.

It is recommended that in such cases, the teachers should utilize repetition strategy when delivering information efficiently. In cases where the problem to be solved is too complex, students with SLD may be affected and not remember how to solve the problem. The notion that a working memory is associated with mental work does not apply to the learners with SLD (Chinn, 2004 cited in Zerafa 2011). In the current study, it will seek to understand the teaching methods teachers use in mainstream education and how they impact on academic performance on learners with SLD in Koibatek Sub- County.

2.4 Teacher Training

Vaz, et al. (2015) while citing Forlin (2003) reported that teacher training is perceived to be the most significant aspect in the development of the affirmative perceptions and requirements for mainstreaming. This is in conjunction with formal academic trainings being identified as among the significant factors that assist in mainstreaming. Similar assertions have been made with trainee tutors, where there is an inclusive approach in the mainstreaming of a mandatory module on variety in a higher level of degree.

Education that uses both formal and planned hands-on experience with learners who have SLD have depicted an improved readiness and positive approach towards mainstreaming. In addition to this, depending on the level of degree, trainee tutors experienced a better understanding the capabilities of learners with SLD after completion of a course unit with focus on mainstream education (Hollins, 2011).

However, the same research study concluded that enhancing knowledge and courage in mainstream education is not enough to cultivate a positive perception towards mainstreaming and demolishing the existing boundary related to anxiety. They describe the finding that there is a slow decline of positive approach towards mainstreaming in trainee tutors as they progress in their training. If the level of awareness is maintained high, then the teachers will be in the know of the possible challenges ahead and can influence their approach towards mainstream education (Vaz, et al. 2015).

Teachers who handle general education require professional development training on mainstream education. This training has to be specific and continuous and solid for enhancing successful school progress regarding mainstream education. The study done by Rakap and Kaczmarek, (2010) concerning Turkey teachers' approach towards mainstreaming education, the determined that teachers with in-service education and special education credentials compared to those who have received special education trainings in campus had comparatively more positive approaches towards mainstream education. Woodcock and Vialle (2015) conducted a study with a purpose to examine the perception of pre-service teachers towards learners with SLDs by analysing their attribution responses to hypothetical learners. The study concluded that one of the most significant factors in the successful inclusion of learners with SLD in mainstream education, teachers still depict mixed reactions to the inclusion of certain learners in the classrooms. Moreover, their perception towards mainstream education seems to be developed during the inception of their initial training.

Participants included 205 pre-service teachers, and the outcome depicted that the preservice teachers' attribution reactions conflicted according to whether or not the hypothetical teachers had a SLD. Their attribution responses were likely to have an unintended negative influence on teachers' acknowledgement, incentives, as well as selfefficacy. Among the ramifications of these findings was that there is need of pre-service teacher-training to include a focus on teachers' perceptions and behaviours in mainstream classrooms.

Positive perception in mainstream education can be cultured by means training in special need education and real-life experiences with learners with SLD. Pre-service training period therefore, is a suitable time to address teachers' interests and possibly change perception towards teaching learners with SLD. The findings of the studies determining the influence of special education training on teachers' perception towards mainstream education imply that training is a crucial aspect in the development of more positive

teacher perception. Research suggests that there is a positive relationship between the level of disability education a teacher has received and educator's positive perception towards mainstream education, (Odongo & Davidson, 2016). However, the current study, identified teacher training as a continuous process of acquiring skills for teaching learners with SLD in mainstream education which influence academic performance in Koibatek Sub- County.

2.5 Teaching Challenges

Rontou (2010) in New Zealand revealed that there was no training of any sort for teachers no how to deal with learners with SLD in mainstream education. For this reason, the research revealed that there was lack of training for teachers on how to teach learners with dyslexia in the mainstream. Also, ti depicted that a learner's self-esteem can become a hindrance to providing support for learners with SLD in education institutes. It is not easy for the teachers to maintain support on learners who always display reduced self-esteem. Lack of experience as well as confidence with teaching has restricted many teachers to continue giving the necessary support to the learners with SLD.

The learners with SLD have fundamental provisions such as practical experiences, acknowledgement, positive educational learning and emotional endurance. They require special approach methods and social interactions for them to progress at their own pace.

Lowell, (2014) suggested that huge class sizes also played a role in the wastage of time spent as it could have been dedicated to one-on-one lessons with the learner with SLD. A huge percentage of the participants in the study indicated that the large class sizes of learners affected the impact of teacher's capacity to further support learners with SLD. This in turn impacted on their knowledge of surfacing of scaffolding. This meant that the large class size with learners of different abilities created a barrier support for the learners that needed attention most. An investigation in Greece by Arapogianni (2003 cited in Tafirenyika, (2015) depicted that most of the teachers did not know how to go about giving support to learners with SLD and did not understand the kind of difficulties the students had. As a result, they felt that they did not have responsibility of any kind for giving them support. With respect to Lowell, (2014), accessibility of information taught in class for the learners with SLD is termed as differentiation and it also involves developing their assessment suitable for learners with SLD, however, they should be effective in assessing the learners.

Differentiation facilitates the learners with SLD to display what they can be able to attain and enjoy their experience in learning.

Chitsa and Mpofu (2016) in their study employed convenience sampling and purposive sampling techniques in a sample selection of 20 participants out of a target population of 170 potential respondents. Collection of data was done using questionnaires and interviews. From the survey, it was determined that teacher's lack of knowledge on how to handle learners with SLD was the biggest challenge experienced. As such there was inadequate knowledge and understanding, the seriousness of the SLD learner's situation was also an aspect.

In this research, we will seek to address the challenges faced by teachers in their quest to facilitate the academic progress of learners with SLD in mainstream public primary school in Koibatek Sub-county, Kenya.

2.6 Theoretical framework

This study utilized positioning theory defined by Harré (2012) based on the principle that not every learner with SLD involved in a mainstream school is treated with same equality as learners without SLD. Social position can help to identify learners with SLD's position within the social hierarchy in a mainstream education. A mainstream education system allows more room for learners' with SLD to impact on their ultimate academic performance. Positioning theory contributes to the learner with SLD's identity; a crucial aspect to learning in the participation framework. Positioning theory, views mainstreaming of learners with SLD as an interaction of position and viewed in terms of participant roles and alignments.

In the theory, the concept of positioning allowed this study to perceive acts of changing school interplay: how learners with SLD place themselves in an academic setting and how their counterparts view them as well in mainstream public primary schools. This theoretical framework helps in understanding the teachers' perceptions, teaching methods, teachers training and teachers' challenges regarding the demands of mainstreaming learners with SLD. Positioning theory is a framework which interprets mainstream classroom directions on particular matters. In particular, the theoretical framework targeted: how the teachers' perception "positions" themselves relative to mainstream practices; how teachers' "position" themselves in response to teaching methods reflective of demands for mainstreaming and how teachers "position" the challenges they face in mainstream education.

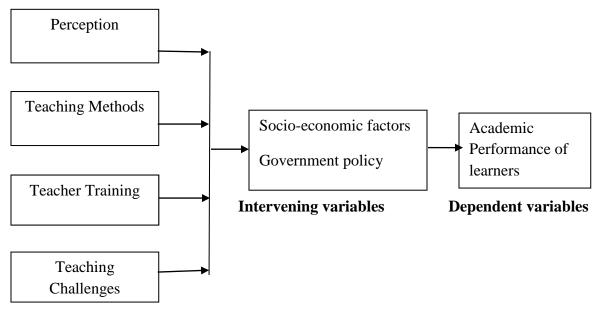
There were two significant points of view in this study. The first approach of positioning was intentional positioning. Davies and Harre, (1990) stated this as a reflexive positioning, where one positions himself/herself according to their own point of view. In this way, whichever the direction the teacher chooses, that particular positioning directs and provide motivation in a manner they interact with the learner.

