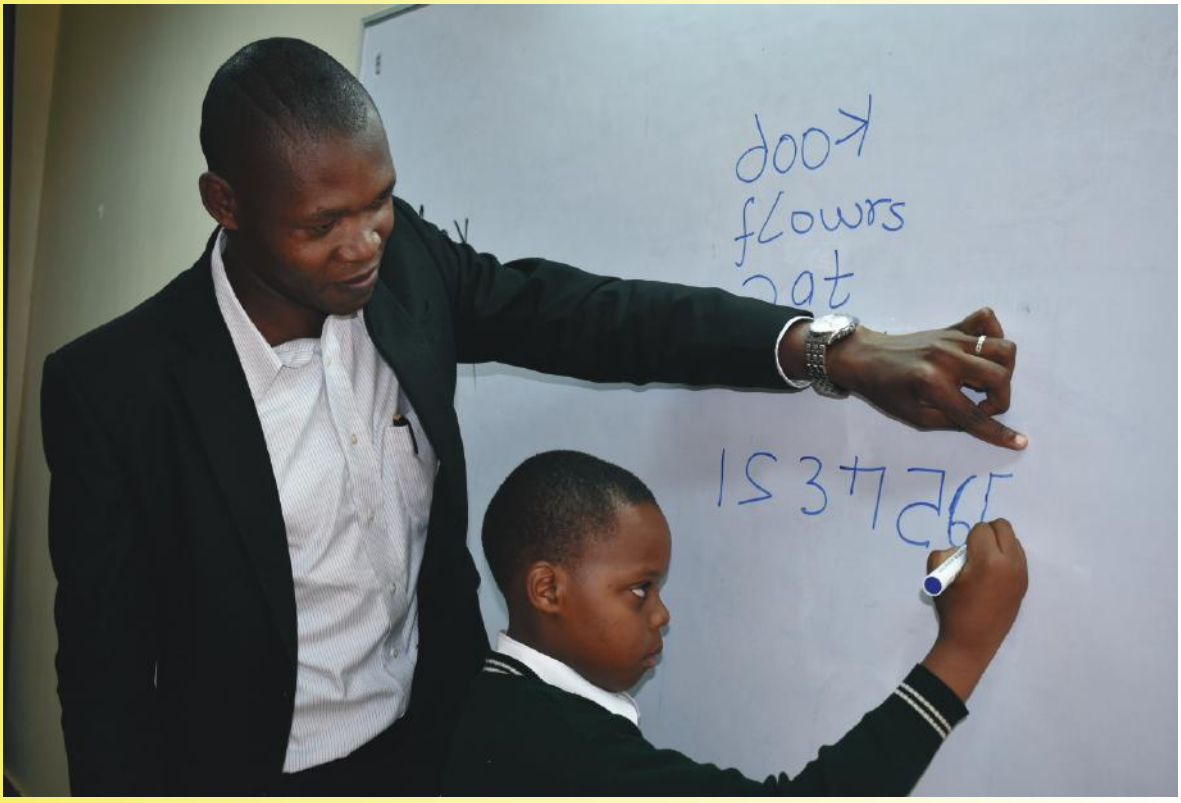
KENYA INSTITUTE OF SPECIAL EDUCATION

ROLE OF TEACHERS IN IDENTIFICATION AND SUPPORT FOR LEARNERS WITH LEARNING DISABILITIES IN PRIMARY SCHOOLS IN KENYA



RESEARCH REPORT
SEPTEMBER 2019

ROLE OF TEACHERS IN IDENTIFICATION AND SUPPORT FOR LEARNERS WITH LEARNING DISABILITIES IN PRIMARY SCHOOLS IN KENYA

Forward

Education provides skills and competencies to enhance lives and promote lifelong learning. The government, in line with the sustainable Development Goal (SDG) 4 is committed to provide quality education to all children including those with Special Needs and Disabilities. Other Legal documents which provide similar directions include: The Constitution of Kenya (2010), the Basic Education Act (2013), The Children Act (2001) and the Disability Act (2003). The Sector Policy for Learners and Trainees with Disabilities (2018) advocates for equity and quality education. Additionally, the policy stresses the importance of early identification, assessment and placement as a key component in the provision of quality and relevant education and training.

Notably, evidence has shown that, many a times, the intended interventions are hindered by imprecise identification of the specific learning difficulties and specials needs among learners. It is in response to this that the Learning Disabilities Survey was conducted between September 2018 and June 2019 to establish teachers' awareness of learning disabilities, their participation in the identification and support of learners with learning disabilities.

The findings of this survey are an eye opener to stakeholders in education to address early identification and provide for early intervention. Further, these findings come at a time when the Ministry of Education is undertaking Curriculum reforms. The work herein is in tandem very well with the competency Based Curriculum (CBC) philosophy of nurturing every learner's potential. The flexibility of the CBC enables the learners to learn at their own pace and to realize their potentials. It is with this regard that I call upon all stakeholders to endeavor to implement the findings of this Survey to ensure equity, quality and relevance of education and training.

Dr. JOHN K. MUGO
CHAIRMAN KISE COUNCIL

Preface

The overall responsibility of the Ministry of Education (MOE) is to provide access to education to Kenyans. Towards this responsibility MOE provides budgetary and technical support to instructions of learning and communities.

Despite support provided for education of children with disabilities, there still exist concerns for children with hidden disabilities and special needs. Among these children are those with Learning Disabilities who experience difficulties in the acquisition and use of basic literacy and numeracy skills. These children are enrolled in our primary schools and may have little or no support which limits their opportunities to actualize their potential.

At present there are about 350,000 Children with disabilities enrolled in institutions of learning. This is a small percentage compared to the expected population of those with disabilities in the Kenyan population. This study on the Role of Teachers in Identification and Support of Children with Learning Disabilities in Primary Schools in Kenya was undertaken to establish the role of teachers. The findings herein provide relevant data on teacher awareness of characteristics of learning disability, their participation in identification and support and challenges they face.

On behalf of the Ministry of Education, I wish to call upon all stakeholders to appreciate the findings and recommendations in this report and improve on services and planning towards enhanced identification and support of learning disabilities.

MUTISO T. WAMBUA HSC
DIRECTOR/COUNCIL SECRETARY

Acknowledgment

Kenya Institute of Special Education wishes to acknowledge the invaluable support and commitment to all those who participated in the realization of this report on Role of Teachers in Identification and Support of Learners with Learning Disabilities in Primary Schools in Kenya.

Special appreciation to the Ministry of Education (MOE) for the support provided during the survey. Further, the Institute is indebted to the following institutions whose staff provided support and participated in this survey; Teachers Service Commission (TSC), Kenya Institute of Curriculum Development (KICD), and Kenya National Examinations Council (KNEC).

The Institute also acknowledges the immense professional and logistic support and contributions provided by staff of Nous limited particularly in provision of data collection platform. Equally, the Institute appreciates members of the technical committee for their commitment in undertaking this invaluable task.
Finally, we acknowledgment to KISE Council, Management, research assistants and all those who played different roles in this survey.

LYDIA W. CHEGE
MANAGER: RESEARCH, ASSESSMENT AND PARTNERSHIP

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Executive Summary

Kenya Institute of Special Education in collaboration with the Ministry of Education, Teachers Service Commission, Kenya National Examination Council and Kenya Institute of Curriculum Development conducted a national survey on Role of Teachers in the Identification and Support of Learners with Learning Disabilities in Primary Schools. This work was done between September, 2018 and June, 2019. The purpose of this survey was to generate data on the teachers' awareness and ability to identify and support learners with learning disabilities.

This survey was conducted in 23 counties where only teachers of English and Mathematics at grade 3 in were targeted. A total of 1,846 teachers in 1,721 public primary schools were interviewed. This is a descriptive survey where both quantitative and qualitative data were collected. A questionnaire, designed and loaded on a digital platform (SurveyToGo) was used to facilitate real-time data collection from the field. Quantitative data was then coded, weighted and processed using Statistical Package for Social Sciences (SPSS) version 25.0. Inferential statistics were used to generalize the findings of the survey to the entire country. Qualitative data were analyzed using thematic approach and continuous triangulation was done to generate the findings, conclusions and recommendations.

Western and Nairobi regions recorded the highest-class enrollment, some schools having up to 130 learners in a class. Eastern, Central and North Eastern regions recorded the lowest enrollment with some schools having less than 6 learners in a class. It was noted that on average, most regions had more boys than girls, except Nairobi and Western regions in which girls were more than boys. Nairobi, Coast and Western regions had greatest disparities in enrollment between schools. Findings further revealed that; teachers are more aware of reading difficulties in comparison to listening difficulties. Sex of the teacher does not affect teachers' level of awareness; training in SNE has a positive impact on teacher awareness of learners' difficulties. It was also evident that teachers who teach one subject are more aware of learners difficulties compared to those who teach both Mathematics and English. Teaching experience improves teacher awareness of learners' difficulties. In addition, findings show that most teachers were able to make observations, however, only a few were able to complete the identification process successfully.

Remedial teaching, giving extra work and consulting with parents were among the support given to learners experiencing learning difficulties. It was not clear if these actions were specifically designed to address the specific difficulties experienced by the learner.
Inadequate parental involvement, Time constraint, Learner absenteeism, inadequate knowledge, inadequate assessment services, large class enrolment, inadequate teaching and learning materials were among the cited challenges hindering early identification and support of learners. Some of the proposed solutions included structured parental

involvement, timely government support, sensitize stakeholders on learning difficulties and disabilities to reduce stigma. Guidance and counseling and Educational assessment services should be taken nearer to the community.

The following were key recommendations

- Kenya Institute of Special Education in collaboration with other relevant government organs to develop assessment procedures and diagnostic tools for learning disabilities. This will provide a clear guidance to teachers and other assessors on how to assess and identify children with learning disabilities
- The Ministry of Education to come up with a structured Individualized Education Programme (IEP) for all categories of disabilities for systematic support for learners with special needs and disabilities
- There is need for a structured parental involvement in education, especially the idea of academic clinics and collaboration with the school system
- There is need to sensitize parents/guardians to inculcate the culture of monitoring and tracking academic performance of their children. This will create interest in the parents to collaborate with schools.
- There is need for the Teachers Service Commission (TSC) to deploy more teachers in schools to improve teacher-learner ratio
- There is need to strengthen training in assessment of disability and special needs. This will enable teachers in schools to screen, advice parents and support children with learning difficulties
- There is need to create awareness to teachers on basic steps of identification and support of learners with learning difficulties
- There is need to develop a general screening tool for numeracy and literacy for learners at risk of learning disability
- There is need to create awareness teachers on the distinction between a learning difficulty and a learning disability

Terms and Concepts

Disability: This is the limitation a person has regarding carrying out an activity in a way it can be regarded as normal

Functional Assessment: This is the systematic process of gathering educationally relevant information to make legal and educational decisions about the provision of special services

Learning Disabilities: This is a term used to describe specific academic disabilities in one or more of the following areas: reading, writing, spelling, and arithmetic, listening and speaking.

Learning Difficulties: Refers to difficulties experienced by learners in acquisition and use of literacy and numeracy skills e.g. reading difficulties, writing difficulties, mathematics computation and reasoning difficulties among others.

Lower primary: Refers from grade 1 to grade 3 in Kenya Primary school education system.

Multiple Interventions: These are preventive intervention measures taken by general education classroom teachers to meet the needs of students who are having disabilities in their classrooms.

Screening: A procedure used to predict which learner is likely to have learning disability and to identify those who may be legible for special programmes such as special education

Special Needs Education: This refers to education, which provides appropriate modifications in curricula, teaching methods, educational resources, the medium of communication or the learning enrolment in order to cater for individual differences in learning

Special Needs: This refers to conditions, barriers or factors that hinder normal learning and development of individuals.

Abbreviations

ADHD	Attention Deficit Hyperactivity Disorder
GMR	Education for All Global Monitoring Report
ICF	International Classification of Functioning Disability and Health
KICD	Kenya Institute of Curriculum Development
KISE	Kenya Institute of Special Education
KNBS	Kenya National Bureau of Statistics
KNEC	Kenya National Examinations Council
KU	Kenyatta University
LD	Learning disability
MOE	Ministry of Education
NACOSTI	National Commission for Science, Technology and Innovation
NGO	Non-Governmental Organization
NJCLD	National Joint Committee on Learning Disabilities
PWD	Persons with Disability
SDGs	Sustainable Development Goals
SLD	Specific Learning Disabilities
SNE	Special Needs Education
SPSS	Statistical Package for Social Sciences
UNESCO	United Nations Educational Scientific and Cultural Organization

1. INTRODUCTION AND BACKGROUND TO THE SURVEY

1.1 Background Information

Education is supposed to provide skills and competencies to all learners to enhance their lives and promote lifelong learning. This calls for assessment practices that enable teachers to identify learners' present level of performance, their strengths, and needs, as well as monitoring their progress and evaluate their achievement (Ahmad, 2015). However, this may not be so for children with Learning Disabilities (LD) which is referred to as an 'invisible disability' and is not easily identifiable compared to other disabilities. Furthermore, learning disability is often diagnosed in school as it affects a learner's cognitive development, which results in learners with a learning disability not learning the same way or at the same speed as their peers (Shillingford & Theodore, 2012).

