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# Teacher Awareness and Support for Learners with Learning Disabilities in Public Primary Schools in Trans-Nzoia County, Kenya

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## Abstract

This paper investigates the level of teacher awareness and its influence on support for learners with learning disabilities in public primary schools in Trans-Nzoia County. The study was based on concurrent triangulation research design. The social constructivism theory formed the theoretical foundation of the study. The target population for the research consisted of 4107 teachers from which 351 were selected as the study sample size. Stratified random sampling technique was used to select teachers. The study used questionnaire, interviews and focus group discussions to collect data from teachers. It emerged that 59.5% of teachers were moderately aware of pupils with learning disabilities in their schools. The results shows that there existed significant positive relationship (r=0.256 and p=0.028) between Teachers Awareness of LD in Trans-Nzoia county and effective inclusion of these learners in their schools. In recommendation, teachers need to look for opportunities for further training to increase their awareness on learning disabilities in schools. There is also need for teachers to work with parents to assist pupils with learning disability in primary schools. **Key Words:** Teacher, Awareness, Learning Disability, Support

#### Introduction

Learning Disability (LD) is a worldwide problem today (Lerner & Johns, 2009; Gandhimathi, Jeryda & Eljo, 2010). This is because children with learning disabilities are found in every economic, racial and language around the globe (Lerner & Johns, 2012). Learning disability is a general term for a neurological condition that interferes with the learner's ability to store, process, or produce information (National Dissemination Center for Children with Disabilities [NDCCD], 2004). This then, affects the learner's ability to read, write, speak, spell or compute mathematics (National Association of Special Education Teachers [NASET], 2007; Lerner & Johns, 2012). Moreover, Tormanen, Takala and Sajaniemi (2008) contended that LD is traditionally synonymous with the concept of underachievement; which interferes with the learners: attention, memory, coordination, social skills, thinking and language (Fletcher, Coulter, Reschly & Vaugh, 2004; McNamara, 2007). Nevertheless, McNamara (2007) argued that learners with learning disabilities have difficulty completing long-term assignments, and keeping track of daily work and events.

According to Saad, Ismail and Hamid (2014), learners with LD are unique, and therefore their needs vary as they show unique profile of strengths and needs. The needs for these learners can be either general or specific in nature (National Council for Special Education [NCSE], 2014). Thus, general learning disabilities can be identified as mild, moderate, severe or profound; while specific learning disabilities are identified as Dyslexia (Reading), Dyscalculia (Math) or Dysgraphia (Writing) (NASET, 2014). If these disabilities are unnoticed, unanswered and, or ignored; the needs of these learners will not be met in the regular classrooms. This then will affect the fulfillment of effective inclusive education, universalisation of primary education and equalization of educational opportunity. It is therefore important for teachers in regular primary schools to be aware and understand various types of disabilities, appropriate curricular, instructional modifications, support and interventions to assist learners with disabilities in their schools (Saad et al., 2014). Such knowledge and understanding will enable them to develop positive attitude towards learners with disabilities and lead them to acquiring or developing better competences to handle these children in their classrooms (Gandhimathi, 2010; El-Gamelen & El-Zeftawy, 2015). Additionally, it is vital for pre-service teachers and education administrators to have an opportunity to learn about children with special educational needs in their training (Saad et al., 2014). This will then help governments establish and maintain a quality educational system of trained and motivated teachers, and administrators to work in the general education (Porter, 2001). One such category of special needs children in general education is that of learning disabilities. Despite these learners being the majority in general education classrooms (Hallahan, Lloyd, Kauffman, Weis & Martinez, 2005), only 60% of them receive information about their needs from general education teachers (Cortiella, 2011).

Researchers in different parts of the world investigated teacher's knowledge and awareness regarding learners with learning disabilities and found out that their success depended on teachers' awareness of their learning needs (Campbell, Gilmore, Cuskelly, 2003; Carroll, 2003; Papadopoulou, Kokarida, Paparikolaou & Patsiaouras, 2004; Koay, Sim & Elkins, 2006). Furthermore, these researchers considered the teachers' role to be of importance in the field of special needs education that required them to know foundational concepts to help learners with LD in regular classrooms. In addition, Rowe (2007) regarded teachers as valuable resource to a school. Therefore, he found it vital to invest in teacher professionalism by equipping them with skills that are effective in meeting the development and learning needs of all learners. This paper focuses on teacher awareness and support for learners with learning disabilities in public primary schools in Trans-Nzoia County, Kenya.

