

# Influence of Teacher Characteristics on Academic Performance of Learners with Hearing Impairment in KCPE in Special Primary Schools in Selected Counties, Kenya.

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**Abstract :** *This study explored the relationships between selected teacher characteristics and academic performance of learners with hearing impairment in Kenya Certificate of Primary Education (KCPE) in special primary schools in selected counties. The study used the descriptive survey research design. The selected teacher characteristics for the study included teacher level of qualification, teacher years of professional experience, teacher absenteeism from school and teacher pedagogical knowledge. One hundred and eight respondents were purposively selected for the study. This sample was made up of seventy one learners, thirty three teachers teaching upper primary and four head teachers. Data collected were categorized, coded and keyed into the computer software the Statistical Package for Social Science so as to get frequency tables and percentages. The findings showed majority of teachers handling learners with hearing impairment in special primary schools were highly qualified, experienced, attend school regularly and had the requisite pedagogical knowledge to cater for these learners effectively. Contrary to the findings, academic performance of learners with hearing impairment in KCPE in special primary schools continues to remain below average with most schools managing a mean of less than hundred and fifty marks. The study recommended capacity building for teachers through workshops and seminars on new skills and trends of effective handling of these learners. Also, curriculum support services and monitoring of instruction processes be enhanced by field officers and strengthening internal supervision of the school instruction processes.*

**Key words:** *Qualification, Professional Experience, Absenteeism, Pedagogical Knowledge, Academic Performance, KCPE, Special Schools.*

## 1.0 Introduction.

Globally education is regarded as a basic human right which is used to enlighten the participants and geared towards generation of wealth and power (Anita, Mise, Odera & Oyugi, 2013). It is therefore paramount that accessibility and quality of any education should meet the diverse needs of a learner. Kenya did roll out a free primary education in 2003 which saw many children including those with special needs in Education (SNE) being enrolled in special schools, units and in regular schools (Task Force Report, 2003). Among the SNE learners are those with hearing impairment who goes through a normal regular school curriculum developed the Ministry of education and examined by the Kenya National Examination Council (KNEC). Teachers handling these learners need be suitably trained in the field so as to cater adequately on the diverse needs of learners with hearing impairment (LWHI).

World Health Organization (WHO, 2011) assert that people with disabilities (PWD) experience worse educational outcomes making them more likely to be poor than persons without disabilities. It is hard for PWD to be absorbed in the labour market which is majorly begged on academic performance of the individual. So access to quality education can help reduce educational marginalization and provide job opportunities for PWD which a large percentage is formed by those with hearing impairment. Further, WHO (2011) postulate that PWD have experienced inequalities over the years in fields such as health care, education and employment as a result of low performance in examinations which is a tool used to select and place individuals on different classes and occupations.

MoE (2005) observed performance of LWHI in special schools in KCPE is dismal as compared to those of other disabilities. This could be attributed

to insufficient supervision of learning in the special schools, inadequate curriculum implementation and examination offered to LWHI, and lack of skills and knowledge among teachers handling LWHI. National Deaf Children Society (NDCS, 2014) opined that the key to unlocking the full potential of LWHI in special schools lies in the expertise of teachers and head teachers. It further posit that a friendly teacher for LWHI should be willing to learn, flexible, fair, explain things clearly with patience, understands the learners who are deaf, a good communicator and sets a good example. On the other hand, Abe (2014) argued that one overriding factor for the success of a learner's academic performance is the teacher. Ibrahim (2000) hold the belief that teachers' level of qualification and exposure can go a long way in bringing about learners academic performance. Adieze (cited by Abe, 2014) observed shortage of qualified teachers leads to poor academic performance among learners. According to Ibrahim (2000) learners taught by more qualified and experienced teachers perform better than those taught by less qualified but experienced teachers. Obegi (2014) assert that a teacher forms bedrock in the lives of a learner at any level of education.

A study by Rivkin, Hanushek and Kain (2005) in Texas and New Jersey showed teachers are useful in the acquisition of academic skills by a learner. Aaronson, Barrow and Sander (2007) as well found that teachers' impact on learners' academic performance was vital. Yu Chen (2010) in Taiwan observed that a teacher spending more time on learners and class preparations tend to be more effective in content delivery as well as improvement of learners' academic performance. According to Etsy (2005) teacher factors that significantly contributed to low performance included lateness to school, absenteeism and inability to complete the syllabi. Muleyi (2008) said teachers do influence learners' academic performance to a greater extent. Yala and Wanjohi (2011) and Adeyemi (2010) found that teacher experience and educational qualification are the prime predictors of learners' academic performance contrary to Rivkin et al (2005) assertion that teachers' professional experience and level of

education were not significantly related to the learner's academic performance.