The second technique of positioning is interactive positioning "in which what one person says positions another" (Davies & Harre, 1990). The attributes of interactive positioning helps to comprehend the teachers' positioning of learners with SLD at the learner center. Teachers might position learners with SLD without recognizing that they are limiting their chances to facilitate a positive sense of themselves as learners.

If there are good approaches within the learning institution concerning mainstreaming. Teachers are more often prone to change their beliefs to coincide with the current approach of other teachers.

2.7 Conceptual Framework

Teacher Attributes



Independent Variables

Figure 1 Teacher Attributes influencing academic performance of learners with SLD

The type of SLD also affects teachers' perception as teachers would generally be more supportive to mainstream learners with a particular type of SLD and would differentiate their perception according to certain type of SLD. The intervening variables causes significantly lower learning performance in some learning niche like writing, reading, arithmetic and pronunciation than could be anticipated with respect to the learner's background information. Theses aspects deter learning in particular niche, for instance, learners with socially and culturally disadvantageous history and of learners with sufficient assistance and understanding. Government policy influences academic performance of learners with SLD. The government can provide teaching/learning resources to mainstream schools and hence boosts the general performance. Necessary changes and efficient teaching methods influence both learning and progress of learners. Most learners with SLD can achieve significantly higher performance and social mainstreaming in this case. These changes however, are gradual and cannot be achieved as quickly as most people would anticipate. This and the basic training for teachers at the inception stages should be sufficient to help give support to learners with SLD.

additional professional assistance. Teachers avoid focusing only on challenges but should aim at improving the learner's performance and career even when some SLD remain. The current challenges faced in mainstream primary schools involved the need for improvement in dealing with learner's individual differences and more personal support for learners with SLD. These challenges require diversified teaching methods and specific teacher competences.

2.8 Summary

The critic of the literature aimed at investigating learners with SLD; particular defects of disabilities surrounding arithmetic (Dyscalculia) and its impacts. Most of the study investigations in Kenya are on learning defects which is a general niche for the different types of learning disabilities. This study sought to link the gap by focusing on the teacher attributes and how they impact on the academic progress of learners with SLD in mainstream public schools. The study dwelt on the teacher's perception, teachers' professional competence, teaching methods and, teaching challenges.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Here the study covered research design that was used, the sample area, the population target, the procedure for sample collection, the size of the population, reliability and validity, the tools that were used, analysis of data collected and ethical implications of this research study.

3.2 Research Design

This research study used descriptive research survey. The descriptive research was regarded and would be suitable for this particular study since it explains the existing state of things and ubiquity of learners with SLD (Price,2000). The design does not only describe the current state of things but also takes a look at the related subjects since the research focused on learners with SLD in mainstream education system; Koibatek Sub-County. The designed was deemed appropriate since it established the existing conditions regarding the influence of teachers' attributes on academic performance of learners with SLD. This included the correlation, the points of view, patterns developing, among others. The attributes of the teachers influence the academic progress of learners with SLD in mainstream education system. Also, the results obtained depicted the current situation and what possible solutions there are for these learners. This research investigation utilized qualitative and quantitative modes in the development of tools as well as data scrutiny.

3.3 Area of Study

The study was conducted in mainstream public primary schools in Koibatek Sub-County, Baringo County in Kenya. Koibatek Sub-County is located a few miles north of the equator, geographical coordinates 0° 30' 0" North, 35° 43' 0" East. The area was formerly a British colonial administrative focal point . Administratively, Koibatek Sub County is divided into 4 divisions namely Torongo (69.1km square), Esageri (290.6 km square), Mumberes (119.1km square) and Ravine (475.6km square). Internally, the sub-county well linked in terms of transit routes. The area is economically dependent on agriculture and horticulture. The performance of learners with SLD has not been satisfactory and as indicated in table 2. The performance of learners with SLD in 2017 shows that 45% of them scored less than 200 marks out of 500 marks.

3.4 Sample population

This implies refers to the people under which the research will be focusing on and whose data will be utilized to represent the whole population (Aduda & Gitonga, 2011). The target population for this study consisted of 77 head teachers and 80 class eight teachers from 77 mainstream public primary schools in Koibatek Sub-County as indicated in the table 3 below.

Table 3 Target population`

Population Category	Total
Head Teachers	77
Teachers	80
Learners with SLD	380
Total	537

Sub-County education officer (2018)

3.5 Sampling Procedures and Sample Size

In this study a non-probability sampling technique was used; here the samples were collected unequally with regards to chances of selection.

Purposive sampling technique is a non-random technique that does not need underlying theories or a set number of participants. The researcher decides what needs to be known

and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Zhi, 2014). The technique was used to identify Ravine and Mumberes divisions with the highest number of learners with SLD with the highest number of learners with SLD who scored of less than 200 marks out of 500 as indicated in table 2. However, 8 schools from the two divisions were selected. The study purposively selected 8 head teachers and 10 class eight teachers. Class eight learners with SLDs from the two divisions of Koibatek Sub County were 20 who would be purposively selected to participate in the study.

3.6 Variables of the Study

The current study classified variables as dependent and independent variables. The independent variable in this case was utilized to determine its impact on the dependent variable. The independent variable in this case study was the teacher attributes whilst the dependent variable was academic performance of learners with SLD in mainstream public primary school. The measurement of the variables depended on how independent variable impacted on the dependent variable. Reactions from the respondents developed into our dependent variables from which groups, details as well as symbols for representation were created for qualitative analysis.

3.7 Data collection tool kit

Primary data was collected using questionnaire as the main tool for teachers and interview schedules for head teachers.

3.7.1 Questionnaires

Questionnaires were used in the study to collect data with variables that cannot be directly observed such as views, opinions, perceptive, perspectives and feelings of the respondents. Such information is best collected through questionnaires. Document analysis schedule

was used to collect information on their joint examinations for the year 2018 academic performance and their general information as in the questionnaire in the appendix.

Teachers completed background information questionnaire containing a series of questions measuring other variables that have previously been demonstrated to affect perceptions towards mainstreaming. This scale was designed to elicit participant demographic and background information across five areas. Part A collected demographic data including their gender, age, academic qualifications and teaching experiences.

Questionnaires were used to collect data from the teachers regarding the influence of selected teacher attributes on academic performance of learners with specific learning difficulties in public primary schools in Koibatek Sub County. The questionnaires had mainly four parts: part B gathered data on perception of teachers; Part C gathered data on teaching methods and Part D gathered data on training while part E gathered information on difficulties faced by teachers in public schools. The questionnaires entailed both open and close-ended items (Oso & Onen, 2005).

3.7.2 Interviews Schedule for Head Teachers.

The interview schedule was used to find out the influence of selected teacher attributes on academic performance of learners with specific learning difficulties in public primary schools in Koibatek Sub County. The information investigated the current state of teachers' perception, training, teaching methods and difficulties faced by the head teachers in the Sub County. Interview schedules were recommended when the respondents are few, allows the researcher to probe, thus enabling the study to get in-depth information.

3.8 Reliability and Validity of Research Instruments

3.8.1 Validity of Research Instruments

Content legitimacy of this research study tools was put in place to enhance complete utilization of tools in measurements. Some strategies were employed to facilitate the genuineness of the study (Denzin, 2012). The use of reflective comments was utilized to bring out the different points of view and not take sides on the information gathered (Finley, 2014).