#### **Research Problem**

Reports from research studies indicate that children with special needs continue to face challenges in accessing primary education in Kenya (MOE, 2009; Gateru, 2010; Adoyo & Odeny, 2015). Trans-Nzoia County is not an exception to experiences of learners with LD as statistics show that 24.5% of students in different schools around the county dropped out of school in the year 2013-2014 (Trans Nzoia County Education Report, 2015). When teachers are aware of the challenges and needs that learners have, they are in a position to provide accurate diagnosis and assessment to enable the children to settle and stay in school. This paper therefore looks at the whether teachers are aware of learners with learning disabilities in public primary schools in Trans-Nzoia County, Kenya.

#### Literature Review

# Teachers Awareness of the Learners with LD in Public Primary Schools

There are several studies conducted in different parts of the world which found that teachers acceptance of inclusion may be promoted by their awareness about the definitions, causes, characteristics and identification procedures of learners with special needs (Caroll, 2003; Koay et al., 2006; Papadopoulou et al., 2004). Unfortunately, DeSimone and Parmar (2006) indicated that there are teachers in regular education who feel that both pre-service and in-service education programs did not adequately prepare them for teaching learners with learning disabilities in inclusive education. This inadequacy of knowledge by the teachers may lead to negative attitudes towards learners with disabilities (Saravanabhavan & Saravanabhavan, 2010). Probably, this is the reason to why several researchers found it relevant for teachers to have certain knowledge and understanding about the needs of different learners, learning techniques and curriculum strategies (European Agency for Development in Special Needs Education [EADSNE], 2010; Ingrid & Sunit, 2013; Saad et al., 2014). It is therefore vital that pre-service and in-service teachers learn about children with special needs in their training (Ingrid & Sunit, 2013). This will then assist them to improve the quality of teaching and contributing to learners' achievement as they engage in professional development on throughout their career (Forlin, Chambers, Loreman, Deppeler & Sharma, 2013).

There are numerous studies in the category of LD that have been conducted on the role of classroom teachers' in promoting and achieving inclusive education in primary schools (Naylor, 2005). One such study is that of Jordan and Stanovich (2002), which showed that the role of a classroom teacher is a key variable to the successful inclusion of learners with disabilities. They believed that the success of learners with disabilities included in regular classes depends on the teachers' awareness of the teaching factors. The results from their study indicated that learners may fare better in classroom performance depending on teachers' awareness of different patterns of instructional interactions, their beliefs, and attitudes towards learners with learning disabilities. Although teacher capacity is convincingly linked to success of inclusive education (Naylor, 2005) as stated earlier in this chapter, there are many teachers who believe that they were inadequately prepared to teach learners with disabilities in inclusive education. Similarly, Smith, Tyler, Skow, Stark and Baca (2003) found out that even though greater numbers of pupils with special needs were included in regular classroom settings, regular teachers had received little or no training in special education.

This is supported by the reviewed research on professional development undertaken by Waitoller and Artiles (2013) for teachers in inclusive education published between 2000 and 2009 which highlighted that it's critical for school systems to nurture and develop teachers who have knowledge and ability to provide quality educational access, participation and outcomes for all learners in inclusive education. It's therefore important to nurture these teachers through training to enable them deal with invisible disabilities like LD (Campbell et al., 2003). This is the reason to why Saravanabhavan and Saravanabhavan (2010) argued that it is critically important to assess the knowledge level of LD among teachers in inclusive education. However, this is not the case when Kamal and Ramganesh (2013) reported about the findings from previous studies on lack of knowledge about LD among teachers in India. Furthermore, they have given evidence from the following studies

(Crawford, 2007; Karande, 2008; Karande, Mahajan & Kulkarni, 2009; Saravanabhavan & Saravanabhavan, 2010) that teachers in primary schools in India exhibited lack of awareness about LD. Similarly in India, Shukla and Agrawal (2015) investigated awareness of learning disabilities among teachers of primary schools in fifteen schools which were selected based on the lottery method in Haridwar region. Data was collected from 60 primary teachers from these schools. They concluded that in spite of the teachers' gender and teaching experiences, the level of awareness about LD among primary school teachers' in India is low.