Odhiambo (2005) on the other hand contend that there is a growing concern from the Kenyan government and the public for teacher accountability that should be evaluated using learners' performance data. Also Kara and Russel (2001) opined that there has been no consensus on the importance of teacher factors leading to the common conclusion that the existing empirical evidence does not hold a strong role for teachers in the determination of learners' academic performance. In the contribution of Bunyasi (2010), poor academic performance among LWHI in KCPE could be due to teachers' reluctance, lack of skills in Kenyan Sign Language (KSL) and inadequate use of learning resources in classes for LWHI.

### 1.1. Statement of the Problem

Academic performance of LWHI in KCPE in special schools is dismal and seemed to remain poor (MoE, 2005). This trend is discouraging and is of great concern to the government of Kenya and other stakeholders in the education sector. Majority of the selected special schools for LWHI in the study performed below average in KCPE as shown in Table 1 getting a mean of less than 160 marks. Poor performance in KCPE denies LWHI an opportunity to join secondary schools and in the long run may jeopardizes opportunities for future job placement making them to live dependable lives in the society.

Taking into account that teachers' role in the instruction processes cannot be underestimated at all cost, studies need be made to investigate the contribution of teacher level of qualification, teacher year of professional experience, teacher absenteeism from school and teacher pedagogical knowledge on the academic performance of learners with hearing impairment in KCPE. Therefore, this study sought to find out the influence of selected teacher characteristics on academic performance of LWHI in KCPE in special primary schools in selected counties of Kenya.

**Table 1. KCPE Results for the selected special schools for LWHI**

County	School	School Mean Score	
		2012	2013
Uasin Gishu	Eldoret Sch for HI	167.44	149.35
Nandi	Kapsabet Sch for the Deaf	145.00	128.55
Elgeyo Marakwet	Iten School for the Deaf	141.00	141.22
Baringo	Esageri Sch for the Deaf	187.79	190.00

Source: MoEST KCPE analysis (2013)

## 1.2 Objectives of the Study

The main objective of the study was to investigate the influence of the selected teacher characteristics on academic performance of LWHI in KCPE in special schools in selected counties.

## 1.3 Research Questions

The study was guided by the following research questions;

- i. To what extent does teacher level of qualification influence academic performance of LWHI in KCPE in special schools in selected counties in Kenya?
- ii. How does teacher years of experience influence academic performance of LWHI in KCPE in special schools in selected counties in Kenya?
- iii. How does teacher absenteeism from school influence academic performance of LWHI in KCPE in special schools in selected counties in Kenya?
- iv. What is the impact of teachers' pedagogical knowledge on academic performance of LWHI in KCPE in special schools in selected counties in Kenya?

## 1.4 Conceptual Framework

Conceptual framework that aided the study was developed based on the research questions and this helped in bringing about the relationship between the variables in the study. Wobman (2004) observed that a learner's performance is as a result of several inputs and interactions in the educational process. This could include but not limited to learner's health, family background, school environment, availability of teaching/learning resources and teacher characteristics. The teacher characteristics which could affect academic performance of a learner include teacher qualification, experience, motivation, pedagogical knowledge, personal health, absenteeism and attitude (Ankomah, Koomson, Bush & Oduro, 2005). This study sought to investigate the influence of selected teacher characteristics of teacher qualification, experience, absenteeism and pedagogical knowledge on academic performance of LWHI in KCPE in special schools in selected counties Kenya. The variables of the study are shown in Figure 1.