The National Joint Committee on Learning Disabilities ([NJCLD], 2005) defines learning Disability as a diverse cluster of disorders, which is exhibited by many problems in the learning of reading, writing, speaking and listening skills, math reasoning or abilities, and is inherent to an individual and is owed to the Central Nervous System Dysfunction. Learners with LD have average or above average intelligence; however, they may exhibit low concentration span, absence of self-confidence, poor self-esteem, deficient motivation in learning, Attention Deficit Hyperactivity Disorder (ADHD) and conduct disorders which ultimately affect learning (Graham, Collins & Rigby, 2017).

The UNESCO (2012) Education for All Global Monitoring Report [GMR] (pp. 124-126) states that "around 250 million children either fail to make it to grade 4 or do not reach the minimum level of learning". One of the central messages made in the Report in developing this estimate is the need to focus more attention on improving data in order to get a better understanding of learning deficits worldwide. However, this report does not specify the reasons as to why these learners failed to reach the minimum level of learning. Probably, learning disabilities could be the reason of them not attaining the minimum level of learning. Furthermore, their learning needs were not identified hence appropriate support may not have been given. The sustainable development goals [SDG4] states that inclusive, equitable and quality education is the vessel to the elimination of gender disparities, provision of equal access at all levels, and promotion of life-long learning opportunities for all including those with disabilities.

A study done in Tanzania by Kafonogo and Bali (2013) established that only a few teachers were aware of the presence of learners with LD and how to provide appropriate learning instruction. Further, the study indicated that ignoring or failure to notice learning disabilities contributes to not meeting learners' needs in schools. Hence this hampers the fulfillment of universal primary education and equal opportunities in education (Shukla, 2015).

The Government of Kenya takes cognizance of the need to provide appropriate education to cater for diverse requirements of learners including those with disabilities and special needs. This is epitomized in the Basic Education Act (2013) which recognizes that, despite MOE providing guidance and counselling services to all learners, there is no adequate personnel in supporting learners with learning disabilities and emotional and behavioural difficulties. The Sector Policy for Learners and Trainees with Disabilities (2018) advocates for equity and quality education for learners and trainees with disabilities through promotion and adherence to appropriate intervention. The policy further stresses on the importance of early identification, assessment and placement as a key component in the provision of quality and relevant education and training.

Despite the policy provisions challenges such as inadequate teacher training in assessment and intervention, large classes and inadequate parental support persist. A recent study (KISE, 2018) established that learners with LD are not appropriately identified, and as such many children who are not performing academically as expected in schools are mislabelled as having LD. Any child who does not meet the expectations of the teachers and parents in academic performance is branded as LD hence the category is seen as a "catch-all" for all the underachievers in school (Peters, Koller & Holliday, 2019). However, the Government is emphasizing on early identification of various disabilities through assessment and provision of intervention measures. To achieve this, the Sector Policy for Learners and Trainees with Disabilities (2018) has recommended establishment of EARCs at sub county level. Records from KISE assessment centre shows an average of 10 per cent annual increase in the incidences of children assessed and diagnosed with learning disabilities between 2014 and 2019.

1.2 Purpose and Significance of the Study

The Sustainable Development Goal Four (SDG4) and the Kenya Sector Policy for Learners and Trainees with Disabilities (2018) advocates for provision of inclusive, equitable and quality education for all. Competence-Based Curriculum (CBC) dispensation in Kenya emphasizes the importance of developing skills, knowledge and their application to real life situations. This would require teachers to have knowledge and skills to cater for diverse needs of all learners. In special needs education, Individualized Education Program (IEP) advocates for differentiated instructions and related services to actualize each learner's potential. As such, both CBC and IEP appreciates the diversity that exist among learners, tasking the teacher with the responsibility to appreciate these diversities and facilitate differentiated learning to ensure all learners are wholly engaged. In Kenya, there is no documentation on the systematic process of identification and support for learners with learning disability. It was on this backdrop, that this survey sought to understand the role of teachers in the identification and support given to learners with LD in our primary schools.

The findings of this study may provide insight into teachers' role in the identification and supporting learners with learning disability in primary schools. The findings may be of interest to learning disability specialists, classroom teachers, administrators, parents, among other education stakeholders to become aware of learning disability at early years. According to National Centre for Learning Disabilities (2014), the sooner learners with learning disability are identified and provided with accommodations and modifications, the sooner there will be an increase in their ability to succeed academically.

1.3 Objectives

This study sought to achieve by the following objectives;

1. To find out teachers' awareness of learning disabilities experienced by learners
2. To establish teacher participation in the identification process of learners with learning disabilities
3. To establish teacher participation in supporting learners with learning disabilities
4. To identify challenges faced by teachers in the identification and support of learners with learning disabilities

1.4 Scope of the Study

This study was carried out in 23 out of 47 counties in Kenya. The study was delimited to teachers of English and Mathematics in grade three in public primary schools. In this grade, learners are expected to have acquired basic literacy and numeracy skills. Public special schools were excluded from the study since LD may be comorbid condition among learners with disabilities.

1.5 Assumptions of the Study

The Teachers Service Commission (TSC) Staffing Policy (2015) provides for one teacher per class in primary schools. The study makes an assumption that this is the standard practice in the county and thus, it was expected that the number of schools targeted would equal the number of grade three teachers.

2. RESEARCH METHODOLOGY

2.1 Introduction

The chapter presents details of methodology to be used in the study; the research design, study location, target population, sampling techniques and sample size, pilot of the study, research instruments, data analysis and logistical, ethical and community considerations.

2.2 Research Design

This study used descriptive survey design. Descriptive survey design is a process of gathering information for answering questions about the current situation of a phenomenon (Creswell & Creswell, 2017), including existing conditions, opinions, relationships and trends. Survey design is preferred in studies that cover large geographical scope and where the findings can be generalized to an entire population. The descriptive survey design is thus appropriate for this study because it provides information about teachers' role in the identification and support for learners with learning disabilities in primary schools in Kenya.

2.3 Location of the Study

The location of the study was 23 counties across the country

2.4 Target Population

Best and Khan (2004), define population as a group of individuals who have one or more characteristics in common that are of interest to the researcher. This study targeted teachers who taught either Mathematics, English or both in grade three in the year 2018.

2.5 Sampling Procedure and Sample size

Sampling is a process or technique of choosing a sub-group from a population to participate in the study; it is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected (Ogula, 2005). Stratified random sampling method was used in this survey to select approximately 50 per cent of the geographical representation of Kenya (23 Counties). The country was stratified into 8 major strata (former provinces) and counties in each of these regions were randomly and proportionally selected based on the number of counties per region. All the sub counties in the sampled counties were represented and the number of schools in each sub-county was randomly sampled proportionally. Each Sub-County in all the selected counties was represented.

Table 1 below presents a summary of the sampled schools in 23 counties.

Table 1: Sample Teachers

REGION	COUNTY	SAMPLED SCHOOLS	TEACHERS INTERVIEWED
CENTRAL	NYERI	79	72
	NYANDARUA	78	77
COAST	KILIFI	79	76
	MOMBASA	46	46
	TAITA TAVETA	68	68
EASTERN	MARSABIT	72	66
	MERU	88	87
	MACHAKOS	89	87
	KITUI	91	95
NAIROBI	NAIROBI	65	60
NORTH EASTERN	GARISSA	65	58
NYANZA	SIAYA	87	90
	KISII	90	91
	MIGORI	87	98
RIFT VALLEY	BOMET	82	82
	TRANS NZOIA	79	84
	KAJIADO	77	70
	KERICHO	82	80
	NAKURU	87	84
	WEST POKOT	78	83
	UASIN GISHU	74	69
WESTERN	KAKAMEGA	90	119
	BUSIA	81	104
	TOTAL	**1,814**	**1,846**

2.6 Data Collection Procedures

The data collection guide was prepared to guide the research assistants on procedures of data collection. The data collection instrument was designed on a digital platform (SurveyToGo) which was instrumental in collecting real-time data from the field. Research assistants were trained for one week. The training covered basic concepts of learning disabilities and difficulties, research ethics and navigation of the digital platform among others. The data were collected using mobile devices and automatically submitted to the ICT server which was managed by a team of Statisticians, Inclusive education experts and information technologists. This team was responsible for receiving, vetting, and approving the data. The data that did not meet the minimum requirements based on the duration of the interview, disparities in the GPS location between data submission point and the school, adherence to the sampled schools and quality of responses were rejected.

2.7 Research Instrument

The survey used a questionnaire to gather empirical data from the field. The questionnaire items were uploaded on a digital platform (SurveyToGo). The research assistants administered the questionnaire using Computer Assisted Personal Interviews (CAPI).

2.8 Pilot Study

A pilot study is considered vital to undertake before the actual study (Kothari, 2008). In an endeavour to improve the validity and reliability of the research instruments, a pilot study was done in 7 counties covering 51 schools. The errors and inconsistencies discovered in the instrument were eliminated before the actual data collection exercise.

2.9 Data Analysis

On receiving the questionnaires, they were cross-examined to ascertain their accuracy, completeness, and uniformity. The data were then coded and processed using the Statistical Package for Social Sciences (SPSS) software version 25.0. The data were weighted to generate national estimates. The aggregate weight was obtained by combining the sampling weights and the non-response weights as follow;

Sampling weight for counties

$$w_c = \frac{N_r}{n_r}$$

Sampling weight for schools

$$w_{sc} = \frac{N_{ic}}{n_{ic}}$$

Non-response weight

$$w_{nr} = \frac{n_{ic}}{n_{nic}}$$

Aggregate weight

$$w_{ag} = \prod_{i=1}^{n} w_c w_{sc} w_{nr}$$

N_r = Total number of counties in the r^{th} region *(strata 1)*

n_r = Sampled counties in the r^{th} region

N_{ic} = Total number of schools in the i^{th} sub-county *(strata 3)* in the c^{th} sampled county *(strata 2)*

n_{ic} = Sampled schools in the i^{th} sub-county in the c^{th} sampled county

n_{nic} =Actual schools reached in the i^{th} sub-county in the c^{th} sampled county

Mixed method was used to analyse the qualitative and quantitative data collected. Quantitative data were summarized using descriptive statistics such as mean, mode and median while inferential statistics such as regression analysis was used to generalize the findings of the survey to the entire country. Qualitative data were analysed using thematic approach developed by (Braun & Clarke, 2006) under which; initial codes were generated, themes were established, reviewed, and defined. Continuous triangulations of both qualitative and quantitative data were done to generate the findings, conclusions, and recommendations of this report.

2.10 Logistical, Ethical and Community Considerations

Approval to conduct this study was sought from Kenyatta University Ethics and Review committee. Thereafter, a research permit was acquired from the National Commission for Science, Technology, and Innovations (NACOSTI). The county education commissioners were consulted to facilitate visits and data collection from schools. Research assistants who administered questionnaires were trained on data collection techniques, research ethics and were supervised by expert personnel.

Respondents requested to participate in the study were assured of confidentiality and anonymity of their identify. Further, they were informed of the purpose of this study and that the data collected would be used only for the purpose of this study. The research assistants' entry to the school was through the head of institution who would give approval. Community leaders and school board of management were also informed about the purpose and benefits of the study.

3 FINDINGS AND DISCUSSIONS

3.1 Introduction

This chapter presents the findings and discussions of this study on the role of teachers in identification and support for learners with learning disabilities in public primary schools in Kenya.

3.2 Response Rate

This section presents distribution of counties selected for the study.