Similarly, Al Khatib (2007) investigated the Jordanian regular education teachers' knowledge of LD; and whether their knowledge differed as a function of selected variables. The sample consisted of 405 regular classroom teachers teaching 1<sup>st</sup> - 6<sup>th</sup> grade students in thirty schools in three Jordanian districts. These teachers completed a 40-item test designed by the researcher, which had adequate psychometric properties. The results of the study revealed that teachers had a moderate level of knowledge of LD. Female teachers were found to be significantly more knowledgeable than male teachers. The teachers' level of knowledge was unrelated to teachers' age, teaching experience or academic qualifications. Saludes and Dante (2009) also conducted a study on the knowledge and perceptions on learning disabilities in the cities of region XI of the Philippines and a region in New York City, USA. The objectives of the study were to find out the knowledge and awareness on learning disabilities, and the level of perceptions on remediation program and treatment services given to learners with LD. The findings of the study revealed that the majority of parents, teachers, and members of the local school board had low knowledge and awareness on learning disabilities

Moreover, Gandhimathi, Jeryda and Eljo (2010) studied awareness of learning disabilities among primary school teachers. The study consisted primary school teachers working in 80 schools in Triuverumbur block, Tiruchirappalli in India. Based on lottery method 16 schools were selected and the data was collected from 71 teachers in these 16 schools. They found out that majority of the respondents (66.2%) had low level of overall awareness about LD. Additionally, Sawhney and Bansal (2016) studied awareness of learning disabilities among elementary school teachers. It was a descriptive survey type of study conducted on fifty elementary teachers teaching in schools in Chandigarh in India. A 20-item test was prepared by the investigators to test basic awareness of learning disability among these teachers. They concluded that there is a great need to generate awareness among teachers regarding LD; since a small group of teachers have basic knowledge regarding LD and are not able to distinguish LD learners from slow learners.

Kafonogo and Bali (2013) conducted a study on exploring classroom teachers' awareness of pupils with learning disabilities by focusing on public primary schools in Tanzania. The study targeted standard three and four pupils and teachers from public primary schools in Kibondo District, Kigoma region. The study revealed that 15% of pupils in regular classrooms had learning disability characteristics, but teachers had little awareness. As a result these learners constantly endured stereotypes and 'name calling' such as; impossible, problem or dull pupils. This study determined the level of teacher awareness in Trans-Nzoia County comparing it with the situation reported by Kafonogo and Bali (2013) in Kigoma, Tanzania. In Kenya, Gateru (2010) assessed the teachers' awareness and intervention for pupils with LD in inclusive education in Makadara Division, Nairobi Kenya. The study concluded that teachers were aware of inclusive education in their schools; teachers had different interventions in place to ensure the success of inclusive education e.g. corrective approaches, direct instructions, systematic phonics and using connectivity' with pupil's individual learning and that teachers were not professionally prepared to cope with learners with LD in inclusive education. It is therefore, evident from the above mentioned studies that teachers' awareness of learners with LD is necessary to ensure they are effectively included in mainstream primary school classroom setting. Runo (2010) conducted a study aimed at finding out whether teachers can identify the causes of reading disabilities in learners. The study adopted both qualitative and quantitative research approaches where mixed method design was used for collecting and analysing data for both teachers and learners. The study embarked on interviews for learners by use of structured interview schedule. It emerged that teachers assessed their learners reading ability but they did not use proper methods of assessment; teachers were able to identify children who could not read at class level as non-performers but were not able to identify the specific reading disabilities. Non-readers ranged from 0 to 27.1% for Nairobi and 0 to 53.6% in Nyeri districts respectively. Almost half of the teachers in the study neither taught reading nor did they know the methods to use in teaching reading. The study indicated that there were more boys (103) than girls (78) who could not read. The study by Runo (2010) involved identifying learners with reading disabilities only while this study determined the different types of learning disabilities common among pupils in trans-Nzoia County. It is also important that teachers become aware and understand the uniqueness of these learners, their strengths and weaknesses before determining ways of assisting them in classroom. This therefore prompted the researcher to investigate the teacher level of awareness of learners with learning disabilities in their schools as inadequate research studies have been conducted on the same on the local scene (Trans-Nzoia County in particular).