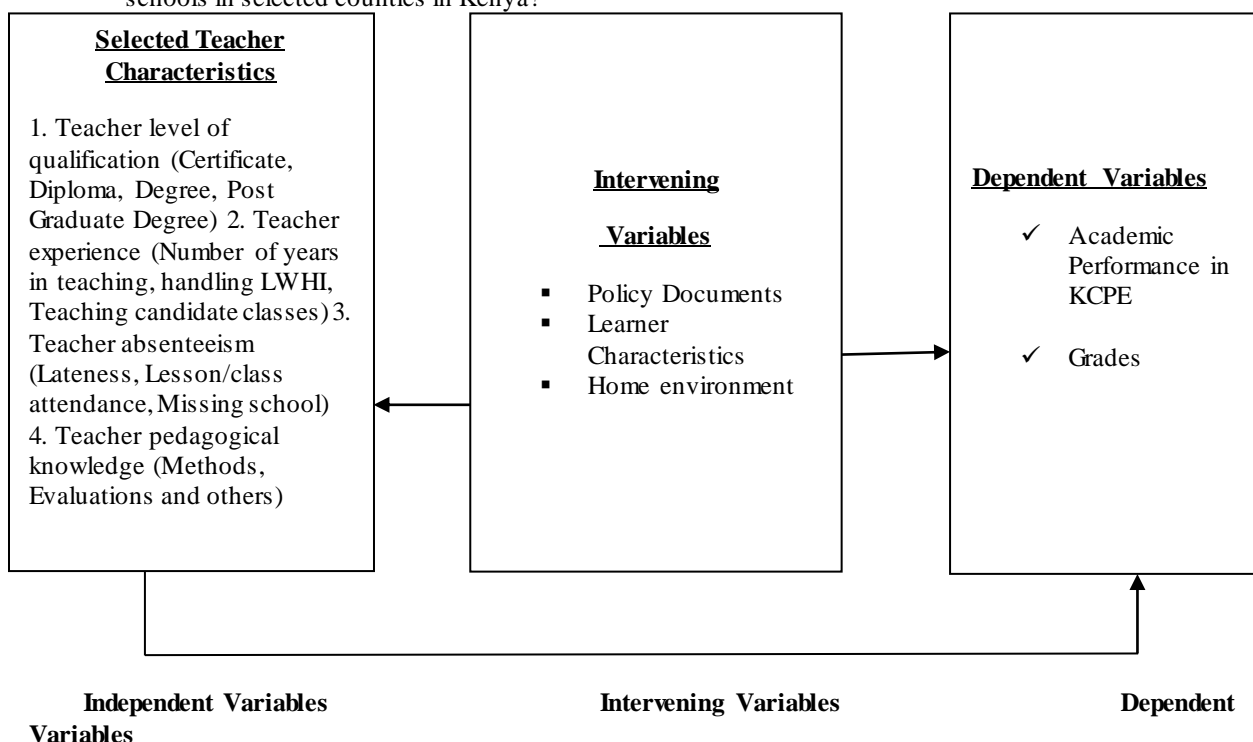


Figure 1. Relationship between selected teacher characteristics and academic performance of LWHI in KCPE.

## 2. Literature Review

### 2.1 Teacher Qualification

Teacher qualification has a relationship with academic performance of learners. Gold and Brewer (2000) established that teachers with subject matter perform better than others. Similarly, Wang (2005) showed that students taught by intern teachers performed worse in math and Chinese than those taught by graduate teachers. On the other hand, Huang and Moon (2009) while investigating the relationship between teacher qualification and student performance established that teacher qualification accounted for 40-60% of the variance in student achievement. Akinsolu (2010) found that availability of qualified teachers determined the performance of students in school.

Oduor (2014) cited the then Teachers Service Commission (TSC) secretary Gabriel Lengoiboni who had observed that some teachers had become semi-illiterate after the neglect of constitutional requirement of taking proficiency courses. In addition, Anita, Mise, Odera and Oyugi (2013) revealed that teachers involved in in-service training were more effective in classroom as compared to teachers who had not undergone training. It can be seen that teacher qualification cannot be ignored when good results is to be realized in schools. A qualified teacher has the content matter, change of attitude, varied skills and knowledge to cater for varied needs of the learners and may modify the instruction processes to suit learners with hearing impairment.

### 2.2 Teacher Years of Experience

Recent studies have shown that teachers' years of experience in the teaching profession have an influence on academic performance of learners. Dial (2008) stated that the only indicator that was systematically linked to student achievement in third grade was teacher experience. The more one has been in the field for many years seem to have acquired complete maturity to handle any learner well in any learning environment. Rockoff (2004) and Felter (2006) found that a teaching experience of ten or more years positively influence student achievement in reading. A teacher with more number of years teaching has a richer background of experience to draw from and could contribute insights and ideas to the teaching/learning process which could aid in the betterment of academic performance of a learner. A view that seemed to deviate from the findings above is shared by Rafael (2008) who observed teacher experience contributed to student learning only in their first

few years in classroom but additional experience does not make a difference after that. Also, Zuzovsky (2003) assert that the benefit of teacher experience level off after a few years of teaching.