Table 2: Response Rate

County	Target Sample	Schools Reached	Response Rate
Nyeri	79	71	89.90%
Nairobi	65	58	89.20%
Bomet	82	81	98.80%
Busia	81	78	96.30%
Garissa	65	55	84.60%
West Pokot	78	76	97.40%
Kajiado	77	68	88.30%
Kakamega	90	89	98.90%
Kericho	82	78	95.10%
Kilifi	79	76	96.20%
Kisii	90	87	96.70%
Kitui	91	88	96.70%
Machakos	89	87	97.80%
Marsabit	72	65	90.30%
Meru	88	85	96.60%
Migori	87	82	94.30%
Mombasa	46	45	97.80%
Nakuru	87	83	95.40%
Nyandarua	78	77	98.70%
Siaya	87	81	93.10%
Taita Taveta	68	67	98.50%
Trans Nzoia	79	76	96.20%
Uasin Gishu	74	68	91.90%
Total	**1,814**	**1,721**	**94.90%**

Table 2 shows the response rate for 1,814 targeted schools, 1,721 (94.9%) were reached from the targeted sample of 23 counties. Teachers were interviewed using computer assisted personal interview (CAPI). The percentage reached was considered adequate in providing

valid and reliable presentation of the population. According to Mugenda and Mugenda, (2012) a response rate should be more than 70.0 per cent for meaningful generalization. The high percentage response rate was attributed to the fact that the interviews were conducted by the research assistants who had been trained on proper use of CAPI and monitored by Global Positioning System (GPS).

3.3 Demographic Information

Section 3.3 presents demographic characteristics of the respondents which include sex, age, teaching experience, highest teaching qualification, training in special needs education, and subjects taught in grade three.

Table 3: Sex of Teachers

Sex	Frequency	Percent
Male	469	25.4
Female	1,377	74.6
Total	**1,846**	**100**

Table 3 shows the sex of the respondents. A majority of the respondents (74.6%) were female while (25.4%) were male. This implies that most of the grade 3 teachers were female.

Table 4: Age of Teachers

Age	Frequency	Percent
Below 21 years	7	0.4
21-30 years	206	11.2
31-40 years	669	36.2
41-50 years	535	29
Above 50 years	429	23.2
Total	**1,846**	**100**

The participants were asked to indicate their age bracket. The findings in Table 4 indicate, that 36.2 per cent of the respondents were at the age bracket of 31-40 years. Another 29 per cent of them were aged 41-50 years, this was closely followed by (23.2%) aged 50 years and above. Age bracket of 21-30 years was represented by (11. 2%). The least age bracket indicated by the respondents was below 21 years represented by (0.4%).

Table 5: Teachers' Teaching Experience

Teaching Experience	Frequency	Percent
5 year & below	309	16.7
6-10 years	407	22.1
11-15 years	337	18.3
16-20 years	178	9.6
21 & above	615	33.3
Total	1,846	100

The participants were asked to indicate their teaching experience. Table 5 show varied teaching experiences with 615 (33.3%) of the teachers having taught for 21 years and above. Those who had taught for 6-10 years were 407 which translated to 22.1 per cent. The data also revealed that 337 (18.3%) teachers had taught for 11-15 years and those who had below 5 years of experience were 309 (16.7%).

Table 6: Teachers' Highest Teaching Qualification

Qualification	Frequency	Percent
Certificate in ECDE	56	3.0
P1	879	47.6
Diploma in Education	56	3
Diploma in ECDE	419	22.7
Diploma in SNE	134	7.3
BEd	260	14.1
MEd	9	0.5
Untrained	33	1.8
Total	**1,846**	**100**

On highest teaching qualification, Table 6 indicates that a majority of teachers 47.6 per cent. were P1 certificate holders. This was followed by diploma in ECDE at 22.7 per cent and bachelor in education at 14.1 per cent. Diploma in SNE had 7.3 per cent while diploma in education and certificate in ECDE were at 3.0 per cent respectively. Further, the results indicate that 1.8 per cent of the teachers are untrained. The least percentage were of teachers with masters' degree in education at 0.5 per cent.

This study sought to establish teacher's training in SNE. The responses as tabulated below:

Table 7: Teachers' Training in Special Needs Education

Category	Area	Frequency	Percent
Trained in SNE	Specialized	197	10.7
No Training	Some awareness	745	40.3
	No awareness	904	49
	TOTAL	**1,846**	**100**

Table 7 shows the participants responses on their training in SNE. It was only a few (10.7%) who had training in SNE. The results revealed that majority (89.3%) of the teachers were not trained in SNE. Among teachers who had no training in SNE, 40.3 per cent had some levels of awareness through attending various forms of awareness creation such as workshops and seminars, conferences among others while 49 per cent had no clear evidence of awareness of SNE.

Table 8: Teaching Subjects Taught

Teaching Subject	Frequency	Percent
Mathematics	119	6.5
English	118	6.4
Both Maths & English	1,609	87.2
Total	**1,846**	**100**

Table 8 indicates that majority of the teachers (87.2%) taught both English and Mathematics. Those who taught Mathematics were 6.5 per cent while a significant number that is 6.4 per cent taught English only. This may be used to infer that most of the schools had a single teacher teaching grade 3, and not rotational. This has implications in identification and support of learners with learning difficulties.

Table 9: Mean Enrollment of Grade three Learners by Sex per Region

Region	Schools	Enrollment	Mean	Std. Err Mean	Median	Mode
Central Region	1,905	Boys	16.1	7.73	15	14
		Girls	15	7.76	13	13
Coastal Region	1,506	Boys	25.9	16.06	23	17
		Girls	24	15.55	21	6
Eastern Region	4,874	Boys	16.6	8.93	15	9
		Girls	16.4	9.36	15	12
Nairobi Region	207	Boys	31.2	12.18	33	35
		Girls	31.6	12	32	36
North Eastern Region	610	Boys	16.3	10.32	13.5	8
		Girls	13.5	9.43	12	14
Nyanza Region	3,714	Boys	22	10.07	20	17
		Girls	21.9	9.62	21	23
Rift Valley Region	6,764	Boys	20.4	11.07	18	20
		Girls	19.6	10.77	17.5	14
Western Region	2,494	Boys	29	13.23	28	32
		Girls	29.4	12.41	27	26

Table 9 shows that Nairobi region recorded the highest enrollment with a mean of 31

girls and 31 boys. Western region followed closely with a mean of 29 girls and 29 boys. The regions that recorded the least mean enrollment were North Eastern with 16 boys and 13 girls, central 16 boys and 14 girls. Further, the table reveals that Coastal, Central, Eastern, Nyanza and Rift valley regions recorded higher mean enrollment of boys than girls, whereas Nairobi, North Eastern and Western regions had higher mean enrollment of girls than boys.

3.4 Teachers' Awareness of Characteristics of Learners with Learning Disabilities

One of the earliest studies in learning disabilities conducted by Clements (1966) identified hyperactivity, impulsivity, perceptual-motor impairment, disorder of memory and thinking, emotional liability, academic difficulties, coordination problems, language deficits, disorders of attention and equivocal neurological signs as the major attributes of individuals with learning disabilities.

The scope of this study was limited to academic difficulties (literacy and numeracy) as proposed by Lerner (2000), who identified disorders of attention, reading difficulties, written language difficulties, oral language difficulties, social skills, psychological process deficit, mathematics computation and reasoning as main learning and behavioural attributes of individuals with learning disabilities. In this study, teachers were asked to identify the difficulties experienced by their learners in the acquisition and use of basic literacy and numeracy skills.

Figure 1 below presents the percentages of different academic difficulties identified by teachers among their learners.

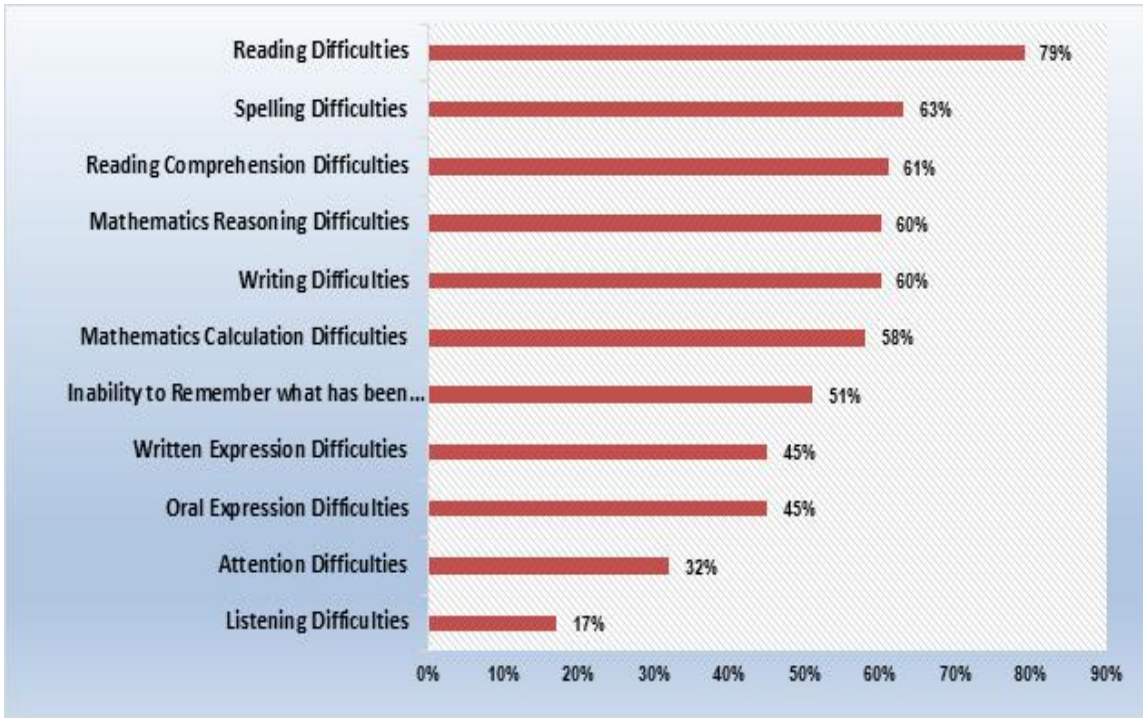


Figure 1: Learners' Academic Difficulties Identified by Teachers

According to the figure above among the learning difficulties identified by the teachers, reading difficulties was the highest (79%) identified while listening was the least (17%) identified.

While it is desirable for teachers to be fully aware of all academic and behavioural development of their learners, some studies (Tindall & Nisbet, 2008; Wegner, 2014; Clemens, Ragan & Widales-Benitez, 2016) indicate teachers may easily notice learners experiencing difficulties in areas that are explicitly and systematically taught such as reading and writing but fail to notice learners experiencing difficulties in other areas such as listening and attention which are not explicitly taught.

3.4.1 Teacher Awareness of Learners' Difficulties in Literacy

Teacher awareness of learners experiencing difficulties in literacy was based on five skill areas; reading, spelling, reading comprehension, written expression and oral expression abilities. The study revealed that 79 per cent of grade three teachers reported of having learners experiencing reading difficulties. The most commonly used activities by teachers in identifying learners with reading difficulties comprised of; giving individual reading tasks, giving word and/or letter recognition activities, letter sound tasks and listening to learners during reading comprehension exercises. Some of the reading difficulties identified by teachers include; inability to recognize sounds, inability to blends sounds, inability to read simple words, inability to read previously learnt material, poor pronunciation, taking unusually longer time to read a word, stammering and skipping some words as they read. Through the use of dictation exercises, giving written exercises, sound and/or letter recognition, copying from the text books and chalkboards, 63 per cent of teachers were able to identify learners with spelling difficulties. When asked how they were able to identify spelling difficulties in learners, a majority of the teachers in their responses reported that, they use dictation exercises, writing exercise, sound and letter recognition, copying from the text books and chalkboards and marking of pupils' work. Some of spelling difficulties identified by teachers include; writing words incorrectly, confusing of alphabets and/or letter sounds, reversing and omission of letters.

Additionally, 61 per cent of the respondents reported that they had learners experiencing reading comprehension difficulties. Probing on how they identify reading comprehension difficulties, teachers indicated that they ask oral questions after reading a story, engaging learners in reading passages and stories, retelling read stories, checking on reading fluency and providing individual reading aloud opportunities. Inability to answer comprehension questions, inability to read any form of text content, fear to read in class and stammering during reading were some of the reading comprehension difficulties identified by teachers. Finally, 45 per cent of grade three teachers reported that they could identify learners experiencing both written and oral expression difficulties. Activities used by teachers to identify learners with written expression difficulties include; giving written composition assignments, asking learners to construct sentences in written and during dictations. Some

of written expression difficulties identified by teachers include; poor spellings, difficulties in vocabularies, inability to construct sentences, omission of letters, difficulties copying from the board, confusing alphabets, inability to write dictated words and failure to write composition. Activities used by teachers to identify learners with oral expression difficulties include; asking them to recite specific words, asking learners to retell a story, engaging learners in oral question and answer sessions, grouping or pairing learners for discussion and asking learners to narrate something after reading it. Some of the oral expression difficulties noted by teachers include; preference to speak either Kiswahili or mother tongue instead of English, shyness when speaking, lack of fluency, stammering, mixing tenses, poor grammar, pronunciation problems, mother tongue interference and failure to construct sensible sentences.