3.8.2 Reliability of study tools

The questionnaires were useful in collection of primary information from the population sample. The credibility if the information was compared to existing secondary information by means of alpha reliability index. This tool assists us to establish the different internal consistency of the data collection tool. This is the best technique to use in this scenario since it helps save on time. Data from the questionnaires were given codes using statistical package (SPSS). This provided ease of analysis of data with known representation of our variables. With respect to Sekaran (2005), if the Cronbach's alpha index is found to be < 0.6, it implies that the tools used in the study have low reliability. This introduces errors to the measurement scheme of data. However, when the alpha index value is above 0.7, the instrument would have acceptable reliability. The internal consistency reliability coefficient (Cronbach's alpha) for the scales which was used in this study was 0.81, and therefore was acceptable for the analysis purpose.

3.9 Data Collection Procedure

The researcher obtained an introduction letter from the graduate school of Maasai Mara University. Prior to the commencement of data collection, the Koibatek Sub-County office was notified ahead of the research for maximum cooperation when sampling and data collection time reached. A letter of introduction to the respondents stating the purpose of the study and assuring them of confidentiality of information provided was also prepared. Data was collected for a period of two weeks. Data was collected through selfadministered questionnaires as well as the interview schedule. The questionnaires were filled under the guidance of the researcher.

3.10 Data Analysis

Data analysis was done with respect to the objectives of the study as well as the research questions. The collection of data coincided with the identification number entry for each set of data. Thereafter, the data was then analysed using descriptive statistics and presented using frequencies, percentages and means.

Qualitative data was derived from interviews conducted to the head teachers. A thematic frame work was used to analyse the data. It involved systematic searching, arranging, organising, breaking data units, synthesizing, searching patterns and discovering what is to be learnt as brought out by the respondents. The researcher categorised data into themes according to research objectives and thematic analysis through discussion and was presented in form of narratives, interview scripts as shared by the participants.

Table 4 Research Methodology Matrix

Research Objectives	Type of Data	Sources of Data	Research Instrument	Data Analysis Techniques
Teacher perception on academic	Ordinal,	Primary/Field	Questionnaire	Frequency,
performance of learners with SLD		data- H/T and	and interview	mean and
in mainstream primary schools		teachers	schedule	percentages
				Thematic analysis
Teaching methods on academic	Ordinal	Primary/Field	Questionnaire	Frequency,
performance of learners with SLD		data- H/T and	and interview	mean and
in mainstream primary schools		teachers	schedule	percentages
				Thematic analysis
Teacher training on academic	Ordinal	Primary/Field	Questionnaire	Frequency,
performance of learners with SLD		data- H/T and	and interview	mean and
in public primary schools.		teachers	schedule	percentages
				Thematic analysis
Challenges teachers face in	Ordinal	Primary/Field	Questionnaire	Frequency,
teaching learners with SLD in		data- H/T and	and interview	mean and
mainstream primary schools.		teachers	schedule	percentages
				Thematic
				analysis

3.11 Ethical Considerations

The researcher sought clearance from the Graduate School of Maasai Mara University then went ahead and registered for a research permit at the National Council of Science and Technology an inquiry into Koibatek Sub-County Director of Education Officer for permission to conduct a research study. Confidentiality of the data collected was treated with the utmost severity.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter contains data presentation, data analysis, interpretation and the discussion of the research findings based on the following objectives to: establish the influence of teacher perception on academic performance, find out the influence of teaching methods on academic performance, examine the impact of teacher training on academic performance and find out challenges teachers face in teaching learners with SLD in mainstream public primary schools in Koibatek Sub-County.

4.1.1 Demographic information of the respondents

While the study did not aim at investigating the influence of the demographic characteristics on learners with specific learning difficulties in mainstream public primary schools, it was critical to get this information for the background information and for future article and documentation.

4.1.2 Demographic Characteristics

The response rate was calculated from the respondents who filled the questionnaires from a total of questionnaires which were distributed and were filled and returned. From a total of filled and returned questionnaires, 100% (10) came from class eight teachers while 87.5% (7) were the head teachers of the schools which participated in the study. The response rate of 97.4 was thus considered adequate for analysis as indicated in the table 5 below.

Respondents	Issued	Returned	Rate (%)
Teachers	10	10	100
Head Teachers	8	7	87.5
Total	39	38	97.4

The gender for class eight teachers were recorded and 30% (3) represented male and 70%

(7) were female teachers respectively as indicated in the figure 2 below.

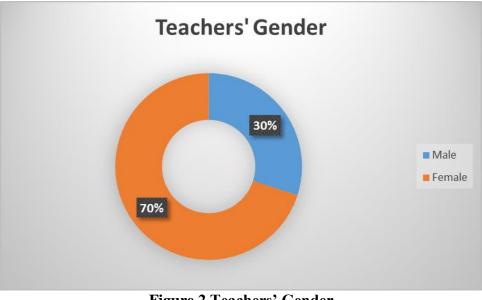


Figure 2 Teachers' Gender

From the results of the findings, it indicated that 43% (3) of the head teachers were male and 57% (4) were female respondents as shown in figure 3 below.

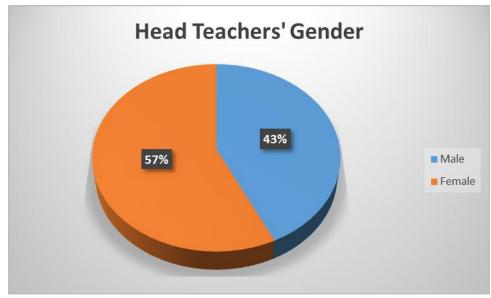


Figure 3 Head Teachers' Gender

Figure 4 below indicates the age in years and the professional qualifications of the teachers and it was found that none of the teachers aged between 25-34 years had a degree qualifications 10% (1) and none of them had a P1 certificate qualification. Among the teachers aged between 35-44 years 10% (1) had degree qualifications, 20% (2) had a diploma and none of them had a P1 certificate qualification 0%. Teachers who were aged 45-54 years old, 20% (2) had degree, 10% (1) had diploma and none had certificate qualifications 0%. Among the teachers aged 55 years and above, none had a degree qualification, 20% (2) had diploma and 10% (1) had certificate qualifications.

Vaz et al (2015) also found that teacher attributes—age, gender, teaching self-efficacy, training-collectively explained 42% of the variability in teachers' perception towards mainstreaming learners with SLD (F (7, 46) = 4.37, p < .001). Male teachers exhibited more negative perception towards mainstreaming (Beta = -.26, p = .04). Teachers who were aged 55 years and over upheld more negative perception towards mainstreaming when comparison was made to the 35–55 year old subgroup (Beta = -.55, p = .002).

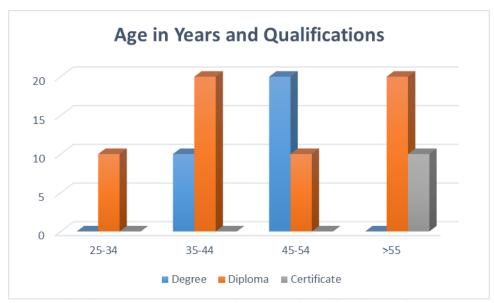


Figure 4 Age in Years and the Professional Qualifications of the Teachers

The head teachers' teaching experience and the length of being in the administrative position were compared and were as indicated in figure 5 below. From the findings none of the head teachers had less than 5 years teaching experience. But 42.9% (3) had between 6-10 years in the teaching profession and only 14.3% (1) had the same range of years in the administrative position as the head teacher. There was no one with 11-15 years teaching experience but 14.3% (1) had been in the administrative position as the head teacher for the same period of years. In a period between 16-10 years only 14.3% (1) had taught for those numbers of years but none had headed for the same period. It was also indicated that 28.6% (2) of the head teachers had taught for over 20 years and 71.5% (5) had been in the administrative position as the head teacher for same period of time.