Stringfield and Teddlie (1991) found that more experience teachers are considered to be able to concentrate on the most appropriate ways of teaching a particular topic to students who differed in abilities, prior knowledge and family background. For learners with hearing impairment to do well academically a teacher with such experiences is very vital. An analysis of experiences of teachers who were deaf and used sign language in teaching confirmed classroom engagement, active participation and peak performances of learners who are deaf (Roald, 2002). Smith and Ramsey (2004) found that teachers' fluency in sign language and experience interacted to yield an effective strategy for increasing learners' involvement which in the long run could result to better academic performances. Anita *et al* (2013) revealed students taught by more experienced teachers achieved at a higher level because teachers had mastered content and acquired classroom management skills to deal with different types of classroom challenges.

### 2.3 Teacher Absenteeism

Teachers being the key factor towards learners' academic achievement need to be regularly present and readily available to attend to the needs of the learners in school and classroom. Alexander (2013) found out that the overall academic performance of students was negatively affected by high teacher absenteeism. It further revealed that teachers who posted the highest level of absenteeism recorded the lowest scores of students' academic performance. Clotfelter, Ladd and Vigdor (2007) estimated that a student achievement in math and reading can fall with teacher absenteeism. Bruno (2002) posit that high absenteeism by some teachers tend to lower the morale of remaining teachers which could result to high teacher turnover as the other tend to feel more burdened regarding additional planning for the absent colleagues.

Wednesday was found to be missed more than any other day of the week (Unicomb, Alley & Barack 1992) and that Monday had the fewest number of days missed per week. Scott and McClellan (1990) established male teachers tend to miss fewer days than female teachers by a ratio of 3.39 to 5.29 days per academic year. NDCS (2014) posit that absenteeism from school negates the effort of a learner in connecting and recalling concepts which had been deliberated upon. This view is shared by the researcher in that learners

with hearing impairment tend to forget concepts easily. As a result of teacher absenteeism from school, these learners could lose more and syllabus coverage may not be well done on time. Uwezo Kenya (2012) opined that one out of ten teachers is out of school on a given day. As teachers miss to attend school, learners' concentration and passion to learn diminishes and could open an avenue for teacher centred learning rather than learner centred learning that could jeopardize effective and meaningful deliberation during the instruction processes geared towards achievement of good results among learners with hearing impairment.

### **2.4 Teacher Pedagogical Knowledge**

Teachers' awareness on the varied teaching/learning methods, practices and attitudes is paramount towards result oriented instruction process. Koehler (2011) stated that pedagogy encompasses overall educational purposes, values and aims, classroom management, lesson planning and learners' evaluation in the learning process. Kituyi (2014) asserted that teachers are trained to utilize an in-depth understanding of the subject matter and to construct meaningful learning activities and assessments for all learners as per the curriculum. Learners with hearing impairment requires adequate preparation, guidance and support at each level of the learning process to be able to accomplish the given tasks thus building their self-confidence and working hard towards realization of better academic performance. Alexander (2013) explained that educational purpose of engaging in teaching was to assist learners gain literacy, develop skills and values to function well in society. With proper teacher pedagogical knowledge that is well used to serve the intended purpose, a learner with hearing impairment could fit and accepted well in the society thus engaging socially and economically as part of a whole in the society.

Fallon, Zhang and Kim (2011) observed the need for teacher training on management of behavior among learners with disabilities. It is essential that teachers are trained in skills and strategies to support behavior management in classroom as well as the ability to differentiate instruction for learners with special needs. This could be carried out by use of individualized education program for each learner so as to address the individual diverse needs. As a result, there could be an upward academic performance of learners with hearing impairment. Teacher pedagogical knowledge could dictate the output of the teaching/learning process depending on the different use of the varied methods, skills and

knowledge employed by the teacher in the classroom environment.