3.4.2 Teacher Awareness of Learners' Difficulties in Numeracy

Teacher awareness of learners experiencing difficulties in numeracy was based on Mathematics reasoning and Mathematics Calculation abilities. It was found that 60 per cent and 58 per cent of grade three teachers could identify learners with Mathematics reasoning and Mathematics calculation difficulties respectively. The activities that enabled teachers to identify these numeracy difficulties include; giving learners exercises, counting exercises, observing learners using counters, observing learners during group work and marking of learners' class work. Some difficulties associated with difficulties in Mathematics calculation according to teachers include inability to recognize and/or differentiate signs, failure to recognize shapes, poor alignment, inability to perform basic operations, failure to follow instructions. On the other hand, the difficulties associated with Mathematics reasoning according to teachers include; inability to comprehend word problems and formulate questions, inability to understand basic operations and failure to apply simple Mathematical concepts.

3.4.3 Teacher Awareness of Learners' Common Literacy and Numeracy Difficulties

Teacher awareness of learners experiencing difficulties in common literacy and numeracy difficulties was based on other skill areas which cut across literacy, numeracy and other behavioural challenges. These aspects include; writing, inability to remember what has been learnt, attention and listening abilities. Writing difficulties was identified by 60 per cent of teachers. The activities used by teachers to identify learners with writing difficulties include; giving work and marking, checking learner's speed of writing, during hand writing and dictation exercises and observing learner's eye hand coordination. Some of the writing difficulties include; failure to differentiate between small and capital letters, illegible handwriting, habitual delays in writing, reversing letters and numbers, omission, writing mirror images, confusing letters and inability to copy from the board and textbooks.

Inability to member what has been learnt as an academic difficulty was identified by 51

per cent of grade three teachers in public primary schools. Some of the activities that lead the teachers to concluding that learners were experiencing this difficulty include; review of previous lessons, administering frequent tests and giving homework and/ or assignment. Some of the indicators to learner's inability to remember what has been learnt according to teachers include; failing to response to questions, failing to link previously learnt concept and the current class, failure to answer question related to previous classes and some learners were taking too long to understand.

Attention and listening difficulties were identified by 32 per cent and 17 per cent of grade three teachers respectively. Teachers stated asking abrupt questions, asking learners to read independently, requesting them to repeat some words or phrases as activities they used to identify learners with attention difficulties. Some of the behaviours that led teachers to conclude that some of their learners experienced attention difficulties include; being too playful, easily distracted by other things, sleeping in class, being withdrawn during lessons, disturbing other learners, losing interest too soon and some would walk in and out of class frequently. On listening difficulties, teachers reported that they used oral tasks, observing learner's concentration on a given task and their behaviour in class. Some of the behaviours that led teachers to conclude that some of their learners had listening difficulties include; some learners were noted to be moving closer to the teacher, others would turn their ears towards the teacher, failure to respond to instructions, giving irrelevant responses while others were always dreamy.

3.4.4 Overall Teacher Awareness of Learners with Academic Difficulties

This section discusses the overall levels of teacher awareness of learners with academic difficulties. According to Endsley and Garland (2000) awareness is the perception of and cognitive reaction to a particular situation or event. The teacher's level of awareness was determined by combining five skill areas in literacy (reading, spelling, reading comprehension, written expression and oral expression), two skill areas in numeracy (Mathematics reasoning and calculation) and four general skill areas that cross-cut between literacy and numeracy (writing, attention, listening and ability to remember what has been learnt) using a geometric mean approach. The use of geometric mean as described by (Jiang, Hager & Li, 2005) normalizes 'n' differently-ranged values into a single observation weighted as the nth root of the set product. The detailed teacher awareness of learners with difficulties in specific academic areas is detailed in Appendix B1, B2 and B3 of this report.

a) Gender and Level of Awareness

Teachers' awareness of learners with difficulties is not affected by the teacher's gender. As displayed in the figure below, the difference between male and female teachers who could identify learners with difficulties in literacy, numeracy and other general academic difficulties is at most 1 per cent. It was found that on average, between 57 per cent and 59 per cent of grade three teachers were aware of learners with difficulties in literacy and

numeracy regardless of their gender while 37 per cent of male teachers and 36 per cent of female teachers were aware of learners with difficulties in other common academic skills as shown in Figure 2. This implies that the awareness levels of learners with difficulties are the same for both male and female grade three teachers.

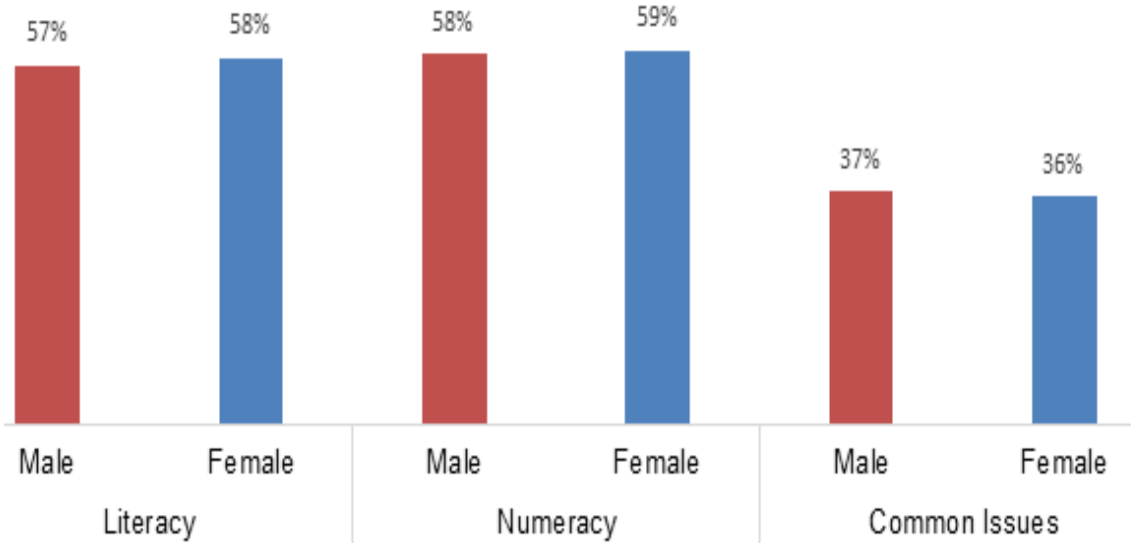


Figure 2: Level of Awareness per Teachers' Sex

b) Training in Special Needs in Education and Level of Awareness

All trained and practicing teachers are expected to have sound classroom management and demonstrate a reasonable level of awareness of their learners' key developmental milestones. Here, we assessed whether additional training in Special Needs Education (SNE) improves teachers' level of awareness of learners with difficulties. As detailed in Figure 4, majority of teachers (57%) were trained inclusive education followed by those trained in Emotional and Behavioural difficulties (20.8%). All other areas of SNE training had less than 10 per cent of teachers while 4.6 per cent of teachers were trained in more than one area. While the table below summarizes teachers' areas of SNE training at all levels (certificate, diploma and degree), more than half of these teachers had a certificate in their respective areas of SNE training. Awareness level of teachers about learners with difficulties was relatively higher among teachers trained in inclusive education and hearing impairment compared to other areas of SNE training.

Table 10: Teachers' Areas of Specialization in SNE

Area of SNE Training	Frequency	Certificate	Diploma	Degree
Inclusive Education	1,241	2.6%	85.3%	12.1%
Emotional and Behavioural Difficulties	489	2.3%	72.7%	25.0%
Learning Disabilities	184	0.0%	88.9%	11.1%
Hearing Impairment	61	18.2%	18.2%	63.6%
Intellectual Difference	20	0.0%	33.3%	66.7%
Physical Disabilities	54	60.0%	40.0%	0.0%
Visual Impairment	44	33.3%	33.3%	33.3%
Deafblind	36	20.0%	60.0%	20.0%
Multiple Areas	99	60.0%	40.0%	0%

The Figure 4 presents a summary of teachers' levels of awareness of learners with difficulties in relation to their training in SNE. Here, all teachers trained in SNE regardless of their areas of specialization and levels of training were put in the same category. On the other hand, those who did not have formal training in SNE were put in the category of teachers without training as shown in Figure 3.

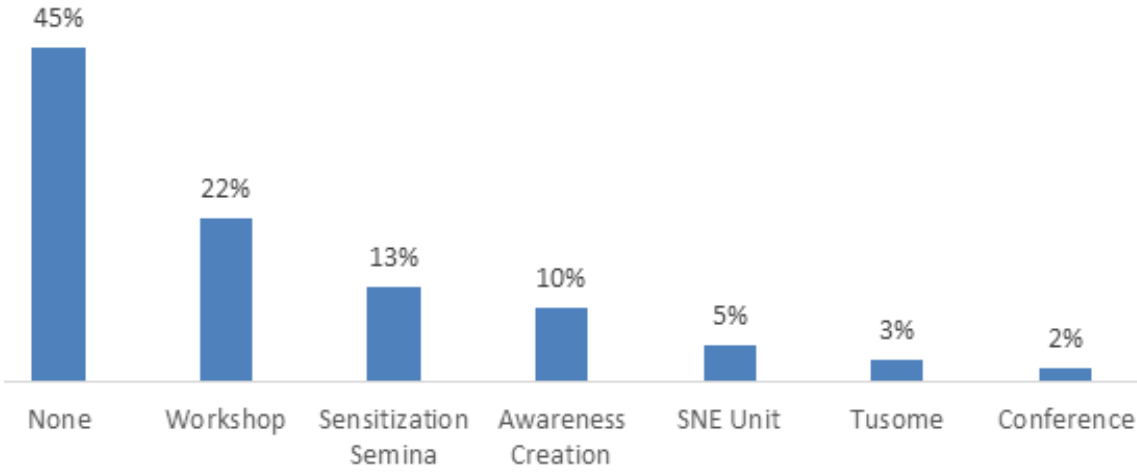


Figure 3: Type of Short Awareness Courses for those Without SNE Training

The Figure 3 shows that 45 per cent had not attended any capacity building in SNE while 55 per cent had attended at least a sensitization seminar, workshops, conferences, Tusome program while others had taken some introductory units on disability and inclusion during their regular teacher training courses as detailed in the figure above.

As shown from the figure below, teachers trained in SNE were more aware of learners with difficulties than those without training in SNE. There was a 3 per cent difference in literacy and 7 per cent difference in numeracy and common issues between teachers who were trained in SNE and those who are not trained. This gives 6 per cent overall difference in awareness between a teacher trained in SNE and the teachers without such training.

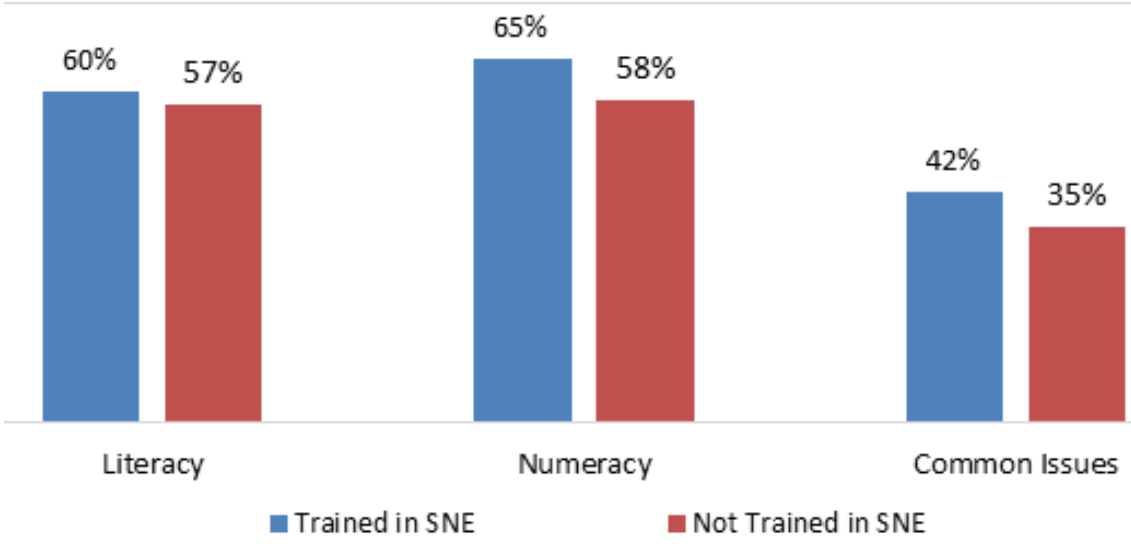


Figure 4: Training of SNE and Level of Awareness

c) Teaching Subject and Level of Awareness

It is common practice in Kenya for a single teacher in lower primary to teach all subjects. This study revealed that about 94 per cent of public primacy schools in Kenya teach more than one subject in lower classes, at least 2 subjects (English and Mathematics). On the other hand, 6 per cent of schools were found to have different teachers of English and Mathematics. Teachers who taught both subjects were asked all questions relating of learners' academic difficulties. Teacher who taught English alone were not subjected to questions that were exclusively numeracy related while those who taught Mathematics alone were not subjected to questions that were exclusively literacy related.

