

# TEACHER ATTRIBUTES INFLUENCING ACADEMIC PERFORMANCE OF LEARNERS WITH SPECIFIC LEARNING DIFFICULTIES IN MAINSTREAM PUBLIC PRIMARY SCHOOLS

Jepkoech Kimuge<sup>1</sup>, Dr Florence Mobegi<sup>2</sup> and Dr. Lilian Milimu<sup>2</sup>

<sup>1</sup> Jepkoech Kimuge P.O Box 861Narok.

<sup>2</sup> Lecturers in the School of Education, Department of psychology, Maasai Mara University P.O Box 861 Narok.

---

**Abstract:** Mainstream education allows for universal learning, participation and performance of all learners, including learners with specific learning difficulties (SLD). In Koibatek Sub-County, learners with SLD look absolutely normal and it is quite difficult to pick them out among other learners. These learners seem to have the ability to perform learning activities yet they do not perform as is expected from them. They 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. The purpose of this study was to find out teacher attributes influencing academic performance of learners with SLD in mainstream public primary schools in Koibatek Sub-County, Baringo County. This research was guided by the position theory. The researcher adopted a survey research design. 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. A pilot study was done to test the validity and reliability of the data collection instruments and a Chronbach alpha of 0.81 was found. Questionnaires for teachers and interview schedules for head teachers were used to collect data. Descriptive statistics was analysed and data was represented using frequency tables, percentages and mean which was used to present data for easy interpretation and understanding. The study found that teachers do not have the required knowledge and expertise to teach learners with SLD in mainstream education and affects their performance in the examinations. Teachers in mainstream schools lack teaching and learning resources for learners with SLD.

**Keywords:** Attributes, Academic Performance and Specific Learning Difficulties.

---

## 1. INTRODUCTION

Specific learning difficulty (SLD) is a neurologically-based processing problem which interferes with learning basic skills such as reading, writing and/or Mathematics. SLD also interfere with higher level skills such as organization, time planning, abstract reasoning, long or short term memory and attention. SLD are recognizable problems during the school years, the signs and symptoms are most often diagnosed during that time. One of the most important factors in the successful mainstreaming of learners with SLD is the teacher (Woodcock & Vialle, 2015).

Specific learning difficulties may occur in almost any area of learning. The common theme is unexpected under-performance in an area of academic skill which is generally unmatched in other areas. While there are clearly different specific learning difficulties, making a distinction between each is not always easy as there are often overlaps. A specific learning difficulty results from an impairment in one or more of the psychological processes related to learning. The difficulties experienced by a learner with specific learning difficulties are unexpected in relation to their other skills. These difficulties are likely to be resistant to intervention and will persist into adulthood, (Reid, Elbeheri & Everatt, 2016).

Kavkler, Babuder and Magajna, (2015) in their study found that, on average; learners with SLD perform 38.3% points compared to learners without SLD who achieve 53% points. The differences that primary school teachers (207 class teachers and 207 subject teachers) perceive in the behavioural responses and learning performance of learners with SLD and those of their peers significantly lower (average grade of 2.70) than that of their peers (average grade of 3.98). Learners with severe SLD had the lowest average learning performance, at 2.05. Teachers also noted that learners with severe SLD stood out due to their negative self-image. Learners with mild, modest or severe SLD, amounting to 10% of all learners, constitute one of the most numerous groups of learners with SEN, which is why 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 severe problems in oral and written expression, reading and listening comprehension, basic reading skills and mathematical reasoning (calculation). Table 1.1 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.

The score in Kenya certificate of primary education (K.C.P.E) determines the quality of secondary school a child can attend. The highest score gains a place 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. 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, it is clear that poor performance is noticed in learners with SLD as indicated in table 1.2 below. 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 on these learners. As a result therefore, the current study will seek to find out teacher attributes influencing academic performance of learners with SLDs in mainstream public primary schools in Koibatek Sub-County, Baringo County

### 1.1 Research Objectives

- i. To establish the influence of teacher perception 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.