## Materials and Methods

This study employed a concurrent triangulation (mixed) research design. The concurrent triangulation design involves collecting quantitative and qualitative data concurrently (Creswell, 2012; Tashakkori & Teddlie, 2010). This study was carried out in Trans Nzoia County which is made up of the five sub counties. The target population for this study consisted of 4107 teachers from public primary schools in Trans-Nzoia County. Teachers were selected using stratified random sampling method. This method was preferred by the researcher because it allows each member of the population an equal probability of inclusion in the sample without bias. This facilitated sampling of 351 teachers who participated in the research. Instruments used in data collection in this study were questionnaires, interview schedules and Focus Group Discussions (FGD) technique. The research instruments were tested for validity and reliability. Data analysis was done using qualitative and quantitative methods. Quantitative data analysis involved use of frequencies, percentages, means and standard deviation. Qualitative data analysis involved used of content analysis method.

## **Results and Discussions**

Demographic data entails determining the biographical information relating to respondents engaged in the research. The researcher requested teachers to give/indicate their gender and academic qualifications. The results are presented in Table 1.

Variable		Details	Frequency	Percent		
Teachers' gender		Male	124	40.1		
-		Female	185	59.9		
		Total	309	100.0		
Teachers' lev	vel of	Secondary	2	.6		
education		PTC	112	36.2		
		Diploma	107	34.6		
		Undergraduate	72	23.3		
		Postgraduate	14	4.5		
		ATS4	1	.3		
		A-Level	1	.3		
		Total	309	100.0		

#### **Table 1 Teachers Demographic Data**

Results on gender (Table 1) shows that majority 185 (59.9%) were female teachers while 124 (40.1%) were male. The result shows that teaching in primary schools is preferred by female gender as opposed to male. Findings on teachers level of education reveal that 112 (36.2%) had Primary Teachers Certificate (PTC), 107 (34.6%) had diploma in education and a significant 72 (23.3%) had undergraduate degree level of education. It's seen that teachers in public primary schools in Trans-Nzoia County have advanced their professional training other than holding the entry PTC certificate.

## Teacher Awareness of Learning Disability Influences the Support of Learners with Learning Disabilities

The objective of the study was to determine the extent to which teacher awareness of learning disability influences the support of learners with learning disabilities in public primary schools in Trans-Nzoia County. Teachers' awareness of LD was measured through respondents understanding the diverse challenges learners with LD experience in learning; number of learners with LD in school; causes of LD; characteristics of LD; effects of LD; and identification of LD. Teachers through questionnaire were asked to rate their level of awareness of learners with LD in their schools. This was done using Teachers Awareness Scale (TAS) as: extremely aware (5), moderately aware (4), somewhat aware (3), slightly aware (2) and not at all aware (1). The results of analysis are given in Table 2.

Table 2 Teachers' Awareness and Support for Learners with LD in Schools

Table 2 Teachers' Awareness and Support for Learners with LD in Schools												
Teacher awareness		EA		ЛА		SA	S	LA	Γ	NA	Μ	SD
	f	%	f	%	f	%	f	%	f	%		
I am aware that	198	64.1	86	27.8	10	3.2	11	3.6	4	1.3	4.4984	.82818
learners with LD												
experience diverse												
challenges in learning	17	15.0		01.4	~ .	17.5	0.4	20.4	10	155	2 0020	1 22052
I am aware that	47	15.2	66	21.4	54	17.5	94	30.4	48	15.5	2.9029	1.32053
learners with LD are												
the majority in my school												
I am aware that LD	111	35.9	66	21.4	71	23.0	32	10.4	29	9.4	3.6408	1.31318
can be inherited	111	55.9	00	21.4	/1	23.0	52	10.4	29	9.4	5.0400	1.51516
I am aware that LD	124	40.1	60	19.4	41	13.3	34	11.0	50	16.2	3.5631	1.49894
can be caused by	124	40.1	00	17.4	71	15.5	54	11.0	50	10.2	5.5051	1.47074
ineffective teaching												
I am aware that LD	184	59.5	74	23.9	25	8.1	15	4.9	11	3.6	4.3107	1.04784
can be caused during	-				_		-					
prenatal, perinatal and												
postnatal stages												
I am aware that LD	174	56.3	88	28.5	30	9.7	14	4.5	3	1.0	4.3463	.90084
can affect learners in												
the way they receive												
and recall information												
I am aware that	165	53.4	84	27.2	31	10.0	24	7.8	5	1.6	4.2298	1.02039
learners with LD have												
short attention span	105		0.6		-							1 10 101
I am aware that	105	34.0	86	27.8	67	21.7	34	11.0	17	5.5	3.7379	1.19491
learners with LD												
exhibit general awkwardness and												
clumsiness												
I am aware that	190	61.5	68	22.0	20	6.5	22	7.1	9	2.9	4.3204	1.06186
learners with LD	170	01.5	00	22.0	20	0.5	22	/.1	,	2.9	4.5204	1.00100
perform poorly in												
tasks requiring												
reading, written												
expression, spelling,												
handwriting and												
mathematics												
I am aware that	218	70.6	54	17.5	23	7.4	10	3.2	4	1.3	4.5275	.86606
learners with LD can												
be identified through												
observation, screening												
and classroom												
performance		10.01		<b>a</b> a -		10.0	•	. ·	4.2		4.00-0	4 40
Average perceptions	152	49.06	73	23.7	37	12.0	29	9.4	18	5.8	4.0078	1.10527