As detailed in Figure 5, 65 per cent of teachers of who taught English alone were aware of learners with difficulties in literacy compared to 59 per cent of teachers who taught both subjects, a difference of 6 per cent. In numeracy, 81 per cent of teachers who taught Mathematics alone were aware of learners with difficulties in numeracy compared to 60 per cent of teachers who teach both Subjects, a difference of 21 per cent. In other academic related difficulties such attention and listening, it was also found that teachers to teach one subject alone (either English or Mathematics) were more aware of learners with difficulties compared to those teaching both subjects, an average difference of 9 per cent. Clearly, teachers teaching a single subject are more aware of learners with academic difficulties compared to those teaching more than one subject.

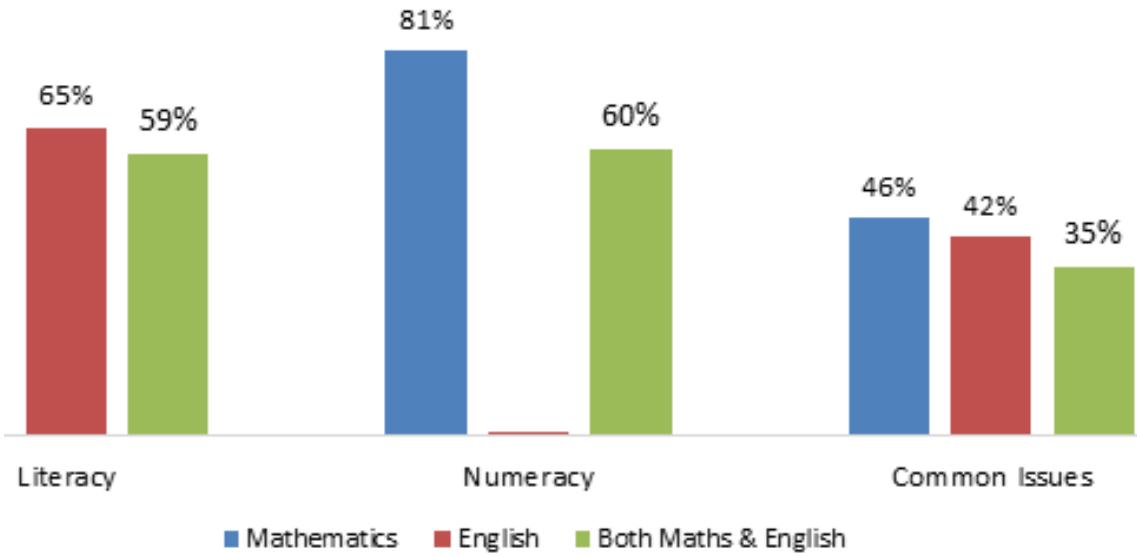


Figure 5: Teaching Subject and Level of Awareness

d) Teaching Qualification and Level of Awareness

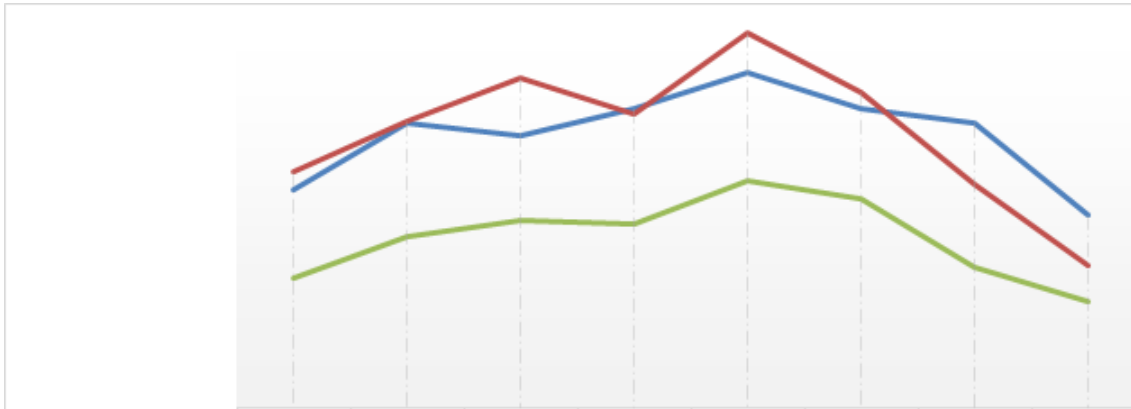
Teachers in Kenya have different teaching qualifications ranging from certificates, diplomas and degrees. While it may not be easy to clearly distinguish which among available teacher qualification is higher than the other, this study used a scoring scale where teachers who did not have a teaching qualification (untrained) were rated lowest (1), followed by teachers with certificate in ECDE (2) and those with P1 (3). Teachers with diploma in Education, diploma in ECDE and Diploma in SNE were all rated the same (4). Teachers with Bachelor of Education were rated (5) while those with Master in Education were rated (6). Based on this scale, linear regression analysis between teachers' teaching qualification and their level of awareness of learners with various academic difficulties was done. Table 11 gives the summary statistics of regression output.

Table 11: Regression Summary Output on Teaching Qualification and Level of Awareness

Regression Statistics	**Literacy**	**Numeracy**	**Common Skills**	**Overall Awareness**
Multiple R	0.87	0.62	0.66	0.71
R Square	0.75	0.38	0.43	0.50
Adjusted R Square	0.56	0.25	0.29	0.34
Standard Error	0.07	0.14	0.07	0.09
Observations	1,846	1,846	1,846	1,846
Regression Coefficients	**Coefficients**	**Standard Error**	**t Stat**	**P-value**
Intercept	0.04	0.02	1.78	0.13
Teaching Qualification	0.33	0.08	3.94	0.02

The table above indicates that teaching qualification is significant factors determining teacher's level of awareness of learners with learning difficulties. There is a positive correlation between teaching qualification and teachers' level of awareness. It was found that a unit increase in the teaching qualification increases teacher's level of awareness by about 0.3 units (30%).

As presented in Figure 6 Teachers trained in diploma in SNE had the highest levels of awareness compared to any other teaching qualification. Further, teachers with master's degree in education were not necessarily the best in identifying learners with difficulties. In fact, in some instances there was no significant difference in awareness levels between teachers with masters in education and those with certificate in ECDE.



	Certificate in ECDE	P1	Dip. in Education	Dip. in ECDE	Dip.in SNE	Bachelor in Edu.	Master in Edu	Untrained
Literacy	43%	57%	54%	59%	67%	60%	56%	38%
Numeracy	47%	57%	65%	58%	75%	62%	44%	28%
Common Issues	26%	34%	37%	36%	45%	41%	28%	21%

Figure 6: Trend in Teacher Qualification and Level of Awareness

e) Teaching Experience and Level of Awareness

It is common belief that mastery of skill is closely related with experience gained over time. In this study, we encountered teachers who had taught for as few as 5 years and below while other teachers had taught for over 21 years. We investigated whether teaching experience had any effect on the teacher's level of awareness of learners with difficulties in the acquisition and utilization of literacy and numeracy skills. To perform regression analysis, we scored teachers with 5 years and below teaching experience (1), between 6 and 10 years (2), between 11 and 15 years (3), between 16 and 20 years (4) and those 21 years teaching experience (5). Linear regression analysis between teachers' teaching experience and their level of awareness of learners with various academic difficulties was done. Table 12 gives the summary statistics of regression output.

Table 12: Regression Summary Output on Teaching Experience and Level of Awareness

Regression Statistics				
	Literacy	**Numeracy**	**Common Skills**	**Overall Awareness**
Multiple R	0.81	0.70	0.69	0.75
R Square	0.65	0.49	0.48	0.57
Adjusted R Square	0.47	0.34	0.33	0.41
Standard Error	0.02	0.03	0.03	0.03
Observations	1,846	1,846	1,846	1,846
Regression Coefficients				
	Coefficients	**Standard Error**	**t Stat**	**P-value**
Intercept	0.01	0.01	1.41	0.25
Teaching Experience	0.40	0.03	16.13	0.01

The table above indicates that teaching experience is significant factors determining teacher's level of awareness of learners with learning difficulties. There is a positive correlation between teaching experience and teachers' level of awareness. It was found that a unit (5 years) increase in the teaching experience increases teacher's level of awareness by about 0.4 units (40%).

However, it was found that teachers with 5 years and below teaching experience were the least aware of learners with difficulties. As detailed in the Figure 7, teachers' awareness improved rapidly for the first 5 years and remains non-decreasing for the rest of their teaching profession.

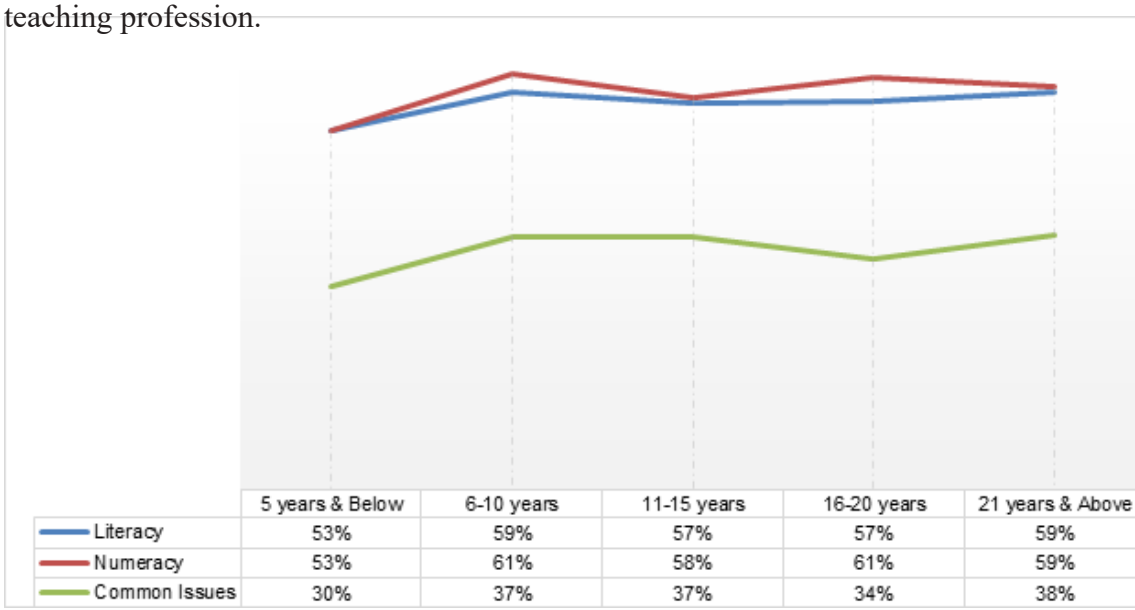


Figure 7: Teaching Experience and Level of Awareness

3.5 Teacher Participation in the Identification Process

Before referral for professional advice or possible assessment to determine the existence of Leaning Disabilities there are some basic things that any teacher can do. Since teachers have worked with many different learners, they can be aware of an individual learner who fails to make progress in the acquisition and use of literacy and numeracy skills.

3.5.1 Activities Teachers Engage in to Identify Learners

Persistent early difficulties strongly predict which learners are likely to develop difficulties with reading accuracy, fluency, and comprehension and mathematics abilities. Teacher participation in accurate and early identification of numeracy and literacy difficulties could greatly reduce learning disabilities among learners who are at-risk and appropriate instruction support is provided immediately (Otaiba, et al, 2009).