## 2. LITERATURE REVIEW

### 2.1 Teachers' Perception

Teachers' perceptions of mainstream education and their beliefs about their ability to teach learners with SLD in mainstream classrooms showed that, a teacher with negative perception is unfair to typically performing learners may act in subtle ways that negatively influence learners with SLD in that classroom. It may be that the presence or absence of positive perceptions and a sense of commitment to principles of mainstreaming can tip teachers toward making or avoiding efforts to effectively teach learners with SLD. Teachers with favourable perception towards mainstreaming generally believe that learners with SLD belong in general education classrooms, that they can learn there and that the teachers have confidence in their abilities to teach them (Berry, 2010).

Specific learning disabilities may occur in almost any area of learning. The common theme is unexpected under-performance in an area of academic skill which is generally unmatched in other areas. While there are clearly different specific learning disabilities, making a distinction between each is not always easy as there are often overlaps. The nature of all SLDs is that the problem is severe, persistent, occurs despite appropriate educational opportunities, and is in contrast to other areas of strength in academic performance (Reid, Elbeheri & Everatt, 2016).

According to Favre and Ax (2011), SLD is a neurologically based disability in which the nerve-cell connections fail to function properly. The learning disabilities occur due to the intended information not reaching a specific target in the brain. The condition leads to unanticipated under-performance in learners whose intelligence is average or above average. Learners may be diagnosed with a SLD where there is a lack of performance at age and ability level, or a large discrepancy between performance and intellectual ability. An untrained observer may conclude that a learner with a SLD

is 'lazy', or 'just not trying hard enough'. For example they may find it difficult understanding the large discrepancy between reading comprehension and proficiency in verbal ability, or between reading level and poor written work.

Dyslexia is a hidden disability thought to affect around 10% of the population, 4% severely. It is the most common of the SLDs. Dyslexia is usually hereditary. A learner with dyslexia may mix up letters within words and words within sentences while reading. They may also have difficulty with spelling words correctly while writing; letter reversals are common. However, Dyslexia is not only about literacy, although weaknesses in literacy are often the most visible sign. Dyslexia affects the way information is processed, stored and retrieved, with problems of memory, speed of processing, time perception, organisation and sequencing. Some may also have difficulty navigating a route, left and right and compass directions the challenges it possess are overcome through identification and accommodation (Kenyon, 2003).

Dyspraxia also known as developmental coordination disorder (DCD), is a common disorder affecting fine and/or gross motor coordination in learners. Learners may vary in how their difficulties present; these may change over time depending on environmental demands and life experience, and will persist into adulthood. A learner's coordination difficulties may influence participation and functioning of everyday life skills in education, work and employment. Learners may present with difficulties with self-care, writing, typing, and riding a bike, play as well as other educational and recreational activities (Kavkler, Babuder & Magajna, 2015).

Dyscalculia is a difficulty of understanding mathematical concepts and symbols. It is a perseverant condition that affects the ability to acquire mathematical skills despite appropriate instruction. Learners with dyscalculia may have difficulty understanding simple number concepts (such as place value and use of the four operations, + -x and ÷), lack an intuitive grasp of numbers (including the value of numbers and understanding and using the inter-relationship of numbers), and have problems learning, retrieving and using quickly number facts in multiplication tables and procedures in long division. Even if they produce a correct answer or use a correct method, they may do so mechanically and without confidence as they have no way of knowing or checking that the answer is correct Chinn (2004 cited in Zerafa, 2011).

Learners with dyscalculia have no "feel for numbers" at all, no ability to estimate even small quantities, and no idea whether an answer to an arithmetic problem is reasonable or not. Additionally, learners with dyscalculia have: An inability to perceive without counting even very small quantities; An inability to estimate whether a numerical answer is reasonable; Weaknesses in both short-term and long-term memory; An inability to count backwards reliably; A weakness in visual and spatial orientation; Directional (left/right) confusion; Slow processing speeds when engaged in mathematics activities; Trouble with sequencing; A tendency not to notice patterns; A problem with all aspects of money; A marked delay in learning to read a clock to the time; and an inability to manage time in their daily lives (Bird 2009).