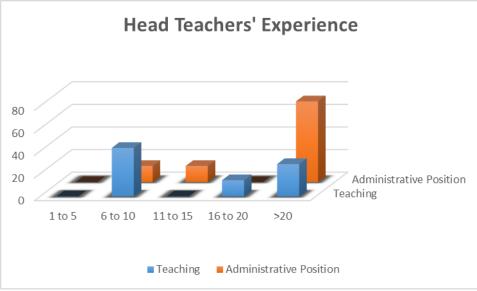


Figure 5 Head Teachers' Experience

4.2 Perception of the Teachers

The following items were used to examine the perception of teachers about learners with specific learning difficulties in public primary schools where respondents were asked to tick where appropriate ($\sqrt{}$) within a scale of, SA=strongly agree, A= agree, D= disagree, SD= strongly disagree and DK = Don't Know.

Statement	SA (%)	A (%)	D (%)	SD (%)	DK (%)
Like teaching learners with SLD	0(0.0)	2(20)	7(70)	1(10)	0(0.0)
Like interacting with learners with SLD	0(0)	4(40)	3(30)	3(30)	0(0.0)
Learners with SLD are difficult to handle	3(30)	6(60)	0(0.0)	1(10)	0(0.0)
Paid extra money to teach learners with SLD	7(70)	2(20)	0(0.0)	1(10)	0(0.0)
Learners with SLD be taught separately	3(30)	3(30)	4(40)	0(0.0)	0(0.0)
Learners with SLD can harm teachers	0(0.0)	8(80)	1(10)	0(0.0)	1(10)
Learners with SLD interfere in class	1(10)	5(50)	3(30)	1(10)	0(0.0)
Mainstreaming influences performance	3(30)	5(50)	2(20)	0(0.0)	0(0.0)
Negative attitude towards learners with SLD	1(10)	7(70)	1(10)	0(0.0)	1(10)

Table 6 Perception of Teachers

Teachers' perception towards mainstreaming are in most cases viewed upon practical interest about the implementation of mainstreamed education, and when teachers were asked if they like teaching learners with SLD, 20% agreed while 80% of them disagreed to the statement. This implies that teachers in mainstream schools discriminate against learners with SLD. This would have enabled learners with SLD have a negative perception towards education and would perform poorly in the K.C.P.E. This result is in agreement with what Kavkler et al., (2015) reported that teachers need positive concept, knowledge, encounter as well as endurance. It is for this reason mainstreamed education is part of learners' curricula in education.

From the data presented in the table above, 40% agreed while 60% disagreed that they don't like interacting with learners with SLD in mainstream schools. This shows that learners with SLD don't interact freely with teachers, therefore the state of fear on teachers exist in the school. When such an environment in the school exist, is a clear indication learners with SLD are not free to ask any question from their teachers and this influence the academic performance in the national examinations. However, such an interaction affect the teacher's perception on the quality of the relationship, as also found by Pasta et al., (2013) that individual learning disparities provides an accurate picture that touches on the significance of learning disabilities. This allows learners with SLDs can flourish academically like dysgraphia for example.

The data in the table above indicate teachers' views that learners with SLD are difficult to handle in which 10% disagreed while 90% of the respondents agreed to the statement. This shows that teachers face a lot of challenges while handling learners with SLDs and this might influence teachers' perception towards mainstreaming these learners. This would have influence in their performance. Common practical concerns in handling

learners with SLD raised by teachers include: accommodating the individualized time in the classroom; being concerned of the quantity and quality of tasks laid ahead and the inadequate support as well lacking the know-how and competent professional support (Bender, Vail & Scott cited in Vaz et al, 2015).

In responding to the statement that teachers should be paid extra money to teach learners with SLD 90% of the respondents agreed to the statement. This requires that teachers need to be aroused and stimulated to focus on the goals set. The level of motivation plays a significant role in determining the levels of performance of learners with SLDs. Teachers' perception towards mainstreaming is critical in implementing the aggressive goal of mainstream education and teachers' opinion was sought whether learners with SLD should be taught separately 60% agreed to the point. Therefore, most of the respondents suggested learners with SLD be taught in special schools rather than to be mainstreamed. The government, through the ministry of education advocates for the mainstreaming of learners with SLD within regular classrooms. Nevertheless, advocacy alone does not ensure that the policy is favourably accepted by teachers and this greatly influences their perception and hence academic performance. This finding concurs with what Vaz et al., (2015) reported in their article that teachers were found to generally be more supportive of including learners with physical and sensory disabilities than those with intellectual, learning and specific learning disabilities.

Data presented from the table above indicated that learners with SLD interfere with other learners in class as opined by 60% of the respondents while 40% were not of the opinion. This statement has a serious implication on mainstreaming education as the perception of the teachers would be affected thus influencing the learners' academic performance in the national examinations. Berry (2010) reported that teachers with favorable perception toward mainstreaming generally have a notion that learners with SLD belong in general education classrooms with their counter parts who do not have SLD.

The table below indicates academic performance of learners with and learners without SLDs. The class teachers recorded the learners' performance in Appendix V, part B of the teachers' questionnaire.

Learners' Performance						
Learners	1 st term	2 nd Term	3 rd Term	Mean		
With SLD	259	251	248	252.67		
Without SLD	321	349	364	344.67		
Mean	290	300	306	298.67		

Table 7 Lea	rners' Aca	demic Pe	rformance
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Table 7 above indicates the academic performance and a graph of learners with and without disabilities was drawn as shown below:

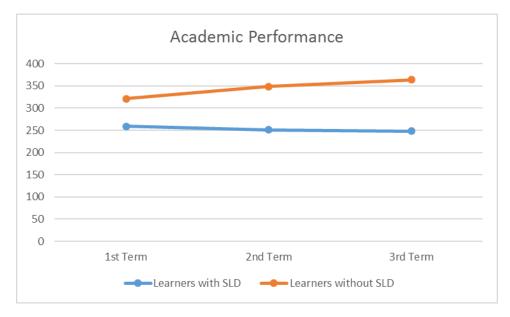


Figure 6 Learners' Academic Performance

Figure 6. Above indicates that the mean academic performance of learners without SLD was higher than those for learners with SLD throughout the year. Subsequently, when teachers were asked if mainstreaming learners with SLD influences school performances in the national examinations. Table 7 above indicates that 20% disagreed while 80% of the teachers agreed that mainstreaming of learners with SLD influence the academic performance of learners without SLDs. This implies that mainstreaming learners with SLD influence teachers' attitude in teaching and this could affect the academic performance of the learners. This findings are in agreement with what Chitsa & Mpofu (2016) while citing Carreker, Joshi & Gooden (2010). Majority of teachers may not struggle with identifying indicators among the learners with SLD but what is required beyond this detection appears to be where the problem begins. From one of the head teachers' interview, the following was reported:

Learners with SLD don't perform well because of the challenges they have

In another interview, it was reported by a head teacher that:

Some learners put a lot of effort and are above average; though some seem to require longer time to reach expectation.

These findings indicate the problem of SLD in difficulties in understanding and processing Mathematical operations which are associated with SLD like dyslexia (Lowell, 2014 cited in Chitsa & Mpofu, 2016).