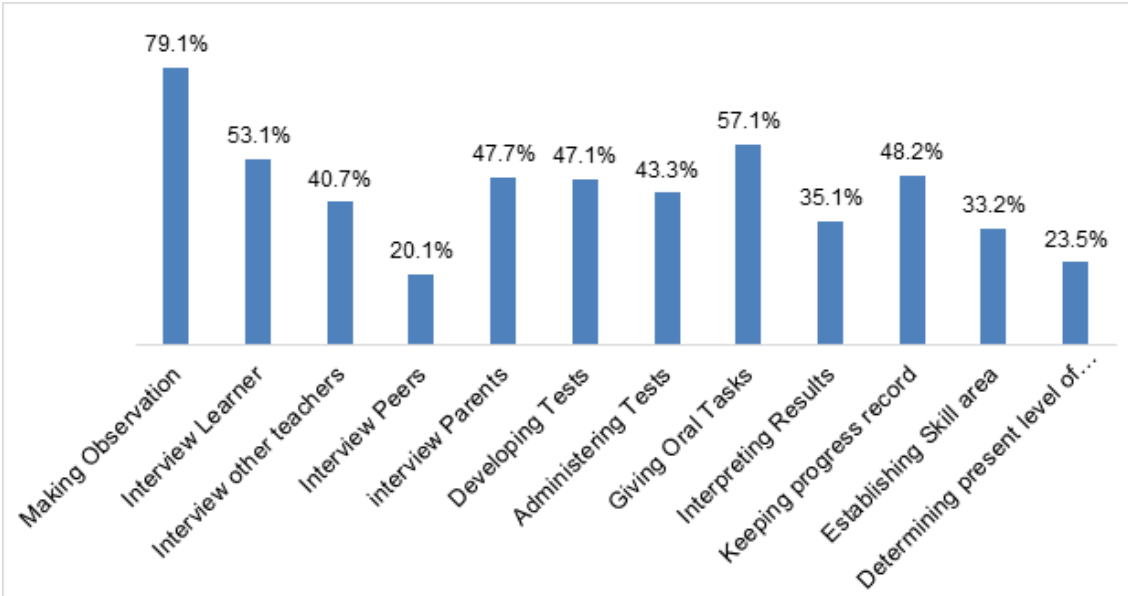


Figure 8: Activities Teachers Engage in to Identify Learners with Difficulties

Teachers were asked to indicate some of the activities they engage in order to identify learners with Learning difficulties. The table above shows that making observations was the most prevalent activity used by majority of teachers (79.1%). Giving oral tasks was at 57.4 per cent, followed by interviewing the learner at 53.1%. The least used activities of identifying learners with Learning difficulties were interviewing of peers (20.1%), determining the present level of functioning at 23.5% per cent and establishing the skill area (33.2%). It is evident that most teachers relied on a single activity to identify a learner with learning disability. According to Bradley, Danielson and Hallahan (2002), no single data source is sufficient for identifying learners with learning disabilities. They further assert that professionals with expertise in learning disabilities are necessary to conduct a comprehensive assessment and evaluation system for learners suspected of having learning disabilities.

3.5.2 General Steps in Identification of Learning Difficulties

Screening is a quick method for obtaining general information about a learners' development and detecting any potential problems. Screening tools are instruments that can help detect learning strengths and needs and indicate potential learning difficulties but cannot provide a diagnosis of learning difficulties (Reynolds, 2012). Screening tools are designed to be brief, inexpensive, quick and easy to use to provide a snapshot that enables the identification of learners needing a more thorough assessment. Screening tools can vary from simple checklists to more in-depth assessments. It is an initial step in identifying 'red flags' and whether further assessment is required (Fletcher & Miciak, 2017). Based on the findings as detailed in Figure 8, teachers use to identify the difficulties were grouped into four crucial systematic procedures key in determining learning difficulties. These procedures are making observations, interviews (from the learner themselves, parents/guardians, other teachers and peers), testing (developing test, administering, interpreting results and keeping of progress records) and finally determining the present level of functioning.

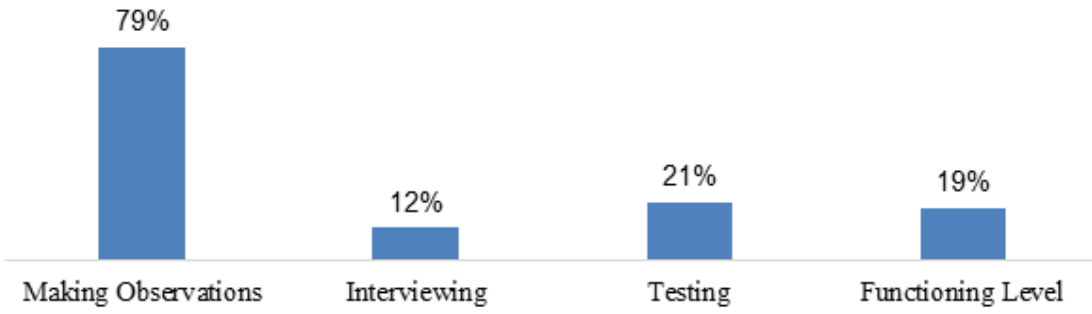


Figure 9: Teacher Participation in Identification Process

For a comprehensive identification of a learner with LD, a teacher is required to make observations during teaching to gather background information, carry out interviews about the learner (from the learner themselves, parents/guardians, other teachers and peers), conduct informal tests (developing test, administering, interpreting results and keeping of progress records) and finally determine the present level of functioning. The table above shows that most teachers (79%) were able to make observations, 12 per cent conducted at least an interview, 21 per cent were involved in testing the learners using general academic tests while 19 per cent attempted to determine the learner's present level of functioning. The following table presents information on teacher participation in the identification process through the four steps (Step 1-Making Observation, Step 2-Interviewing, Step 3-Testing and Step 4 – determining the learner's present level of functioning)

3.5.3 Transition of Teachers Through Identification Process

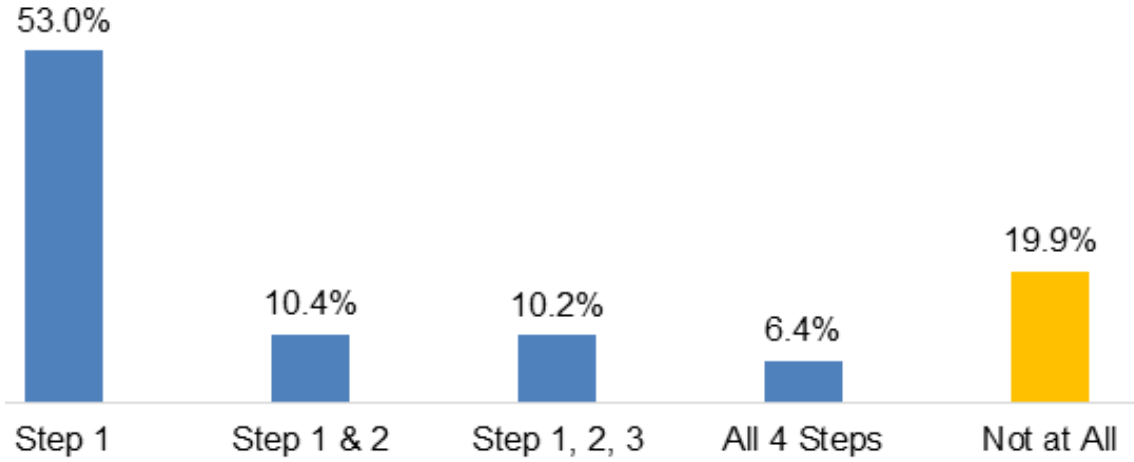


Figure 10: Teacher Participation at Various Identification Stages

Early identification and prevention efforts depend on a number of critical, interconnected elements such as proactive approach to the effective teaching of the academic curriculum, systematic screening to identify learners who require additional support, and provide evidence-based interventions and continued supports for those who need them (Sadaket, 2009).

The study established that less than 10 per cent of teachers are able to complete the four steps when identifying learners with learning disabilities. In the first step, 53 per cent of the teachers are able to make observation, 10.4 per cent are able to move to the second step, 10.2 per cent of teachers can move up to the third step. Only 6.4 per cent of the teachers are able to complete the process of identification and establish the functioning level of the learner. However, 19.9 per cent were unable to participate in any of the identification activities. Without proper screening data from teachers, making good decisions that will determine support services required for learners' instructional needs or future LD determinations was flawed.

3.5.4 Actions Taken by Teachers when they Suspect a Learner with Difficulties

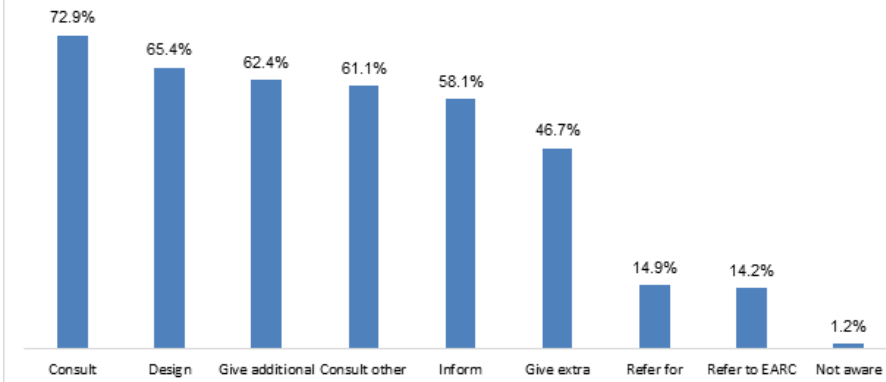


Figure 11: Actions Taken by Teachers

The table above sought to find out the actions taken by teachers when they suspected a learner had learning disabilities. Findings revealed that majority of teachers (72.9%) consult parents when they suspect a learner has learning disability. Other significant actions reported by teachers when they suspected learners with learning disabilities included: designing remedial program (65.4%), giving additional work (62.4%), consulting other teachers (61.1%) and informing the head teacher (58.1%). It is worth noting that 46.7% of teachers gave extra tuition once they suspected that their learners had learning Disabilities. The least actions taken by teachers when they suspected a learner with learning Disabilities were: referring learners to EARC (14.2%) and referring for medical attention (14.9%). However, there was an insignificant number of teachers (1.2%) who reported not to be aware of what to do when they suspected a learner had Learning disability (ies).

It is evident that teachers make deliberate efforts to assist learners with learning disabilities through the provision of support. For instance, most teachers are able to make consultation with other teachers, school administration and parents and designing of remedial programs. While giving additional work to learners with learning disabilities may not be an appropriate remediation strategy, designing of remedial programs by 65 per cent of teachers for these learners could be the best strategy since such programs are designed to close the gap between what the learner knows and what they are expected to know. It often targets reading and Mathematics skills (Karibasappa, Nishanimut, & Padakannaya, 2008). The study carried out by Hyry-Beihammer and Hascher, (2015) in Finland emphasized the significance of remedial education as a form of complementary teaching in order to individually support different levels and types of learners. However, when it comes to involvement of other experts outside the school environment such as referral for specialized assessment and medical attention these being the least among the action's teachers reported to have taken. This could be attributed to lack of awareness about education assessment services and lack of understanding of the heterogeneous nature learning disabilities.

From the above data we acknowledge teachers are attempting to identify learners at risk of LD however studies have shown that three tiered model of intervention (response to intervention - RTI) is the best approach to use when in a large class RTI identifies students' learning and behavioural problems early so that educators can intervene with specialized instruction to improve academic achievement (Cortiella & Horowitz, 2014; Beach &O'connor, 2013).

3.6 Teacher Participation in Supporting Learners with Learning Disabilities

It is important to ensure that learners are provided with well-designed instruction aiming the area in which the learner is struggling. This instruction should be explicit, systematic and cumulative and needs to form the foundation of an intervention that continues for at

least six months.

3.6.1 Support Provided by Teachers to Learners with Learning Difficulties

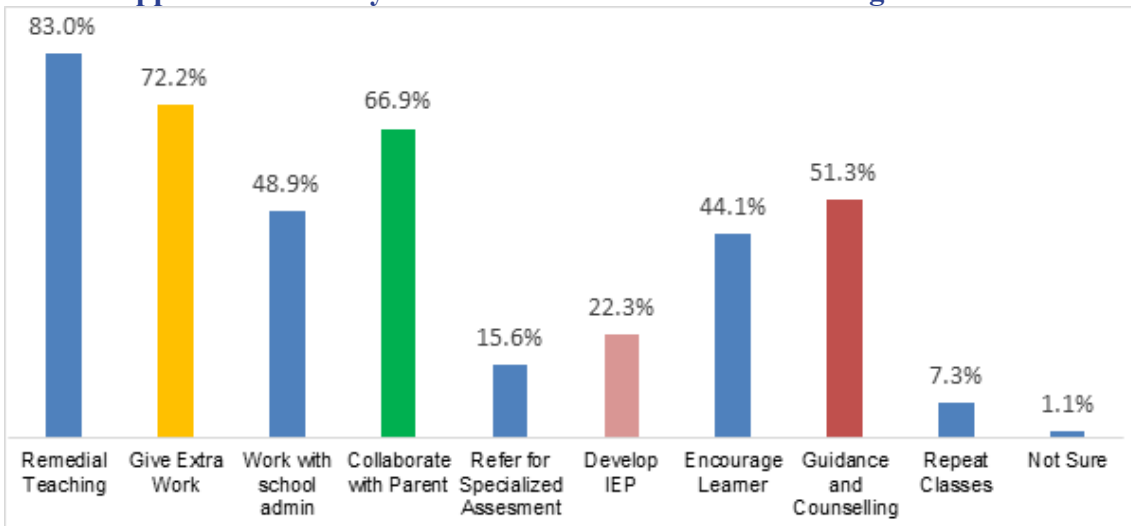


Figure 12: Support Given by Teachers to Learners with Learning Difficulties

The above table indicates that majority of the teachers took different actions when they suspected a learner had learning difficulties. Majority of teachers (83%) reported that they gave remedial teaching to learners suspected to have learning difficulties,72.2 per cent of the teachers gave extra work to the learners, 66.9 per cent of the teachers collaborated with the parents of the learners while 51.3 per cent did guidance and counselling to the learners. However, an insignificant number of teachers (1.1%) were not sure of the action to take when they suspected a learner had learning difficulties. Some teachers (7.3%) made learners suspected to have learning difficulties repeat classes,15.6 per cent of the teachers referred the learners for specialized assessment while 22.3 per cent of the teachers developed Individualized Educational Programs (IEP) for learners suspected to have learning difficulties.