Key: EA-Extremely Aware, MA-Moderately Aware, SA-Somewhat Aware, SLA-Slightly Aware, NA-Not at all Aware, M-Mean and SD-Standard Deviation

The result in Table 2 show that most 198 (64.1%) of teachers indicated that they were extremely aware that learners with learning disabilities experienced diverse challenges in learning, only 4 (1.3%) of teachers admitted that they were not aware. This is confirmed by mean statistics which shows that majority of respondents (teachers) were extremely aware (M=4.49 and SD=0.82) that learners with learning disabilities experienced difficulties during their learning process. The results corresponds with Adebowale and Moye (2013) research in Nigeria that showed that most of the teachers (43.6%) had good knowledge of learning difficulties while another 18.1% had excellent knowledge of what constitutes learning difficulties. However, Kafonogo and Bali (2013) research in Tanzania revealed teachers awareness of the presence of pupils with learning disabilities in regular classrooms was much less in schools. The study revealed that 15% of pupils in regular classrooms had learning

disability characteristics. Unfortunately, classroom teachers had little awareness. As a result, these students constantly endured stereotype and 'name calling' such as "impossible", "problem" or "dull" learners. Often than not, they were subjected to physical punishments in attempts to manage symptoms manifesting their learning disabilities such as; hyperactivity, short attention span, and inability to perform class appropriate literacy or numeracy-related activities. When asked to state their awareness on whether learners with LD were majority in their school, 94 (30.4%) were slightly aware and only 47 (15.2%) were extremely aware. Computed means statistics shows that teachers were somewhat aware (M=2.90 and SD=1.32) that learners with LD were majority in their schools. The result implies that most teachers are not aware that learners with LD form a significant majority in their schools. This study is different from El-Gamelen and El-Zeftawy (2015) who found out that majority of the studied groups in both rural and urban areas (91% and 75.6% respectively) reported that they had a number of children with learning difficulties in their classes. They further reported that the number of those children with learning difficulties ranged between 5-10 children in one classroom. In Kenya, Rasugu (2010) also found out that LD was affecting a significant number of children in primary schools in Starehe division of Nairobi, 58 out of a total of 135 pupils screened (43%) were reported to have a high risk of LD. However, head teachers and standard 3 teachers reported a total number of 55 pupils out of a total sample of 135 standard three pupils in the five schools as having LD (17.5%). Lerner and Kline (2006) observed that estimates of the prevalence of learning disabilities in developed countries vary widely - ranging from 1 percent to 30 percent of the school population. This therefore shows that the number of learners with LD in schools is high.

Results also revealed that 111 (35.9%) of teachers were extremely aware and 66 (21.4%) were moderately aware that LD can be inherited. The result therefore shows that most teacher seem to be moderately aware (M=3.64 and SD=1.31) that LD can be inherited. Despite their position, the high standard deviation scores (above 1) reflects that there are some teachers who still believed that LD cannot be inherited but rather it is something that happens during child developmental stage. The finding is different from Shukla and Agrawal (2015) survey in India that showed that only 29% teachers said they were aware of the causes of learning disabilities. This shows that in some schools, some teachers may not actually know what cause learning disabilities among children. Moreover, in Nigeria, Onwuka, Obidike and Okpala (2015) tteachers' response showed that they were aware of some of these learning difficulties, bearing in mind the symptoms specified on the items. When asked to indicate their level of awareness that LD can be caused during prenatal, peri-natal and postnatal stages of child growth and development, 184 (59.5%) were extremely aware, 74 (23.9%) were moderately aware, 25 (8.1%) were somewhat aware, 15 (4.9%) were slightly aware and 11 (3.65) were not aware at all. The result therefore shows that teachers were moderately aware (M=4.31 and SD=1.04) that LD is caused during child growth and development. Results correspond with Kakabaraee, Akbar and Ali (2012) findings of the present study have revealed that 82.1% of teachers achieved a score higher than 10 for awareness of learning disability etiology. In other words, they mainly had an agreeable opinion and identified the proposed reasons for the incidence of learning disability as important. The findings is in contrast with Gandhimathi, Jeryda and Eljo (2010) who found out that majority of the respondents (62%) were found to have low level of awareness about causes of learning disabilities. Therefore, the teachers under study were considered to have unacceptable knowledge about the factors causing learning disability.