Signs of attention deficit disability (ADD) include inattention, restlessness, and impulsivity, erratic, unpredictable and inappropriate behaviour, blurting out inappropriate comments or interrupting excessively. Some learners come across unintentionally as aggressive. Most fail to make effective use of feedback. Learners have particular problems remaining focused so may appear 'dreamy' and not to be paying attention. Learners with this condition are very easily distracted, lose track of what they are doing and have poor listening skills. By failing to pay attention to details, they may miss key points. Often co-occurs with dyslexia. Frequently associated with dyslexia, students may have difficulty understanding when listening, expressing themselves clearly using speech, reading, remembering instructions, understanding spoken messages and staying focused. Learners often demonstrate unusual behaviours due to inflexible thinking, over-reliance on routines, a lack of social and communication skills (Kavkler, Babuder & Magajna, 2015).

Gastaldi and Longobardi (2016) carried out a study to investigate the differences perceived by teachers in their relationships with learners SLD. In particular, the sample included 108 learners (age: M = 100.03 months; SD = 6.29), 63 males and 45 females. All the subjects were Italian nationals. The sample was further articulated into three subgroups: an Experimental Group (EG) formed by 38 learners with a SLD (i.e., were diagnosed or had a pending diagnosis); a first Control Group (CG1), composed by the same amount of classmates (N = 38) that did not present SLD but had the same scholastic performance as the learners in the EG, and a second Control Group (CG2), that was composed of 32 learners who had opposite scholastic performance compared to EG members.

Furthermore, SLD can sometimes hamper the teacher's perception especially 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, Mendola, Longobardi, Prino & Gastaldi, 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, et al. (2015) in their study whose aim was to identify the factors associated with primary school teachers' perceptions towards mainstreaming of learners with all SLD in regular schools. Seventy four primary school teachers participated in a cross-sectional survey conducted in Western Australia. Teachers' perceptions toward mainstreaming of learners with disabilities were measured using the opinions relative to integration of students with disabilities scale and Bandura's teacher perception scale respectively. When the results were analyzed, a preliminary screening was conducted through examination of residuals. At each step of the multiple regression analyses, the scatter plot of residuals against predicted values was examined. No multivariate outliers were found in any of the steps. No obvious pattern to the errors was detected through examination of the residual scatter plots.  $R$  was significantly different from zero at the end of each step. No significant interactions were found, so they were removed from the models.

Vaz, et al. (2015) found that four teacher attributes—age, gender, teaching perception, training—collectively explained 42% of the variability in teachers' perception towards mainstreaming learners with disabilities ( $F(7, 46) = 4.37$ ,  $p < .001$ ). The study further found that male teachers had a more negative perception towards mainstreaming (Beta =  $-.26$ ,  $p = .04$ ) and teachers who were aged 55 years and over upheld more negative perception towards mainstreaming when compared to the 35–55 year old subgroup (Beta =  $-.55$ ,  $p = .002$ ). Teachers with low-levels of self-efficacy in their teaching skills were more likely to also uphold negative perception towards mainstreaming learners with SLD (Beta =  $-.38$ ,  $p = .003$ ).

Odongo and Davidson (2016) examined the attitudes and concerns of the Kenyan teachers toward 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 inclusive education programs. The overall findings indicate that teachers have a positive perception towards mainstreaming of learners with SLD in regular classrooms. Overall, the study showed that perceptions and concerns of the teachers influence their acceptance and commitment to the implementation and success of mainstream education.

Villa et al., (1996) cited in Odongo, & Davidson, (2016) found that administrative support and collaboration were indicators of positive teacher's perception toward mainstreaming. The role of school head teachers can promote mainstreaming practices in schools, foster new meanings about diversity and build relationships between schools and community, promote dialogue, adopt mainstreaming policy and incorporate whole school approaches and cultures.

## 2.2 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 create conducive situation where all learners feel included. 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:

### 2.2.1 Restating a Problem

Learners with SLD perceive mathematics concepts as simply abstracts, and numbers are mere marks on a page. Talking through a problem or writing it down in sentence form can help with seeing relationships between the elements. Even restating word problems in a new way can help with organizing information and seeing solutions. interventions based on direct instruction integrate; drills and probes, repeated feedback, rapidly paced instruction, individualized instruction,

breaking the task down into a sequence of steps, pictorial diagrams, small-group instruction, and direct questioning by the teacher Swanson (2001 in Tuchura, 2016).