The findings of this study reveal that most teachers take action when they suspect a learner has learning disabilities in order to support them overcome the disabilities they experience in specific academic areas. This is in line with Hen and Tam (2006) who expresses that teachers of learners with learning disabilities should be competent in areas such as identification, counselling and interpersonal skills needed in supporting every learner to achieve maximum academic standards. NJCLD (2005) also supports that when learners with learning disabilities are provided with timely and right support within the regular main stream environment, most of them may finally achieve academically and develop positive self-esteem and social skills.

The best practices in supporting learners with learning difficulties involve designing

appropriate remediation strategies based on the learners' present level of performance as determined by the teacher in the identification process. According to Fletcher, et al., (2018) the minimum remediation period for a learner with learning difficulties is six months, after which an individual learner who does not respond to remediation should be referred for specialized assessment for learning disabilities. However, it was difficult to determine whether the actions taken by teachers were designed to remediate the difficulties identified and whether the intervention timeframe was appropriate.

3.7 Challenges Facing Teachers in Identification and Support of Learners with Learning Difficulties

In the process of identifying and supporting learners with learning difficulties, teachers indicated that parental involvement, time constraints, learner's absenteeism, inadequate knowledge, teaching and learning materials were the major challenges encountered by the teachers and are discussed below;

a) Parental Involvement

Analysis of qualitative data revealed that parental involvement was the greatest challenge teachers came across when identifying and supporting learners with learning difficulties. Teachers cited lack of support, poor cooperation, negative attitude, and denial by parents that their child had learning difficulties. Sometimes parents fail to provide historical background information of their children, yet this information could be a pointer to a cause of a learning difficulty. In addition, some parents are unaware of their children's learning struggles and therefore fail to report to school when requested. Inadequate collaboration between parents and teachers was also reported as a concern especially where parents fails to support their children in assignments given by teachers.

b) Time Constraints

Teachers expressed inadequate time as a constrain because they did not have enough time to identify and support learners specific needs due to heavy workload. Teachers also complained about timetables which are 'fixed' and 'loaded' such that it becomes difficult to cater for learners with learning difficulties. Some of the teachers also said they are not able to find adequate time to prepare for the learners because they are engaged in teaching both lower and upper classes. They further reported that though they give work, they do not have adequate time to mark as they identify individual leaner's needs. Some teachers reported that there was insufficient time to develop and implement IEP yet this is key in addressing individual learner's needs.

c) Learners Absenteeism

When learners experience repeated failure in academic activities, they are likely to develop low self-esteem, poor self-concept, and poor self- image which may lead to absenteeism.

Findings in this study showed that learners' absenteeism deters teachers from identifying learners with learning difficulties. A teacher had this to say;

"…Cases of absenteeism influence monitoring the progress of the learner"

In addition, absenteeism made the learners lag behind as they fail to master concepts which are likely to result in LD.

d) Inadequate Knowledge on Identification Process

The study revealed that the respondents felt they had inadequate knowledge and skills necessary in the identification and support of learning difficulties. They further reported inability to identify and support learners with learning difficulties due to lack and or inadequate training in SNE. Some of the teachers trained in SNE found it difficult to advice their colleagues who are not trained in SNE fearing lack of cooperation from them and the likelihood of stigmatizing the learner. Inadequate training further influenced the teachers' attitude, such as being insensitive to learners needs, being prejudice and mistaking the learners to be disobedient.

e) Inadequate Assessment Services

Functional assessment is key in helping to determine the learner's areas of needs. However, findings of the study reveals that inaccessibility and unavailability of assessment centres, lack of assessment tools, difficulty in reaching out to assessment officers, convincing parents to take their children for assessment leads to few learners being assessed yet, the assessment reports are fundamental in guiding the teachers when supporting learners with learning difficulties.

f) Large Class Enrolment

Teachers in the study expressed having large enrolment which minimises frequency of one on one contact with their learners thus hindering chances of early identification and support of learners experiencing learning difficulties. Further, the teachers cited shortage of teachers as a contributing factor hindering identification and support of learners with learning difficulties because they are overwhelmed with other school activities thus, concerns that may be pointers of learning disabilities could easily escape their notice.

g) Teaching and Learning Materials

Most teachers reported of inadequate teaching and learning materials whereby they are not able to do remedial teaching to learners experiencing learning difficulties. They also expressed about insufficient materials that suit specific needs of the learner. A teacher had this to say;

"Since teachers lack adequate training in specialized training, they are not able to prepare learning materials suitable for learners with learning disabilities."

There are inadequate supplementary books apart from course books and story books.

Inadequate of demonstration materials and guide books on which the teachers can use to support learners with learning difficulties. They also cited insufficient infrastructure to cater for learner's individual learning needs (resource rooms).

3.8 Suggested Solutions to the Challenges in Identification and Support of Learners with Learning Difficulties

In the process of identifying and supporting learners with learning difficulties, respondents suggested the following; parental involvement, government support, sensitization on LD, support by teachers, guidance and counselling and educational assessment as solutions to challenges they encountered and are discussed below.

a) Parental Involvement

The study findings cited involvement of parents/guardians as paramount in solving challenges when identifying and supporting learners with learning difficulties. Parents// guardians need to give the right background information about the learner instead of failing to acknowledge the child's learning needs. Teachers also emphasized the need for parents// guardians to follow up on their child's attendance so as to limit issues of absenteeism and therefore make it easy to track progress and identify any learning difficulties.

b) Timely Government Support

Government and school systems need to enable school administrators and teachers by supporting them in their quest to provide quality learning opportunities for diverse learners in their classrooms. This will help in minimising challenges encountered when identifying and supporting learners with learning difficulties. Some of the ways through which the government could intervene is: by employing more teachers to lessen individual teacher's workload, government to aid in provision of learning materials and increase the number of classrooms in schools. Government agencies to provide trained SNE teachers, provide training through workshop and seminars as a way of increasing awareness.

c) Sensitization on Learning Difficulties and Disabilities

The study found that there was need to sensitize teachers, parents and stakeholders on learning difficulties and disabilities. Teachers reported that sensitization could be carried out by the school and local administration. Some teachers had this to say;

"Create awareness and sensitize the parents on issues of disabilities and importance of supporting their children"

"Call parents for a meeting and give them sensitization which should come from higher office since most parents don't come willingly"

By providing sensitization to the stakeholders will help in timely identification and intervention of learners with learning difficulties and reduce stigmatization associated with learning difficulties.

d) Support by Teachers

It was reported that there was need for teachers to allocate their own individual time to identify and support learners with learning difficulties and create individualised programmes for the learners and to assist in addressing their learning needs. Some teachers also suggested that there should be remediation classes provided to learners with learning difficulties, whereby they emphasized the importance of adequate learning resources to cater for different individual needs and levels of learning

e) Guidance and Counselling

Guiding and counselling is the process of helping individuals discover and develop psychological potentials and thereby to achieve an optimal level of personal happiness and social usefulness. Some teachers pointed the following;

"Encouraging and guiding the parents on what to do to their children with learning disabilities"

"Guidance and counselling and informing parents to ensure their children attend school regularly"

"Give guidance and counselling and provide love so that the learners know they are not alone in whatever they are experiencing"

Through continuous guidance and counselling, parents are able to understand and accept that their children are experiencing learning difficulties thereby appreciate and support them to realise their potentials. There is also need to counsel the learners individually so that they may accept themselves cope positively.

f) Educational Assessment Services

The teachers itemized educational assessment as one of the solutions to challenges they had during identification and support of learners with learning difficulties. Referral for assessment, consultation with educational assessment personnel and involvement of well trained and specialized assessment teachers were among the solutions suggested. The teachers also expressed need for early identification and support for the learners with learning difficulties.

Some of the voices from teachers concerning assessment include:

Our school administration should be encouraged to look for educational assessment for learners

Induction of functional assessment of the use of technology

Assessment officers should schedule e a program to schools and carry out assessments instead of sitting in the office

The ministry of education should consider to establish local educational assessment centres in the community

4 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

4.1 Summary of Findings and Conclusions

Findings and conclusions drawn in this report is based on empirical data gathered from 23 counties, 158 sub-counties, 1721 (95% of target) schools in which 1846 (469 male and 1377 female) grade three teachers were interviewed. The of teachers ranged between 20- 60 years while their teaching experience ranged between 1-30 years. The average enrolment in grade three in Kenya is 44 (51% male and 49% female) learners. However, enrolment varies significantly across different geographical regions and location of schools. For instance, regions such as western and Nairobi regions recorded the highest-class enrolment, some schools having up to 130 learners in a class. On the other hand, Eastern, central and North Eastern regions recorded the lowest enrolment with some schools having less than 6 learners in a class. It was noted that on average, most regions had more boys than girls, except Nairobi and Western regions in which girls were more than boys. Nairobi, Coast and Western regions had greatest disparities in enrolment between schools, while central and Eastern regions had the least disparities in enrolment between schools.

4.1.1 Teachers' Awareness

Teachers are more aware of reading difficulties compared to listening difficulties. This shows that difficulties related to skills that are explicitly taught are easily identifiable compared to difficulties related to skills that are implicitly taught.

Among teachers' areas of specialization in SNE, those with inclusive education were the highest while those intellectual disability took the least. This may be because inclusive education teachers are deployed to regular schools while those trained in intellectual disability are deployed special schools and units. 45 per cent of teacher not trained in SNE while 55 per cent have attended at least a training of some kind such as attending a workshop, seminar that is related to SNE. This shows that there is a significant number of teachers who are not trained in SNE and have not had any exposure to SNE related fora.

Training in SNE has a positive impact on teachers' awareness on learners experiencing difficulties. Teachers who had some training in SNE were better in identifying learners with difficulties compared to those who did not have SNE training.

Teaching qualification and experience have positive impact on teachers' awareness on learners experiencing difficulties.

Teachers teaching only one subject in a class are more aware of learners with difficulties in those subject areas compared to teachers who teach more than one subject.

4.1.2 Teacher participation in the identification process

The process of identifying a learner with learning difficulties begins with making observations through administration of tests to determining the present level of performance. Most teachers were able to make observations, however, only a few were

able to complete the process.

Most teachers took some actions to identify learners experiencing learning difficulties. Despite teachers being aware of learning difficulties, some of them used inappropriate activities to identify such difficulties. For instance, some teachers could not clearly distinguish between stammering and hesitation during reading.

While learning difficulty should be a persistent trait, some teachers classified learners as having learning difficulties on situational circumstances.

4.1.3 Teacher Participation in Support

Remedial teaching, giving extra work and collaborating with parents were among the support given to learners experiencing learning difficulties. It is not clear in these actions were specifically designed to address the specific difficulties experienced by the learner.