4.3 Teaching Methods

The following were items in relation to teaching methods teachers used while teaching learners with SLD in public primary schools. They were asked to tick where appropriate $(\sqrt{})$ within a scale of, SA=strongly agree A= agree, D= disagree, SD= strongly disagree and DK = Don't Know.

Table 8 Teaching Methods

Statement	SA (%)	A (%)	D (%)	SD (%)	DK (%)
Uses learner-centered method	4 (40)	4 (40)	2 (20)	0 (0)	0 (0)
Uses teacher-centered method	0 (0)	2 (20)	4 (40)	3 (30)	0 (0)
Learners can be taught the same way	1 (10)	2 (20)	4 (40)	3 (30)	0 (0)
Uses teaching and learning resources	3 (30)	6 (60)	1 (10)	0 (0)	0 (0)
Learners-SLD don't need attention	1 (10)	0 (0)	5 (50)	4 (40)	0 (0)
Mainstreaming put pressure	2 (20)	6 (60)	1 (10)	1 (10)	0 (10)

Data presented in table 8 above, indicates teachers' responses on the teaching methods used in a mainstream school. Teachers use learner-centered as a method of teaching in class as 20% (2) disagreed while 80% (8) agreed. This is because every learner is unique and learns in a particular approach. This means that this approach caters for SLDs' individual differences and hence enable them to grasp the content well. This could have an influence in their performance in KCPE. This finding is similar to the Salamanca Declaration, in that learner with SLD, must have access schools like their counterparts which should cater for their needs using a learner-centered education that can meet their requirements (Johnson 2004 cited in Chitsa & Mpofu, 2016).

The respondents were also asked the teaching methods they used in teaching learners in mainstream schools. The results indicated that 50% agreed while 50% of the teachers disagreed that they use teacher-centered method of teaching. This implies that learners with SLD were taught using other methods which enable them to grasp the concept well and would pass their KCPE examinations. Similar results were reported by Kerr, (2001 in Chitsa & Mpofu, 2016) who found that a good teaching method assists learners to master or extend teaching concepts. This also affected their knowledge of what scaffolding would look like.

Data also indicated that all learners with specific learning difficulties can be taught in the same way as the average learners was a statement in which 30% agreed while disagreed by 70% of the respondents. This implies that teachers were for the opinion that individual differences of the learners with SLDs should be taken into consideration and therefore, would enable them to understand what they learned and would do well in the KCPE examination. Zarafa, (2011) reported also that a good method of teaching would enable learners with SLDs to see the relationships and understand concepts. This enables learners with SLDs find it easier to translate what is being asked and thus chose an appropriate operation.

The results indicated that teachers use teaching and learning resources as 10% disagreed while 90% of the respondents agreed they incorporate them with the teaching method. This implies that SLDs can manipulate these resources making learning concepts less abstract and good performance would be achieved. In the interview, it was reported by a fifth of the teachers that:

Inadequate facilities and resources citing it as a major hindrance for effective passing of knowledge and skills to the affected learners. Teaching and learning materials play a major role for a learner to be able to generalize and apply what they learn.

This results is similar with what Makumi, (2012) reported that teaching-learning resources enable learners achieve good performance.

Respondents were asked if learners with SLD do not need a lot of attention and 10% of them agreed while 90% disagreed. This means that without a lot of attention poor performance in their KCPE examinations was expected. A tenth of the teachers claimed that high enrolment was a challenge to teachers. One of the head teachers said that: Parents' ignorance and their failure to cooperate with respective teachers was another pressure put to teachers by these learners with SLDs.

This indicate that learners with SLD would have lacked individualized attention leading to poor performance in KCPE. The study by Zerafa, (2011), also found that learners with SLDs have the inability to retrieve arithmetic facts from long-term memory.

The data from the above table indicated that 20% disagreed while 80% of the respondents agreed that integration put a lot of pressure on teachers. This implies that teachers put a lot of effort to help learners with SLD and therefore, teaching and learning would not be effective and would lead to poor performance. Tuchura (2016) while citing O'Gorman & Drudy (2011) asserts that education and support of learners with SLDs demands well educated, experienced and professionally self-directed and dedicated teachers, who can adapt teaching and curricula to the needs and resources of learners with SLDs.

4.4 Teacher Training

The following were items used in relation to the training and teaching methods of teachers about learners with specific learning difficulties in public primary schools in which teachers were asked to tick where appropriate ($\sqrt{}$) within a scale of **SA**=strongly agree **A**= agree, **D**= disagree, **SD**= strongly disagree and **DK** = Don't Know.

Statement	SA (%)	A (%)	D (%)	SD (%)	DK (%)
Had personal interest in teaching	2 (20)	6 (60)	1 (10)	1 (10)	0 (0)
profession					
Resorted to teaching when failed	0 (0)	2 (20)	6 (60)	2 (20)	0 (0)
to get a course					
Have been trained to handle	1 (10)	3 (30)	5 (50)	1 (10)	0 (0)
learners with SLD					
Understands the requirements for	0 (0)	5 (50)	3 (30)	2 (20)	0 (0)
learners with SLD					
Learners with SLD can be taught	2 (20)	2 (20)	3 (30)	3 (30)	0 (0)
in the same way					
Can operate teaching aids for	1 (10)	2 (20)	5 (50)	1 (10)	1 (10)
learners with SLD					
There should be administrative	5 (50)	5 (50)	0 (0)	0 (0)	0 (0)
support					
Training in instructional and	5 (50)	4 (40)	1 (10)	0 (0)	0 (0)
class management					

Table 9 Teachers' Training

Data from table 9 above indicated that 20% disagreed while 80% of the teachers agreed that they had personal interest in teaching profession. In this case most of the teachers pursued their passion which is an attribute required to improve the academic performance of learners with SLDs. Teachers were also asked if they resorted to teaching when they failed to get another course and 20% disagreed while 80% agreed. This implies that teachers had interest in the teaching profession and therefore would be committed in teaching which improve the performance of learners with SLDs. In a similar study by Rakap & Kaczmarek, (2010) cited in Odongo & Davidson, 2016) regarding teachers' training in Turkey, found that teachers with inservice education and special education certificates and those who received special education courses while in college had relatively better performance in teaching learners in mainstream schools.

Data from the teachers whether they have been trained to handle learners with SLD indicated that 40% disagreed while 60% of them have not. The participants from the interview disclosed that:

Lack of knowledge and confidence with teaching learners with SLDs also hindered the provision of support for the learners. Too high demands on the teacher such as finishing the syllabus, preparing for final national examination, too much work for marking and lesson preparation was another burning barrier to providing support for learners with SLDs in Mainstream public primary schools in Koibatek sub-county schools.

This implies that teachers were not able to handle learners with SLDs since they lack knowledge and confidence teaching these learners and it might have affected their performance in KCPE examinations. From the interview, more than a third of the respondents said that teachers should be trained on knowledge and skills on usage of suitable resources. Similarly, a study in Greece by Arapogianni (2003 cited in Chista & Mpofu, 2016) showed that the majority of the teachers in mainstream schools did not know what to do to support learners with SLD in the classroom. They did not have any training on SLD and had a lack of understanding about the nature of the learners difficulties.

The study investigated if teachers understood the requirements for most learners with SLD and 50% disagreed while 50% did not understand. Lack of training in handling learners with SLDs means poor teaching methods which would lead to poor performance in examinations. Another study highlighted the findings that there is a gradual decline of positive perception towards mainstreaming in teachers as they advance in their training years. Perhaps an increased awareness of the challenges one is likely to face by including all learners with SLD might dampen teachers' openness towards being mainstream (Vaz,et al. 2015).