Findings also revealed that 124 (40.0%) of teachers were extremely aware that learning disability can be caused by ineffective teaching, 60 (19.4%) were also found to be moderately aware but 50 (16.2%) were not aware at all. The result mean that most teachers appeared to be moderately aware (M=3.56 and SD=1.49) that ineffective teaching in classrooms could lead to development of learning disabilities to learners in public primary schools in Trans-Nzoia County. To manage the development of LD; Ali, Mustapha and Jelas (2006) study in Malaysia found out that majority of the respondents (78.3%) agreed that special needs students need extra attention and help in the classroom. In another view, Dapoudong (2013) also found out that respondents had partial knowledge on the provision of legislation and exhibited moderate knowledge on the symptoms of learning disabilities in Philippines. Results also shows that at least 174 (56.3%) of teachers were extremely aware that LD can affect learners in the way they receive and recall information, 88 (28.5%) were moderately aware, 30 (9.75%) were somewhat aware, 14 (4.5%) were slightly aware and 3 (1.0%) were not aware. The results therefore shows that majority of teachers were moderately aware (M=4.34 and SD=0.90) that LD affects learners in the way they receive and recall information. The processing time happens to be the key here since teachers argue that learners with LD take a longer period to receive and recall information during classroom learning. This shows that teachers understood that learners with LD had this challenge. The findings corroborate with Saad, Ismail and Hamid (2014) research in Malaysia that showed that teachers had moderate level of knowledge of learning disabilities among their pupils.

When asked as to whether they were aware that learners with LD have short attention span, 165 (53.4%) of teachers were extremely aware and 84 (27.2%) were moderately aware. This shows that majority of teachers level of awareness is moderate (M=4.22 and SD=1.02) on the issue that learners with LD have short attention span. This is in line with Lerner and Johns (2009) argument that learners with LD have short attention span. Hence, teachers need to be patient and understanding to help these learners acquire knowledge in class. Rasugu (2010) found out that three (3) head teachers and two (2) standard three teachers reported difficulties in specific areas such as reading, spelling, writing, copying accurately and arithmetic; two (2) head teachers and two (2) standard three teachers reported lack of attention span or concentration; and a similar number of head teachers as well as standard 3 teachers reported dull and unsociable as unique characteristics of learners in their schools and classrooms. On the statement that "I am aware that learners with LD exhibit general awkwardness and clumsiness", show that 105 (34.0%) of teachers reported that they were extremely aware, 86, (27.8%) were moderately aware and 67 (21.7%) were somewhat aware. The computed mean statistics shows that teachers were moderately aware (M=3.73 and SD=1.19) that learners with LD exhibited general awkwardness and clumsiness. This implies that teachers have a great responsibility of ensuring that learners with LD in their classrooms feel less embarrassed participating in various activities in the school.

Majority 190 (61.5%) of teachers were extremely aware and 68 (22.0%) were moderately aware that learners with LD performed poorly in tasks requiring reading, written expression, spelling, handwriting and mathematics. Descriptive statistics also reveal that most teachers appeared to be moderately aware (M=4.32 and SD=1.06) that learners with LD performed poorly in the above mentioned activities. The result suggests that most teachers understand that learners with LD do not perform well in various class activities, and this signifies the need for their special handling and support to ensure that they perform better. The findings coincides with Kafonogo and Bali (2013) research in Tanzania that showed that teachers could identify learners with learning difficulties based on their characteristics like low achievement on tests and assessments. Unfortunately, they labeled these learners as 'impossible learners', 'dull', 'slow learners' or 'pupils with unknown problems'. Furthermore, it was not kind at all for teachers to refer to these learners as 'poor learners' because it eventually affected their learning and performance in the inclusive classroom. It was also evident from research findings that most 218 (70.6%) of teachers were extremely aware that learners with LD can be identified through observation, screening and classroom performance. This implies that almost all teachers were exceptionally (M=4.52 and SD=0.86) aware of various methods of identifying learners with learning disabilities in their institutions. This shows that teachers utilise these techniques to know the proportion of learners with learning disabilities in their classrooms. The finding however contradicts what Shukla and Agrawal (2015) found out that only 11% of the teachers were capable of identifying learners with learning disabilities in their classrooms in India. In addition, Gandhimathi, Jeryda and Eljo (2010) research found out that majority of respondents (78.9%) had low level of awareness about identification of learners with learning disabilities.