Drawing the problem can also help learners with SLD to see relationships and understand concepts. Learners can “draw through” the problem with images that reflect their understanding of the problem and show ways to solve it. Learners can easily get overwhelmed by a complex problem or concept, especially if it builds on prior knowledge — which they may not have retained. Separating a problem into its component parts and working through them one at a time can help learners with SLD focus, see connections and avoid overload. Problem solving for math is the task most often recognized as dependent on both reading and language competence. Learners with SLD may not only find difficulties with actually reading and understanding the word problem but may also find it very hard to translate what is being asked and thus to choose an appropriate operation Rothman & Cohen (1989 in Zerafa, 2011).

### 2.2.2 Concrete Objects

Relating mathematics to the practicalities of daily life can help learners with SLD (dyscalculic) make sense of concepts and see the relationships between numbers. Props like measuring cups, rulers and countable objects that students can manipulate can make math concepts less abstract. Concrete objects work together with teacher direction and learners with SLD interactions, as well as with repeated demonstrations and explanations by both teachers and learners. Equipment and material sought to be adequate and accessible to enable teachers and learners achieve success in the teaching and learning process (Makumi, 2012).

Lack of appropriate mathematics materials compounds the problem of poor curricula and instruction. Teachers should construct opportunities for real world problem solving so that learners with SLD can generalize and apply what they are learning. 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 aids assist in encouraging greater participation by learners hence supporting a Chinese saying which says, “What I hear I forget, what I see I remember, and what I do I understand”. According to Emerson and Babbie (2014), learners ought to work with concrete resources to construct visual images. The researchers assert that the learners need sufficient time with the concrete equipment to experience, talk about quantities and make connections, consequently establish the meaning of numbers and their relationship.

Educational software can help learners with SLD in skill building, by offering multisensory experiences, positive reinforcement, individualized instruction, and repetition. Learners having difficulty processing written information can complete writing assignments and remedial lessons with the aid of computers, like the standard word processor may prove a valuable tool for learners with SLD. Quiet work areas and ear protectors may make computer input easier for learners who are hypersensitive to background noise and get easily distracted. Adaptive devices like large print displays, alternative colors on the computer screen, and voice output can help in compensating reading problems. 'Electronic Mathematics Sheets' help in the organization, alignment and working of the Mathematics problems on a computer screen, where the numbers appearing can be read aloud through the speech synthesizer, helping learners facing difficulty in aligning Mathematics problems using pencil and a paper. Software like 'Abbreviation expanders' can prove helpful with word processing to create, store, and re-use abbreviations for frequently used words or phrases, to ensure proper spellings for learners with difficulty in writing. ICT is an important tool of teaching creatively and of teaching for creativity. The concept of constructivism and socio-constructivism is the basic frame for different types of inclusive teaching (Bjekic et al, 2012).

This technology proves useful for learners struggling with listening, writing, and memory and reading skills. Learners with difficulty interpreting visual material can improve comprehension and the ability to identify and correct errors when words are spoken or printed in large fonts. Computer documentation in electronic forms may be used with enlarged character and voice synthesis devices to ensure better accessibility to learners with reading difficulties. Assistive technology has a major role in remediating and compensating the performance deficits experienced by learners, enhancing the learners’ academic performance; and ensuring effective evaluation as an accommodation during testing, offering adequate solutions when an extended evaluation is needed. Effective technology integration in education can therefore help in addressing the functional barriers experienced by learners with SLD, providing them with equitable learning opportunities and a leveled field to rightly exhibit their differential abilities, through provision of necessary support and an equally accessible learning environment to all (Ahmad, 2015).

In accordance with the preferable channel of stimulus reception, learners with SLD develop compensatory learning strategies, too. Teachers can help these learners using different mnemonics techniques and adapted teaching materials. Some forms of teaching material adaptations: using visual and illustrated instructional materials, changing fonts and letter size, voice support etc. According to Price, there are useful methods for auditory learning, visual learning, and kinesthetic learning for learners with SLD. Methods for auditory learning for learners with SLD: tape recorder including learner's own voice, mnemonics, discussion, songs, rhymes, reciting information, discussing ideas in groups, explaining ideas to someone else. Methods for visual learning of SLD: colorful displays/paper/post, etc, colorful pens/highlighters, visualization, use of pictures, posters, videos, games. Methods of teaching learners with SLD: real life activities, role play, hands-on experience, writing out in their own words, drama/play, feeling learning rather than looking, jigsaws and games (Obradovi et al, 2014).