### **3. Methodology**

This study made use of the descriptive survey research design. The design was adopted by use of questionnaires to obtain information about the selected teacher characteristics and its influence on academic performance of LWHI in KCPE. Four special schools for LWHI one from each of the four selected counties arrived at through simple random sampling were used to get the respondents for the study. Each of the special schools follows the regular academic school curriculum and participates in the national examination of KCPE. Purposive sampling was used to get the schools and respondents of the study.

The target population for the study comprised all learners in classes seven and eight, teachers teaching upper primary and head teachers in the selected special schools for LWHI. The sample for the study consists of 108 respondents made up of 71 learners with hearing impairment, 33 teachers and 4 head teachers purposive selected. The selected teachers have at least been handling the candidate classes in the period 2012-2014 covered by the study. Data for the study was collected using three types of questionnaires meant for learners, teachers and head teachers to elicit information on the selected teacher characteristics and its influence on performance of LWHI in KCPE. Each respondent was issued with a copy of the questionnaire and learners were assisted by the class teachers to comprehend the procedures then allowed to make their response to the questions in the instrument. Head teachers provided information on KCPE performance among LWHI for the period 2012-2014 as indicated by KNEC. The completed questionnaires was collected, sorted, coded and fed into a computer assistive device the Statistical Package for Social Sciences for analysis using frequency tables and percentages. A descriptive brief was noted on each of the findings.

### **4. Results**

The findings from the study sought demographic information of the respondents so as to establish relationship between the selected teacher characteristics and academic performance of learners with hearing impairment in KCPE. Results obtained from the study as stipulated in Table 2 showed majority (75%) of head teachers are males, most teachers (54.5%) in special schools

are females while majority (50.7%) of the learners are females. A sizeable part of learners (3%) were overage at (22-25) years old. On performance of learners with hearing impairment in KCPE in the period 2012-2014, results indicated majority (75.2%) of learners with hearing impairment scored less than 160 marks consisting of 38.9% boys and 36.3 girls while 24.8% scored more than 160 marks consisting of 15.1% boys and 9.7% girls. Most of the teachers (48.5%) had a bachelor degree while 50% of head teachers were degree holders. On the hand, most teachers (48.5%) observed that teacher level of qualification influences academic performance of learners with hearing impairment. All head teachers (100%) and a majority (75.8%)

of teachers had a teaching experience of over 15 years. Most of the teachers (63.6%) attend school regularly. On teacher pedagogy, most teachers (45.4%) were of the view that they do assist learners with hearing impairment during their free time occasionally and on collaboration, majority of the teachers (51.5%) assert this happens during team teaching. Head teachers reported that about 75% of professional documents are hardly prepared by teachers which could mean that there is inadequate preparation for instruction processes by curriculum implementers and this could impact negatively on the syllabus coverage as well as academic performance of learners with hearing impairment.

**Table 2. Summary findings of the study**

Variable	Label	Frequency	Percentage	
Gender–	Head teachers	M	3	75
		F	1	25
	- Teachers	M	15	45.5
		F	18	54.5
	- Pupils	M	35	49.3
		F	36	50.7
Age of pupils	10-12 years	2	3	
	13-15 years	27	38	
	16-18 years	34	48	
	19-21 years	6	8	
	22-25 years	2	3	
KCPE Scores (2012-2014)	100-160 marks- M	44	38.9	
	- F	41	36.3	
	161-200 marks – M	17	15.1	
	- F	11	9.7	
Education Qualification	- Teachers	Certificate	2	6.1
		Diploma	12	36.4
		Degree	16	48.5
		Post Graduate	3	9.1
	- Head teachers	Certificate	1	25
		Diploma	1	25
		Degree	2	50
		Post Graduate	0	00
Qualification influence performance	influence	Strongly agree	26	36.4
		Agree	34	48.5
		Undecided	02	03
		Disagree	00	00
		Strongly disagree	9	12.1
Teaching experience	- Teachers	5-8 years	3	9.1
		9-12 years	3	9.1
		13-15 years	2	6
		Over 15 years	25	75.8
Teaching experience-head teachers		Over 15 years	4	100
School attendance-teachers		Occasionally	1	03

	Frequently	21	64.6
	Very frequent	11	33.4
Assisting LWHI during free time	Rarely	2	6.1
	Occasionally	15	45.4
	Frequent	14	42.4
	Very frequent	2	6.1
	Team teaching	17	51.5
Teacher collaboration	Panel meetings	14	42.4
	School INSETs	2	6.1
	Often	1	25
Teacher preparation	Occasionally	2	50
	Never	1	25