Furthermore, Kakabaraee, Akbar and Ali (2012) established that a high percentage (90.0%) of teachers did not have a satisfactory ability in identifying students with learning disabilities. In other words, 90.0% of teachers under study did not have the required knowledge and capability of identifying and diagnosing students with learning disabilities. This shows that in India many classroom teachers in regular mainstream schools have limited knowledge about LD. To determine teacher, overall perceptions on LD in this study, scores on the ten teacher awareness areas on were summed up and average scores obtained based on the rating scale used. Figure 1 presents the results of the scores obtained.

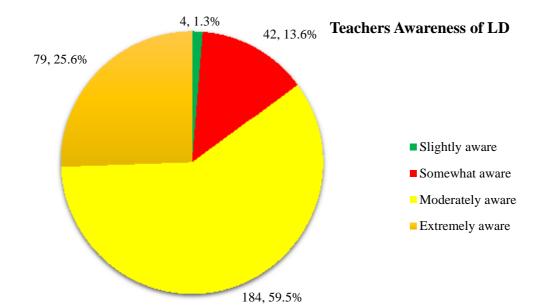


Figure 1 Teachers Awareness of Learners with Learning Disabilities (TALLD)

Result (Figure 1) show that most 184 (59.5%) of teachers were moderately aware of learners with learning disabilities in their schools, 79 (25.6%) were extremely aware, 42 (13.6%) were somewhat aware and only 4 (1.3%) were slightly aware. The result therefore shows that most teachers are fairly aware (M=4.09 and SD=0.06) of learners with learning disabilities in their schools. The teachers were more aware of the methods of identification and the challenges these learners experience in schools. The study findings coincides with Kakabaraee, Akbar and Ali (2012) who found out that awareness about the nature of learning disability was high and the teachers achieved an acceptable score. The teachers in the study believed to have had a suitable awareness about the nature of learning disability. However, they were found to be least aware that learners with LD were majority in their schools. This is in agreement with Westwood (2008) who found out that early childhood teachers were skilled in noting when children were having learning problems by taking into account their ability to: maintain attention to task for adequate periods of time; work without close supervision; persist with task despite frustrations; listen to and understand instructions; socialize with peers; and show interest in books and make serious efforts to learn.

To answer the research question (To what extent does teachers' awareness of learning disability influence the support for learners with learning disabilities in public primary schools in Trans-Nzoia Count?), the researcher correlated combined score of Teachers' Awareness of Learning Disability and level of inclusion of learners with learning disabilities in public primary schools in Trans-Nzoia County. The results are given in Table 3.

		TALLD	INC	
TALLD	Pearson Correlation	1	.256	
	Sig. (2-tailed)		.028	
	N	309	309	
INC	Pearson Correlation	.256	1	
	Sig. (2-tailed)	.028		
	N	309	309	

Table 3 Teachers Awareness of Learning Disabilities and Inclusion

Key: TALLD-Teachers Awareness of Learning Disabilities and INC-Inclusion

The results shows that there exist significant positive relationship (r=0.256 and p=0.028) between Teachers Awareness of LD in Trans-Nzoia county and effective inclusion of these learners in their schools. The results suggest that teachers awareness of LD is not high, thus leading to low inclusion of learners with learning disabilities in primary education. This implies that teachers' awareness of LD does not translate to inclusion of learners with learning disabilities in public primary schools in Trans-Nzoia County. The findings are in line with Adebowale and Moye (2013) who established that a considerable proportion of the teaching population under study still had unacceptable level of knowledge (fair and poor) of what learning disability meant. Similarly, Gandhimathi, Jeryda and Eljo (2010) found out that majority of the respondents (66.2%) were found to have low level of overall awareness about learning disability. Majority of the respondents (66.2%) were found to have low level of awareness about concept of learning disability. Therefore, the results suggest that if teachers could improve their awareness of learning disability, the level of inclusion of learners will be high. In conclusion, this objective has found out that although teachers tend to be aware of the characteristics, aetiology and challenges that LD learner's face in schools; does not translate to effective inclusive education of these learners in public primary schools in Trans-Nzoia County. This could be because most schools are understaffed which increases teachers' workload and inability to assess and monitor all learners in their classroom on regular basis.