A sequestered academic performance is much less important than the opportunity for collaborative and cooperative work in small groups and social interaction in which learners with SLD can express their creativity and a different direction to tackle the problem, which can bring them an affirmation within a group and boost their self-confidence and self-respect. The major benefits of developing e-learning courses for students with SLD, the positive effects of e-learning and education in an e-environment on them and accessibility are (according to Bjeki et al., 2014): peer support by using computer-mediated communication tools and possibilities for peer-to-peer collaboration and to avoid social isolation; web-based education enables users – learners with disabilities to be proactive and self-reliant, rather than reactive and dependent; controllability of learning; flexibility in time and space afforded by ICT modalities can address the needs of learners with SLD, it allows learners to progress at their own pace and to use their own direction in solving problems; multimodal communication, or wide range of e-learning communication tools allows presentation of information in the way adaptable to specific disability; individual learner-teacher communications can take place efficiently and easily; asynchronous communications is the benefit for learners with SLD.

### 2.2.3 Remediation

Learners with SLD struggle to retain Mathematics-related information; it becomes hard to master new skills that build on previous lessons. Short, frequent review sessions - every day, if necessary - help keep information fresh and applicable to the next new task. Creating written references such as cards or diagrams can help with quick reviews. The sensory-cognitive tools do not mature with time but develop after an experienced teacher addresses their growth using prescriptive methods. Successful remediation highly relies on the delivery of mathematics curriculum particularly to support and develop the processing tools and, delivery of math curriculum based on learners' individual processing approaches to ensure they efficiently process the curriculum (Berg, 2013).

A study with fifty 11-12 year-old Spanish monolingual learners reveals that the performance of learners with SLD in tasks where short-term memory is involved is lower than that of the control group. It concluded that this might be linked to a poor working memory and a lack of counting skills. Additionally, this research reveals that it "appears that the ability to retrieve arithmetical facts from long-term memory is defective" learners with SLD. Therefore, teachers should use repetition method and avoid giving a long string of instructions which will make learners with SLD struggle to keep up with the pace of the lesson. If a problem has too many questions, children might become confused as they might forget which question must be answered first. Even though working memory is mostly associated with mental work, it can also affect written work as children with a deficiency in memory would not be able to remember how to write out the numbers. They may also forget the procedure to working out specific mathematical operations (Chinn, 2004 cited in Zerafa 2011).

## 3. RESEARCH DESIGN METHODOLOGY

A descriptive survey research design was adopted in this study. A descriptive research design was considered to be the most appropriate approach for this study because it describes existing situation, of prevalence of learners with SLD (Price, 2000). A descriptive research design not only concerns itself with the current status of things but also focuses on a group of subjects, as the present study will focus on a group of about learners with SLD in mainstream public primary schools in Koibatek Sub-County. Descriptive research is a process of collecting data in order to answer questions concerning the current status of the subject in the study (Best & Khan, 1993). This includes the conditions existing, relationships, opinions held, processes going on and trends developing among others. A descriptive study was undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation.

This research design deemed appropriate for this study because information relating to the teacher attributes influencing academic performance of learners with SLDs in mainstream public primary schools in Koibatek Sub-County, Baringo County was found.

Target population refers to the population which the researcher wants to generalize results of the study (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 3.1 below.

### 3.1 Sampling Procedures and Sample Size

In this study a non-probability sampling technique was used where the samples were gathered in a process that does not give all the participants or units in the population equal chances of being included.

The purposive sampling technique is the deliberate choice of a participant due to the qualities the participant possesses. It is a non-random technique that does not need underlying theories or a set number of participants. Simply put, 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 division with the highest number of learners with SLD with the highest number of learners with scores of less than 200 marks out of 500 and information-rich cases was selected for the most proper utilization of available resources. 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 were purposively selected to participate in the study.