4.1.4 Challenges in Identification and Support

- Inadequate parental involvement: Most parents were not involved in the identification and support of their children despite teachers' effort to reach out to the parent
- Time constraint: Teachers do not have sufficient time to identify and support learners with learning difficulties due to heavy workload and other school activities.
- Learner absenteeism: Learners absent themselves from school which makes it difficult for teachers to identify and provide support for those with learning difficulties.
- Inadequate knowledge: Most teachers cited inadequate knowledge on learning disabilities as a contributing factor to their ineffective identification and support of learners with learning difficulties.
- Inadequate assessment services: Some teachers cited inaccessibility of educational assessment services as a leading factor to inadequate information on learners with learning difficulties.
- Large class enrolment: Large class enrolment minimizes frequency of one-on-one contact between teachers and learner thereby hindering chances of tracking specific learning difficulties among the learners.
- Inadequate Teaching and learning materials: Majority of the teachers expressed their concern on the insufficient teaching and learning materials which hinders remediation for learners experiencing learning difficulties

4.1.5 Proposed solutions to the Challenges

- Parental involvement: Parents/guardians need to give the right background information about the learner, follow up child-school attendance and track their school records to help teachers in identification and support of learners with learning difficulties.
- Timely government support: The government should provide funds for sourcing teaching and learning resources, employing more teachers, supporting assessment centres and training centres in assessment skills timely
- Sensitization on learning difficulties and disabilities: To reduce stigmatization associated with learning difficulties, sensitization of parents, teachers and education stakeholders should be given priority.
- Support by teachers: Teachers should strive to understand their learners' individual needs and offer required individualized support
- Guidance and counselling: this will enable parents to understand parents understand their children and appreciate the support given by the teachers. It also enables the learner with learning difficulties accept themselves and improve their self-esteem.
- Educational assessment services: Assessment services should be taken nearer to the community where they are needed. On the same note, teachers should be trained in basic assessment skills.

4.2 Recommendations

- Kenya Institute of Special Education and other relevant government agencies should develop assessment procedures and tools for children with learning disabilities. This will provide a clear guidance to teachers and other assessors on how to assess and identify children with learning disabilities
- The Ministry of Education to come up with a structured Individualized Education Programme (IEP) for all categories of disabilities
- Encourage teachers to create personal time to support learners with learning difficulties
- There is need for every teacher to have basic skills on special needs education and therefore there is need to incorporate a component of SNE in the teacher training curriculum. Additionally, practicing teachers not training in SNE should strive to undertake SNE training
- There is need to sensitize parents/guardians to inculcate the culture of monitoring

and tracking academic performance of their children. This will create interest in the parents to collaborate with schools.

- There is need for the Teachers Service Commission (TSC) to deploy more teachers in schools to improve teacher teacher-learner ratio
- There is need strengthen training in assessment of disability and special needs. This will enable teachers in schools to conduct assessment, advice parents and support children with learning difficulties instead of relying on assessment centres
- There is need to capacity build teachers on various activities to be used in identification and support of learners with difficulties in numeracy and literacy skills
- There is need to create awareness to all primary school teachers on basic steps of identification and support of learners with learning difficulties
- There is need to develop a structured/standard guiding and counselling procedures that will help learning institutions provide guiding and counselling services. In addition, Teachers Service Commission should strive to staff at least one guiding and officer in every learning institution
- There is need to sensitize teachers on the distinction between a learning difficulty and a learning disability

REFERENCES

Acosta, M. D. (2019). Gifted Education: A Multi-Case Study on the Identification Process of Historically Underrepresented Students in Gifted Programs in North Carolina.

Ahmad, F. K. (2015). Exploring the invisible: Issues in Identification and Assessment of Students with Learning Disabilities in India. Transcience: A Journal of Global Studies, 6(1), 91-107.

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2018). Learning disabilities: From identification to intervention. Guilford Publications.

Beach, R. E., & O'connor. (2013). Special education in a 4-year Response to Intervention (RTI) environment: Characteristics of students with learning disability and grade of identification. Learning Disabilities Research & Practice, 28(3), 98-112.

Bradley, R., Danielson, L., & Hallahan, D. P. (2002). Identification of Learning Disabilities: Research to Practice. Routledge.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative research in psychology, 3(2), 77-101.

Clemens, N. H., Ragan, K., & Widales-Benitez, O. (2016). Reading Difficulties in Young Children: Beyond Basic Early Literacy Skills. Policy Insights from the Behavioral and Brain Sciences, 3(2), 177-184.

Cortiella, C., & Horowitz, S. H. (2014). The state of learning disabilities: Facts, trends and emerging issues. New York: National Center for Learning Disabilities, 25.

Creswell, J. W., & Creswell, J. D. (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage publications.

Endsley, M. R., & Garland, D. J. (Eds.). (2000). Situation Awareness Analysis and Measurement. CRC Press.

Fletcher, J. M., & Miciak, J. (2017). Comprehensive cognitive assessments are not necessary for the identification and treatment of learning disabilities. Archives of Clinical Neuropsychology, 32(1), 2-7.

Graham, S., Collins, A. A., & Rigby-Wills, H. (2017). Writing characteristics of students with learning disabilities and typically achieving peers: A meta-analysis. Exceptional Children, 83(2), 199-218.

Hen, M., & Tam, K. (2006). Special education in general education programs in Singapore. Teacher Education and Special Education, 29, 149-156.

Hyry-Beihammer, E. K., & Hascher, T. (2015). Multi-grade teaching practices in Austrian and Finnish primary schools. International Journal of Educational Research, 74, 104-113.

Jiang, Y., Hager, W. W., & Li, J. (2005). The Geometric Mean Decomposition. Linear Algebra and Its Applications, 396, 373-384.

Kafonogo, F. M., & Bali, T. A. (2013). Exploring Classroom Teachers' Awareness of Pupils with Learning Disabilities: Focusing on Public Primary Schools in Tanzania. Journal of Education and Practice, 4(24), 58-66.

Karibasappa, C. N., Nishanimut, S. P., & Padakannaya, P. (2008). A remedial teaching programme to help children with mathematical disability. Asia Pacific Disability Rehabilitation Journal, 19(2), 76-90

KISE., (2018). National Survey on Children with Disabilities and Special Needs in Education. Kenya Institute of Special Education. 1(1), 1-67

Kothari, C. R. (2008). Research Methodology: Methods and Techniques. New Age International.

Lemer, J. (2000). Learning disabilities: Theories, diagnosis, and teaching strategies. Boston: Hotlghton Miflin Company, 35-60.

Mugenda, O. M., & Mugenda, A. G. (2012). Research Methods Dictionary.

National Joint Committee on Learning Disabilities [NJCLD]. (2005). Responsiveness to Intervention and Learning Disabilities. Retrieved from www.ldonline.org/njcld.

Ogula, P. A. (2005). Self-Study Material for the Bachelor of Education Degree Research Methods. Nairobi: CUEA.

Otaiba, S., Petscher, Y., Pappamihiel, N. E., Williams, R. S., Dyrlund, A. K., & Connor, C. (2009). Modeling Oral Reading Fluency Development in Latino students: A Longitudinal Study Across Second and Third Grade. Journal of Educational Psychology, 101(2), 315.

Peters, R. H., Koller, J. R., & Holliday, G. A. (2019). A functional assessment approach to strategy development and implementation for a person with a specific learning disability: A case study. Journal of Applied Rehabilitation Counseling, 26(3), 30-35.

Rasugu, G. K. O. (2010). Nature and prevalence of learning disabilities among standard three primary school pupils in starehe division of nairobi province, kenya.

Reynolds, T. E. (2012). Theology and Disability: Changing the Conversation. Journal of Religion, Disability & Health, 16(1), 33-48.

Sadaket, C., (2009). Phonologically based reading disabilities: Toward a coherent theory of one kind of learning disability. In Perspectives on learning disabilities (pp. 106-135). Routledge.

Shillingford-Butler, M. A., & Theodore, L. (2012). Students Diagnosed with Attention Deficit Hyperactivity Disorder: Collaborative Strategies for School Counselors. Professional School Counseling, 16(2_suppl), 2156759X12016002S05

Shukla, P., (2015). Awareness of Learning Disabilities among Teachers of Primary Schools. Online Journal of Multidisciplinary Research, 1(1), 33-38.

Tindall, E. and Nisbet, D. (2008). Listening: A vital Skill for Learning. International Journal of Learning. 15(6), pp. 121- 128

UNESCO., (2012). Youth and Skills: Putting Education to Work. Education for All Global Monitoring Report [GMR] 9(1), 124-126

Wegner, H. (2014). The Relative Effectiveness of Active Listening in Initial Interactions. International Journal of Listening. 28(1).

Appendix B1: Teachers Awareness of Learners with Literacy Challenges

Sex of Grade three Teacher	Estimate Total	Writing	Listening	Attention	Remembering
Male	5,352	62%	18%	31%	53%
Female	16,719	59%	17%	33%	50%
Teaching Qualification					
Certificate in ECDE	701	45%	13%	19%	39%
P1	10,520	59%	15%	30%	50%
Diploma in Education	713	69%	14%	34%	58%
Diploma in ECDE	5,181	59%	18%	32%	52%
Diploma in SNE	1,501	67%	21%	39%	53%
Bachelor in Edu.	3,003	65%	21%	41%	53%
Master in Edu	77	49%	12%	18%	56%
Untrained	376	45%	4%	23%	47%
Teaching Experience					
5 years & Below	3,592	57%	14%	23%	44%
6-10 years	4,800	60%	17%	36%	53%
11-15 years	4,123	62%	17%	34%	54%
16-20 years	2,226	60%	14%	31%	51%
21 years & Above	7,330	60%	19%	34%	52%
SNE Training					
Trained in SNE	2,227	65%	21%	39%	56%
Not Trained in SNE	19,844	60%	16%	32%	50%
Subject(s) Taught					
Mathematics	842	63%	28%	44%	58%
English	855	71%	21%	41%	50%
Both Maths & English	20,374	60%	16%	32%	51%

Appendix B2: Teachers Awareness of Learners with Numeracy Challenges

Sex of Grade three Teacher	Estimate Total	Maths Calculations	Maths Reasoning
Male	5,352	58%	59%
Female	16,719	57%	61%
Teaching Qualification			
Certificate in ECDE	701	44%	50%
P1	10,520	55%	59%
Diploma in Education	713	70%	61%
Diploma in ECDE	5,181	58%	59%
Diploma in SNE	1,501	64%	73%
Bachelor in Edu.	3,003	61%	64%
Master in Edu	77	76%	26%
Untrained	376	52%	61%
Teaching Experience			
5 years & Below	3,592	54%	52%
6-10 years	4,800	59%	64%
11-15 years	4,123	54%	62%
16-20 years	2,226	59%	63%
21 years & Above	7,330	59%	60%
SNE Training			
Trained in SNE	2,227	64%	67%
Not Trained in SNE	19,844	57%	59%
Subject(s) Taught			
Mathematics	842	88%	75%
English	-	-	-
Both Maths & English	20,374	59%	62%

Appendix B3: Teachers Awareness of Learners with Challenges Both Literacy and Numeracy

Sex of Grade three Teacher	Estimate Total	Writing	Listening	Attention	Remembering
Male	5,352	62%	18%	31%	53%
Female	16,719	59%	17%	33%	50%
Teaching Qualification					
Certificate in ECDE	701	45%	13%	19%	39%
P1	10,520	59%	15%	30%	50%
Diploma in Education	713	69%	14%	34%	58%
Diploma in ECDE	5,181	59%	18%	32%	52%
Diploma in SNE	1,501	67%	21%	39%	53%
Bachelor in Edu.	3,003	65%	21%	41%	53%
Master in Edu	77	49%	12%	18%	56%
Untrained	376	45%	4%	23%	47%
Teaching Experience					
5 years & Below	3,592	57%	14%	23%	44%
6-10 years	4,800	60%	17%	36%	53%
11-15 years	4,123	62%	17%	34%	54%
16-20 years	2,226	60%	14%	31%	51%
21 years & Above	7,330	60%	19%	34%	52%
SNE Training					
Trained in SNE	2,227	65%	21%	39%	56%
Not Trained in SNE	19,844	60%	16%	32%	50%
Subject(s) Taught					
Mathematics	842	63%	28%	44%	58%
English	855	71%	21%	41%	50%
Both Maths & English	20,374	60%	16%	32%	51%

Appendix B4. Screening Checklist

Purpose: Teachers are advised to use the following checklist to rule out vision, hearing, or environment issues. A more advanced screening should be conducted by a multidisciplinary team if the answers to all questions are "yes", yet the learner continues to struggle.

Screening Checklist

	Questions	Yes	No
1.	Has the learner obtained a vision screening in the last 1 year?		
2.	If a learner wears glasses, has his/her vision been checked in the last one year?		
3.	Has the learner obtained a hearing screening in the last year?		
4.	If a learner wears a hearings aid, has his/her hearing been checked in the last months?		
5.	Has the teacher checked on any traumatic event in the learner's life that might be causing the present learning difficulties?		
6.	Has the teacher checked on any factors on learner's school history that may be related to the existing difficulty (previous academic performance, frequent or prolonged absenteeism)?		
7.	Has the teacher ruled out any variables related to family history that may affect school performance (home life, stress, poverty, emotional support etc.)?		
8.	Has the teacher ruled out any issues related to the learner's medical history that may affect school performance (illness, nutrition, trauma, or injury)?		
9.	Has the teacher done any intervention (remediation, one on one intervention) for the last 6 months?		
10.	Has the teacher discussed the learner's difficulties with the parents or guardians on giving extra support		

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