## Teachers Understanding of Learners with LD (Interviews)

Through interview sessions, the teachers were asked to indicate their understanding of learners with LD. Teachers interviewed had this to say:

They are those children who cannot cope with learning under normal learning environment until special attention is given.

Another teacher said that:

These are learners with special needs.

Both teachers had minimal knowledge about learners with learning disabilities. Learners with LD are unique, and their special needs are specific in nature (NCSE, 2014). These learners require special attention in a normal learning environment which has been adapted to suit their individual needs (Lerner & Johns, 2014; NASET, 2014). From the interview with teachers, it was noted that a few of them understood who learners with LD are while majority did not. This therefore could affect their learners' inclusion in normal classroom settings. The findings coincide with a study conducted in India by Shukla and Agrawal (2015) that found out that 67% of teachers had no knowledge of learning disabilities 20 % teachers had little awareness of learning disabilities and only 11% teachers knew about learning disabilities satisfactorily. Robuck (2009) alleged that general education teachers usually had very little knowledge about learning disabilities in general supported this. Nonetheless, Dapoudong (2014) found out that teachers had moderate knowledge on inclusive education as a way of reducing social discrimination, and as integration of special educational needs learners in mainstream classrooms.

## Focus Group Members Understanding of Learners with LD

The focus group discussion involved teachers from the five sub counties. They were asked about their understanding of learners with learning disabilities. The following are statements recorded from group 1 and 2 of FGDs. Group 1 reported that:

- Children who come from different homes due to their surrounding making them not to fit in the normal classroom
- Those who cannot get the information from teacher quickly capability of understanding information takes a lot of time to digest
- Some of them make mistakes e.g. instead of writing + (plus) they write (minus), when it comes to addition they forget to carry they are forgetful in summation that involve caring off. These mistakes may be seen obviously. They can write letter 6 in a reverse way e.g. 6-9, 3-8, I one, d(b)
- Group 2 members reported the following as their understanding of learners with LD.
- Those who have problems in reading and writing, their performance is hindered by several factors which were:
  - They have problems with conversations
  - They are low achievers performing lower in mathematics

The above responses show that learners with learning disabilities are not well known by teachers in public primary schools in Trans-Nzoia County. During the discussion teachers reported that these learners are known as slow learners and, or low achievers in their classes/ schools. Some teachers indicated that these learners' problems could have been genetically inherited from family lineage while others mentioned that it could have been developed from learners not being supported effectively by their teachers in school. The problem of truancy in school and class was also mentioned as a contributing factor to learning disabilities among learners in public primary schools in Trans-Nzoia County. In agreement with the study findings, Gateru (2010) research found out that most teachers in Nairobi County were aware of inclusive education in their schools for learners with learning disabilities.

#### **Conclusions and Recommendations**

According to the study results, 70.6% of teachers perceived that they were extremely aware that learners with LD could be identified through observation, screening and classroom performance (M=4.52 and SD=0.86). This showed that teachers were aware on the methods of identifying learners with learning disabilities in their classrooms/schools. In addition, 64.1% of teachers also said that they were extremely aware that learners with LD experienced diverse challenges in their education (M=4.49 and SD=0.82). These challenges streamed from home, school and even in classroom. However, research results showed that most teachers were somewhat aware that learners with LD were the majority in their schools. However, teachers in the focus group identified that

they had a high proportion of learners with LD in the classes/ schools. During focus group discussion, it was established that some teachers were not able to differentiate between learners with learning disabilities and with learners with special needs. On average, teacher responses showed that 59.5% were moderately aware of who learners with learning disabilities were in their schools. The lack of adequate teacher understanding affected the support that was required to be given to those learners. In making recommendations, Ministry of Education need to provide teachers with in-service training on inclusive education and special needs education to increase their awareness level. Teachers also need to look for opportunities for further training on issues related with inclusive education and learning disability.

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