## 4. RESEARCH FINDINGS

### 4.1 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 (√) within a scale of, SA=strongly agree, A= agree, D= disagree, SD= strongly disagree and DK = Don't Know.

**Table1: Perception of Teachers**

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)

Teachers' perception towards mainstreaming are often based on practical concerns about how mainstreamed education can be implemented, 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 finding is in agreement with what Kavkler et al., (2015) reported that teachers need positive perceptions, knowledge, experience and support, which is why mainstreamed education is part of learners' curricula in education.

From the data presented in the table above indicated that 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 does 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 their teachers and this busts the academic performance in the national examinations. However, such an interaction affect the teacher's perception of the quality of the relationship, as also found by Pasta et al., (2013) that individual learning differences offers a more accurate snapshot that captures the essence of learning disabilities. This allows learners with SLDs can flourish academically like dysgraphia for example. He or she may have A-worthy ideas for a problem inside his or her head, but without interaction with teachers those ideas will probably not earn the grade they deserve.

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 a great influence in their performance in national examination. Common practical concerns in handling learners with SLD raised by teachers include: 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 (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 work towards desired goals once motivated; the desire to work has to be nurtured and maintained. Motivation plays a significant role in determining the levels of performance of learners with SLDs. Teachers' perception towards mainstreaming is critical in implementing the ambitious 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 findings 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 believe that learners with SLD belong in general education classrooms, that they can learn there, and that the teachers have confidence in their abilities to teach them.

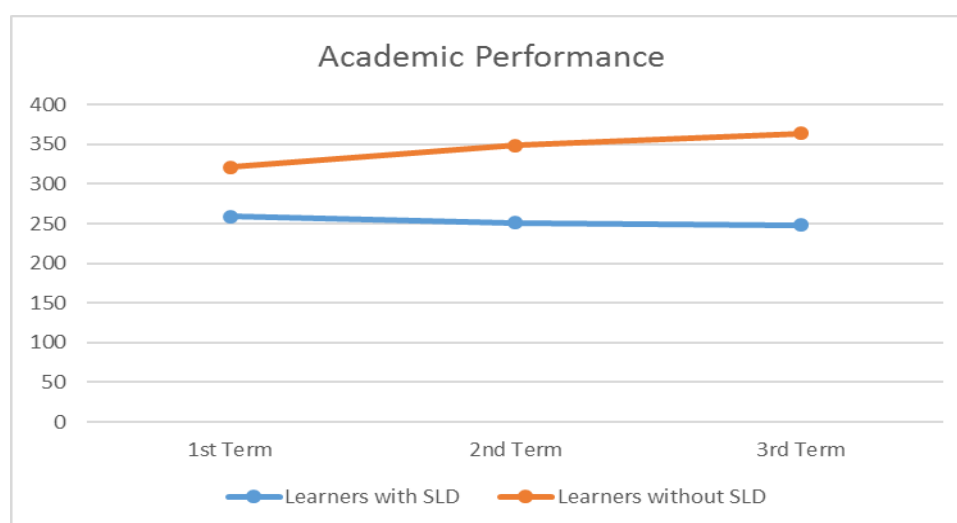
The table below indicates academic performance of learners with and learners without SLDs. The class teachers recorded the learners' performance in Appendix V, part B of the teachers' questionnaire.

**Table 2: Learners' Academic Performance**

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

Table 7 above indicates the academic performance and a graph of learners with and without disabilities was drawn as shown below:





**Figure 1: 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 is in agreement with what Chitsa & Mpofu (2016) while citing Carreker, Joshi & Gooden (2010) discovered that the 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 because of the human need to communicate via the written word. This is evident when accurate and fluent word reading and spelling develops with great difficulty. Difficulties with accurate or fluent word recognition, poor handwriting, and difficulties with reading comprehension or Mathematics reasoning are associated with dyslexia (Lowell, 2014 cited in Chitsa & Mpofu, 2016).

#### 4.2 Teaching Methods

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

**Table 3: 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 findings is similar to the Salamanca Declaration, in that learners with SLD, must have access to regular schools which should accommodate their needs using a learner-centered pedagogy capable of meeting these needs (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 an 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) who 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 might have contribution of poor performance in their KCPE examinations. 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.*

This indicate that learners with SLD would have lacked individualized attention and therefore would not grasp the concept well 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.