The table above indicated respondents' opinion in which 40% agreed while 60% of them disagreed that all learners with SLD could be taught in the same way. This implies that most teachers did not support mainstreaming and would not teach well learners with SLDs which affects greatly the performance in the KCPE examinations. One of the participant stated:

The headmaster expects us to ensure that we give each pupil class work every day, an exercise every day, revision exercises daily. Then one is expected to provide individualized learning to the pupils with SLDs. It's unmanageable. I am not a miracle worker.

In a similar study conducted by Woodcock and Vialle (2015) with a purpose to examine the perception of teachers towards learners with SLDs reported that one of the most important factors in the successful mainstreaming of learners with SLD is the teacher.

In this study teachers were asked if they can operate most teaching aids for learners with SLD, and 40% agreed while 60% disagreed. This means that teachers do not employ teaching aids effectively and this would affect learners from grasping the content and might have lead them perform poorly in the KCPE examinations.

From the results of the interview, about a third of the sampled teachers quoted that:

.... mainly used counters e.g. pebbles, sticks and bottle tops. Several teachers used multiplication tables and number cards. Use of resource persons and pupils in class, games applied in mathematics. The teachinglearning resources could play a good role if the teachers used them appropriately and at the right time.

Chista and Mpofu, (2016) reported that though, teaching aids do not teach by themselves repeated demonstrations and explanations by teachers work well. Some of the strategies to provide support in regular classrooms include for instance creating participatory classroom activities using peer collaboration strategies and small group work. The strategies are not based solely on ability where individual learning, where interdependence and interpersonal skills are promoted within heterogeneous groups. Teachers should also promote classroom dialogue for learning by using responsive instruction strategies.

From the study 10% disagreed while 90% of the respondents were for the opinion that teachers should be trained in instructional adaptations and class management. This implies that a teacher requires to be well trained on how to manage the cognitive, social and emotional challenges that learners with special needs have. There should be administrative support such as in-service training for teachers was a statement agreed to by all the teachers. A study by Tuchura, (2016), found that most of the teachers had not been attending in-service training on current ways for instructing pupil with mathematics disabilities. Only a small number of the respondents stated that they sometimes attend such trainings that are mostly conducted through SMASE program. Teachers need professional development training that is "concrete, specific and ongoing" as necessary for promoting successful school changes regarding mainstreaming.

4.5 Challenges Teachers Face in Teaching

The following were statements which examined the challenges faced by teachers handling learners with specific learning difficulties in public primary schools in which teachers were asked to tick where appropriate ($\sqrt{}$) within a scale of, SA=strongly agree, A= agree, D= disagree, SD= strongly disagree and DK = Don't Know.

Statement	SA (%)	A (%)	D (%)	SD (%)	DK (%)
Schools lack appropriate	3 (30)	5 (50)	2 (20)	0 (0)	0 (0)
teaching/learning resources					
There is irregular attendance	1 (10)	7 (70)	2 (20)	0 (0)	0 (0)
Schools face overloading teachers	2 (20)	2 (20)	5 (50)	1 (10)	0 (0)
There is lack of enough trained teachers	3 (30)	6 (60)	1 (10)	0 (0)	0 (0)
Teachers lack motivation	7 (70)	3 (30)	0 (0)	0 (0)	0 (0)
There is delayed remittance of funds	4 (40)	6 (60)	0 (0)	0 (0)	0 (0)
There is negative attitude towards	2 (20)	6 (60)	0 (0)	0 (0)	2 (20)
learners with SLD					
Limited participation in policy	3 (30)	6 (60)	1 (10)	0 (0)	0 (0)
formulation & awareness rising					

 Table 10 Challenges Teachers Face

Teaching and learning resources assist in encouraging greater participation by learners but from the data it was reported by 20% disagreed while 80% of the teachers that their school lack appropriate teaching and learning resources. This implies that learners with SLDs were not able to grasp the concepts and this lead to their poor performance in the KCPE examinations. Tuchura, (2016), found that one head teacher said that:

teachers lacked teaching and learning resources suitable for learners with learning disabilities.

Data also revealed that there existed irregular attendance of learners with specific learning difficulties in school. The opinion gave by 20% who disagreed while 80% of the teachers who agreed to the statement. It therefore, means that some topics were taught when learners with SLDs were not in school and it would be very difficult for them to understand those topics and leads to poor performance in those topics. A study by

Tuchura, (2016), found that the major cause of learner's irregular attendance was parents' ignorance and their failure to cooperate with respective teachers was another challenge as stated by one of the respondents.

Schools face large class enrolment hence overloading of available trained teachers in special education. Results indicated that 30% agreed while disagree was by 60% of the respondents. This implies that enrolment did not affect teachers' workload in most schools and therefore, this was not a major cause of the poor performance in the KCPE examinations. This was contrary to what Tuchura, (2016), found that a tenth of the head teachers claimed that high enrolment was a challenge to teachers.

The table above indicates respondents' views in which 10% disagreed while 90% reported lack of enough trained SLDs teachers. This means teachers without specialized skills were not able teach learners with SLDs and learners did not get the concepts well and therefore might have led to their failure in the national examinations. Similarly, Tafirenyika, (2015) showed in a study that the majority of the teachers did not know what to do to endure with learners with SLD. They lacked necessary training on learners with SLD and had a lack of knowledge they felt that they were not responsible for providing intervention.

The data from table 10 above revealed that most peers and community have a negative attitude towards learners with specific learning difficulties as 20% disagreed while 80% of the teachers were for that opinion. When teachers cast learners with SLD in a negative light, it may have adverse ramifications on the learners' education and might have led to poor performance in KCPE. Looking at the teacher's approach and outlooks can have long-term consequences. It is well documented that if not properly addressed, SLD leads to separation according to mental status, placing learners at risk and brings about

depression and anti-social behavior, which can affect education progress (Chitsa & Mpofu, 2016).

The study also found that there was limited participation of teachers in policy formulation, and awareness rising though 10% disagreed while 90% of the respondents agreed. This has an advanced effect as teachers would report the status of learners with SLD especially basic requirements. Therefore, lack of such fora would lead to missing certain essential services and would have led to poor performance in examinations. Rontou, (2010) found that awareness, appraisal, positive educational experiences and emotional support are all necessary provisions for learners with SLD and all stakeholders should participate.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of findings, conclusions and recommendations based on research questions. The research questions sought to assess the influence of teacher perception on academic performance, find out the influence of teaching methods on academic performance, examine the impact of teacher training on academic performance and find out challenges teachers face in teaching learners with SLD in mainstream public primary schools in Koibatek Sub-County.

5.2 Summary

The perception of teachers towards mainstreaming of learners with SLDs was found. To be negative as most of them didn't like teaching in mainstream education. This enables learners with SLD to have a negative perception towards education and would not perform well in the K.C.P.E. Teachers didn't liked interacting with learners with SLD in mainstream schools and therefore, the state of fear existed in schools.

Learners with SLD were difficult to handle and teachers face a lot of challenges which might influence teachers' perception towards mainstreaming this learners. The challenges cited included: accommodating the individualized time in the classroom; being apprehensive of the quality and quantity of work output; lacking adequate support services; and limited training and competence in supporting mainstream educational practice. Teachers had personal interest in teaching profession and did not resorted to teaching when they failed to get another course and were committed in teaching which improve the performance of learners with SLDs. Most teachers have not been trained to handle learners with SLD and lack of knowledge in teaching these learners. Teachers could not operate most teaching aids for learners with SLD, and did not employ teaching aids effectively and this would affect learners from grasping the content.