## 5. CONCLUSION

With government policy of mainstream 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 were 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 it's particularly important for mainstream practices to be successful in Kenya. Such teachers are in turn likely to have beneficial impact on the perception of learners with SLD.

Teaching strategy is an important teacher attribute 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 that learner can be taught the same way using a variety of teaching and learning resources.

## 6. RECOMMENDATION

The government should address the issue of teacher training and supported well in terms of administrative support, 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.

## REFERENCES

- [1] Ahmad F. (2015). Use of Assistive Technology in Inclusive Education: Making Room for Diverse Learning Needs. *Transcience* Vol. 6, Issue 2 ISSN 2191-1150
- [2] Berry, R. A. W. (2010). Pre-service and early career teachers' attitudes toward inclusion, instructional accommodations, and fairness: Three profiles. *The Teacher Educator*, 45, 75-95.
- [3] Bird, R. (2009). *Overcoming difficulties with number: supporting dyscalculia and students who struggle with maths*. London: Sage Publications.
- [4] Elvira L.; Tiziana P.; Giovanna F.; Claudio L., (2016). The effect of autism spectrum disorders, down-syndrome, specific learning disorders and hyperactivity and attention deficits on the student-Teacher relationship. *Electronic Journal of Research in Educational Psychology*, 14(1), 89-106. ISSN: 1696-2095-<http://dx.doi.org/10.14204/ejrep.38.15043>
- [5] Emerson, J. & Babbie, P. (2014). *The Dyscalculia Assessment*. London. Bloomsbury Publishing p/1.
- [6] Gastaldi M. & Longobardi C. (2016). Down syndrome, specific learning disorders and hyperactivity and attention deficits on the student-teacher relationship. *Electronic Journal of Research in Educational Psychology*, 14(1), 89-106. ISSN: 1696-2095. 2016, no. 38 - 89- <http://dx.doi.org/10.14204/ejrep.38.15043>
- [7] Kavkler M., Babuder K. & Magajna L. (2015). Inclusive education for children with specific learning difficulties: analysis of opportunities and barriers in inclusive education in Slovenia. *ceps Journal* 5(1).
- [8] Kenyon, R., (2003). *Facts and Statistics on Disability and Literacy: Bridge to Practice*. London: London Press.
- [9] Makumi, M.W. (2012). "Challenges facing teachers in learning resource management in primary schools and units for mentally challenged learners in Kiambu district": Unpublished Med Thesis; Kenyatta University.
- [10] Njuguna, M.N. (2012). "Analysis of teachers' competences, teaching and learning strategies teachers use to educate pupils with learning disabilities in regular public primary schools in Thika West District, Kiambu County, Kenya": Unpublished Med thesis; Kenyatta University
- [11] Odongo, G. & Davidson, R. (2016). Examining the attitudes and concerns of the Kenyan teachers toward the inclusion of children with disabilities in the general education classroom: A mixed methods study. *International Journal of Special Education*
- [12] Pasta T., Mendola M., Longobardi C., Prino L.E., Gastaldi F.G.M. (2013). Attribution style of children with and without specific learning disability. *Electronic Journal of Research in Educational Psychology*, 11(3), 649- 664.
- [13] Tuchura D., (2016). Analysis of teachers' remedial strategies for enhancing mathematics skills to learners with dyscalculia in regular primary schools in Nyandarua County, Kenya. Unpublished Med thesis; Kenyatta University.
- [14] Vaz S., Wilson N., Falkmer M., Sim A., Scott M., Cordier R, et al. (2015). Factors associated with primary school teachers' attitudes towards the inclusion of students with disabilities. *PLoS ONE* 10(8): e0137002. doi:10.1371/journal.pone.0137002
- [15] Woodcock S. & Vialle W. (2015). Learning and individual differences: An examination of pre-service teachers' attributions for students with specific learning difficulties. <https://doi.org/10.1016/j.lindif>.
- [16] Zerafa E. (2011). Helping children with dyscalculia: The implementation of a teaching programme with three primary school children.
- [17] Zhi., H. L. (2014). A comparison of convenience sampling and purposive sampling. *PubMed*, 105-11.