Teaching and learning resources assist in encouraging greater participation by learners but most of the schools lack appropriate teaching and learning resources. Irregular attendance of learners with specific learning difficulties in school was common and failed to understand those topics. Schools lacked of enough trained SLDs teachers and ordinary teachers were not able teach learners with SLDs. most peers and community had a negative attitude towards learners with specific learning difficulties. Limited participation of all stakeholders in policy formulation, and awareness rising was noted and essential services were not availed in the school.

5.3 Conclusion

With government policy of mainstreaming education, support must be provided that promotes change in perceptions of teachers. Issues identified in this study included, teaching, interaction, handling and extra money to teach learners with SLD. Others issues found included separation, harm to teachers and interference in class and negative attitude towards learners with SLD. There is need for a change in the negative perception on teachers as its particularly important for mainstreaming practices to be successful in Kenya. Such teachers are in turn likely to have beneficial impact on the perception of learners with SLD.

Teaching methods are important teacher attributes that teacher training institutions must train teachers who are confident in their ability to cater for diversity in their classrooms. To facilitate effective teaching of learners with SLD, the teachers must consider strategies like use of learner-centered method compared to teacher-centered method. Teachers also reported that learners can be taught the same way using a variety of teaching and learning resources. Teachers should be trained in instructional adaptations and class management, through in-service training.

The teachers in the study pointed out that schools lack appropriate teaching/learning resources, irregular attendance and overloading teachers. There were more challenges reported like lack of enough trained teachers, teachers lack motivation, delayed remittance of funds, negative attitude towards learners with SLD and limited participation in policy formulation & awareness rising. Teachers expressed fear that because majority of them do not have the required knowledge and expertise to teach learners with SLD who are mainstreamed, this is contributing to low mean scores in the examinations. While schools tend to be blamed for not being more mainstreamed, the teacher training college and colleges of education at the universities must acknowledge and embrace their role more fully to ensure that they are producing graduates who have the appropriate knowledge, skills and strategies to be more proactive in furthering the mainstreaming of learners with SLD.

5.4 Recommendations

The study made the following recommendations:

Teacher's perception is an attribute which directly influence learners with SLD performance. Therefore, teachers trained to teach learners with SLD should be posted to mainstream schools.

The government should address the issue of teacher training and support in terms of administrative issues, planning time and disability-specific teaching skills and resources. In-service training of teachers in the area of handling learners with SLDs in order to understand the requirements for these learners.

Poor performance of learners with SLD can be attributed to irregular attendance due to parent's ignorance and large classes. Parents of learners with SLD should be sensitized on the importance of taking full responsibility of supporting and cooperating with the school administration. There should be enough learning resources and a standard size classroom should be maintained. This study further recommended that, an investigation of preservice teachers' attributions for learners with SLD can be done.

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APPENDICES

Appendix I: Letter of Introduction

JEPKOECH KIMUGE

Dear Sir/Madam,

REF: PERMISSION TO CONDUCT RESEARCH

I am a post-graduate student at Maasai Mara University pursuing a Master's Degree in Special needs education. As part of my course work, I am conducting a research study on "*Teacher attributes influencing academic performance of learners with specific learning difficulties in public primary schools in Koibatek Sub-County, Baringo County*".

You have been selected to participate in this study. I am therefore seeking for assistance in collecting the necessary information by filling in the questionnaire attached herein. This will only take about 10-15 minutes. Kindly, note that the information being sought is purely for academic purposes and will be treated with outmost confidentially.

Your participation in the study will be highly appreciated.

Thank you very much.

JEPKOECH KIMUGE

Appendix II: Questionnaire for Teachers

You are invited to participate in this research that seeks to find out **teacher attributes influencing academic performance of learners with specific learning difficulties in public primary schools in Koibatek sub-county, Baringo County.** The outcome of this research is purely for the purpose of fulfilling academic requirement. All information submitted will be treated with utmost confidentiality. At no time will your name appear in any reported findings along with your responses. Feel free to express yourself as honestly as possible. Thank you for your cooperation.

Instructions

- a) Please do not write your name on the questionnaire.
- b) The information you will give will be treated with confidentiality.
- c) Indicate your choice by a tick $(\sqrt{)}$
- d) Kindly answer all questions.

Part A: Demographic Data

1. Your gender:	Male	[]	Female	[]					
2. What is your current	nt age?								
25 – 34 Years []	35 – 44 Year []	45 – 54 Y	ears [] 55 Y	Years and above []					
3. Academic qualifications Masters [] Degree [] Diploma [] Certificate []									
Other Certificates (Sp	becify)								
4. Kindly state your d	lesignation								
Head Teacher []	Class Teacher [] Teacher []						
5. How long have you	u been a teacher?								
1-5 year []	6-10 years [] 11-15 y	/ears [] abov	ve 15 years []					
6. How long have you held your current position?									
1-5 year []	6-10 years [] 11-15 y	/ears [] abov	ve 15 years []					

PART B: Perception of Teachers

The following are items intended to examine the perception of teachers about learners with specific learning difficulties in public primary schools in Koibatek Sub-County. Please tick where appropriate. ($\sqrt{}$)

~ · ·				
SA-strongly agree	$\Lambda - \alpha r \alpha D - d d$	ignaron SD-atros	naly digagraa	, DK = Don't Know
SA-Shongly agree	A-agice, D-u	isagice, SD- Suoi	ligiy disagice.	DK = DOII I KIIOW

	Statement	SA	Α	D	SD	DK
1	I like teaching learners with SLD					
2	I always like interacting with SLD					
3	Learners with SLD are difficult to handle					
4	We should be paid extra money to teach learners with SLD					
5	Learners with SLD should be taught separately					
6	Some SLD learners can harm teachers					
7	Learners with SLD interfere with other learners in class.					
8	Integration with learners with SLD influences school performances.					
9	Most peers and community have a Negative attitude towards learners with SLD.					

Learners' Academic Performance

The following table is intended to capture the academic performance of learners with SLDs and the learners without SLDs in public primary schools in Koibatek Sub-County. Please indicate the learners' academic performance for the whole year.

Learners	1 st term	Learners' Performance 2 nd Term	3 rd Term	Mean
With SLD		-		
Without				
SLD				
Mean				

PART C: Teaching Methods

The following are items in relation teaching methods of teachers about learners with SLD in public primary schools in Koibatek Sub-County. Please tick where appropriate. ($\sqrt{}$)

SA=strongly agree A= agree	D= disagree, SD= strongl	ly disagree DK = Don't Kno	JW
0,0	0,00	2 0	

Statement	SA	Α	D	SD	DK
1. I use learner-centered as a method of teaching in class.					
2. I use teacher centered as a method of teaching in class.					
3. All learners with specific learning difficulties can be taught					
in the same way as the average learners.					
4. I use teaching and learning resources in teaching learners in					
class.					
5. Learners with SLD do not need a lot of attention.					
6. Integration put a lot of pressure on teachers as they have to					
put a lot of effort to help learners with SLD.					

PART D: Teachers' Training

The following are items in relation to the training and teaching methods of teachers about learners with specific learning difficulties in public primary schools in Koibatek Sub-County. Please tick where appropriate. ($\sqrt{}$)

SA=strongly agree A= agree, D= disagree, SD= strongly disagree DK = Don't Know

Statement	S	Α	D	SD	DK
	Α				
1. I had personal interest in teaching profession.					
2. I resorted to teaching when i failed to get another course.					
3. I have been adequately trained to handle learners with SLD.					
 I understand the requirements for most learners with SLD. 					
 All learners with SLD can be taught in the same way. 					
6. I can operate most teaching aids for learners with SLD.					
 There should be administrative support such as in-service training for teachers. 					
8. Teachers should be trained in instructional adaptations and class management.					

PART D: Teaching Challenges

The following are statements in relation to examine the challenges faced by teachers handling learners with specific learning difficulties in public primary schools in Koibatek Sub-County. Please tick where appropriate. ($\sqrt{}$)

SA=strongly agree A= agree D= disagree SD= strongly disagree DK = Don't Know

	Strategies	SA	Α	D	SD	DK
1	Our school lack appropriate teaching and learning resources.					
2	There is Irregular attendance of learners with specific learning difficulties in our school.					
3	Our school face large class enrolment hence overloading of available trained teachers in special education.					
4	There is Lack of enough trained SNE teachers.					
5	Teachers lack motivation especially better remuneration.					
6	There is also delayed remittance of funds by government.					
7	Most peers and community have a Negative attitude towards learners with specific learning difficulties.					
8	There is Limited participation of all stakeholders in policy formulation, and awareness rising.					

Appendix VI: Head Teacher's Interview Schedule.

The purpose of this study is to examine the "*teacher attributes influencing academic performance of learners with specific learning difficulties*" in mainstream public primary schools in Koibatek Sub County, Baringo County. Any, responses and information given in this study will be treated with **utmost confidentiality**. Please note sincerity is important in giving responses in this interview. Feel free to express yourself as honestly as possible. Thank you for your cooperation.

Part A: Demography Information

1. Indicate your Gender:

Male..... Female.....

2. What is your current age

(<25) (26-35) (36-45) (>45)

3. What is your highest level of qualification?

P1 (), Diploma (), Degree (), Masters ()

4. For how long have you been in the administrative position?

(1-5) (6-10) (11-15) (16-20) (21-30) (Over 30) years

5. What is your teaching experience?

(1 - 5) (6 - 10) (11 - 15) (16 - 20) (21 - 30) (Over 30) years

Part B: Teachers Perception

1. How do you find teachers teaching learners with specific learning difficulties in your school?

.....

.....

2. What are the ways in which your school administration uses in order to effect positive perceptions amongst teachers towards learners with specific learning difficulties?

.....

.....

.....

3. Comment on the performance of learners with specific learning difficulties in the school?

4. How do teacher's perceptions affect the effectiveness of teachers in instruction and consequently performance of learners with specific learning difficulties?

.....

5. Suggest ways of changing and maintaining teacher's perceptions.

.....

.....

PART C: Training and Teaching Methods of Teachers about Learners With SLD

1. Which meetings, seminars and workshops have teachers from your school attended?

.....

Comment on the ability of teachers to handle learners with specific learning

difficulties in education

.....

3. Does improving teachers' professional development enhance the performance of learners with specific learning difficulties in education?

.....

4. Comment on the methods of teaching used by the teachers in your school

.....

PART D: Head Teacher's Challenges

1. Comment on the availability and use of all teaching and learning resources in your School?..... -----..... 2. How is the attendance of learners with specific learning difficulties in your school? 3. Comment on the number of trained special needs teachers in your school 4. How can you comment on syllabus coverage of learners with specific learning difficulties in education? 5. Do the school policies improve the attendance of learners with specific learning difficulties in education?

Appendix III: Learners with SLD in Koibatek Sub-County

 Table 3: STD 8 Learners with Specific learning difficulties in selected schools in Koibatek

 Sub County, Baringo County.

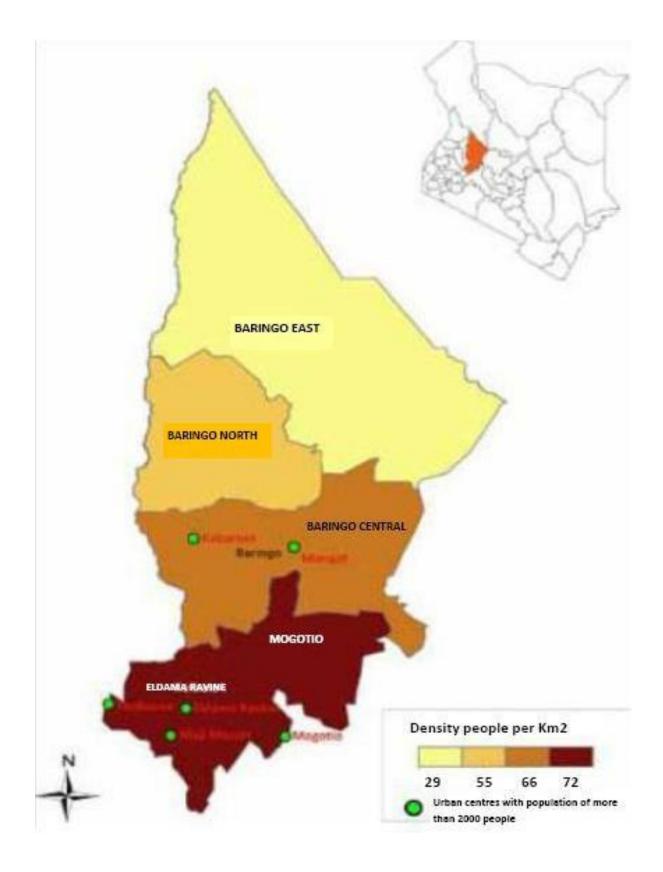
Schools		Year	2019	
Shimoni		20		
Koibatek		25		
Nakurtakwei		20		
Igure		21		
MMF		21		
Solian		16		
Kamelilo		26		
MMRC		27		
Saos		30		
Mwachon		10		
Kibias		14		
Sogonin		8		
Poror		33		
Sigowet		24		
Kapkitet		5		
Kimamoi		9		
Equator		17		
Kaprorwa	- 1 <u>e</u>	20		
Soibei		10		
Tarigo		25		
Total		378		

Source: Sub County Director of Education Koibatek Sub County, January 2019

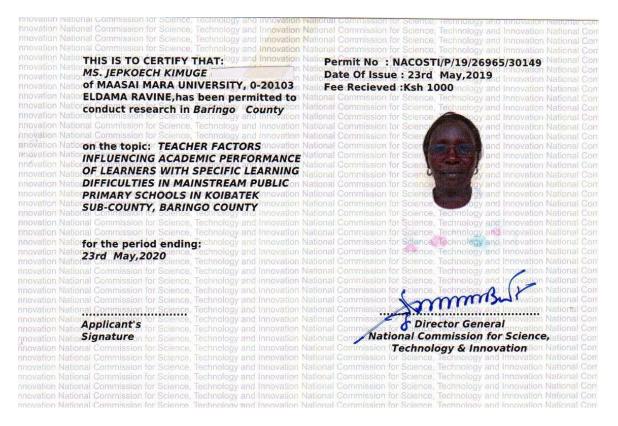
EDUCATIONAL ASSESSMENT

Etobs 12/3/2019

APPENDIX VI: Baringo County Map



Research Permit





NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420 Fax:+254-20-318245,318249 Email: dg@nacosti.go.ke Website : www.nacosti.go.ke When replying please quote NACOSTI, Upper Kabete Off Waiyaki Way P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No. NACOSTI/P/19/26965/30149

Date: 23rd May, 2019

Jepkoech Kimuge Maasai Mara University P.O. Box 861 NAROK.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Teacher factors influencing academic performance of learners with specific learning difficulties in mainstream Public Primary Schools in Koibatek Sub-County, Baringo County*" I am pleased to inform you that you have been authorized to undertake research in **Baringo County** for the period ending 23rd May, 2020.

You are advised to report to the County Commissioner, and the County Director of Education, Baringo County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Baringo County.

The County Director of Education Baringo County.