## 5. Discussion

This study described the influence of selected teacher characteristics on academic performance of LWHI in KCPE in special schools in selected counties. Results from the study indicated that special schools for LWHI are well staffed and this could give the learners an opportunity to be attended to effectively both during and outside the instruction process. With a total number of 58 teachers compared with 398 LWHI in the schools giving rise to a ratio of 1:7 which is within the ministry's recommendation of 1:12 (MoEST, 2007). Contrary to the staffing balance the findings revealed majority (75.2%) of LWHI scored less than 160 marks in KCPE within the period 2012-2014. This effect could mean that despite the adequate availability of teachers in special schools for LWHI there is more that meet the eye on the low performance by LWHI in KCPE yet enough teachers are in the school.

Further, the findings revealed majority (54.6%) of teachers had degree or post graduate degree meaning they have the requisite qualification to handle content delivery to LWHI translating to better results. Shockingly this is not reflected well by the dismal performance of LWHI in KCPE in special schools. This view is shared by Bunyasi (2010) in that teachers handling LWHI are highly qualified, has the skills and knowledge to work well with the learners for better results but the outcomes of KCPE is poor. It is evident that teacher level of qualification does influence performance of a learner through acquisition of new knowledge, skills and attitudes. This also shall facilitate more understanding and accommodation of divergent opinions as well as ability to use varied teaching/learning methods to aid in the instruction process. Majority (48.5%) were in agreement to this fact with only a portion (12.1%) disagreed arguing that they had seen unqualified

teachers producing better results than the so called qualified. Anita et al (2013) observed that teachers who undergo in-service training were more effective in the classroom as compared to those who had not undergone any further training.

The study found majority (75.8%) of teachers and 100% head teachers had a professional teaching experience of more than 15 years. This is an indication that teachers and head teachers have the desired experience to work with LWHI in any learning environment, very understanding and considerate to the diverse needs of the learners as well as being in good position to guide and prepare LWHI achieve better results in KCPE. Felter (2006) argued that experience of more number of years a teacher has been practicing teaching could translate to high test results in the end. This view is supported by Rockoff (2004) who posit that a teaching experience of more than ten years positively influence performance of a learner. These observations and findings from the study do not read on the same script because performance of LWHI in KCPE is below average yet teachers are qualified and experienced.

Uwezo Kenya (2012) assert that one out of ten teachers is absent from school daily. The findings from the study showed majority (63.6%) of teachers are always in school while about 47.9% of the learners reported teachers attend class regularly. Teacher absenteeism from school affects a learner's concentration on given tasks due to misconception or misunderstanding of given instructions that could have been assisted by the presence of a teacher. Allexander (2013) observed that academic performance of a learner is negatively affected by teacher absenteeism from school. Performance of LWHI in KCPE remains below average despite the assertion of the majority (63.6%) that they are present in school regularly. This fact could suggest teachers are under teaching,

the mode of instruction is wanting or ineffective assistance given to the learners that could aid them do well in their examinations.

Learners with hearing impairment have diverse needs which need to be catered for effectively for them to realize good results. Results from the study indicated that majority (45.4%) of teachers do assist and provide individual attention to LWHI occasionally during free time. The findings concur with Kimani, Kara and Njagi (2013) in that individualized attention to weak learners had a significant effect on academic performance though on the hand Ogola (2010) noted that it was difficult to offer individualized attention due to large number of learners in a classroom thus resulting to poor performance. Contrary to Ogola's observation the results showed in special schools for LWHI the number in classroom is minimal to at least seven which is manageable and adequate for realization of better results.

Also the findings indicated most teachers (42.4%) use question and answer technique and continuous assessment tests (CATs) as the most suitable strategies for evaluating learners and the lesson. Peer tutoring and task analysis was also considered effective by 18.2% of the respondents while field trips, demonstrations and self-directed activities were on the least side at 6.1%. In support of the findings, Mukangu (2008) observed the most preferred methods were discussion and question and answer whereas the least preferred were field trips and group work. Ouma (2015) opined that 34% of teachers preferred paired and group work method. All these could yield good results if effectively executed with an aim of assisting a LWHI acquire and perform independently on given tasks with ease. The methods could be utilized well to maximize potentials of the learners doing well in examinations. Raising concerns of this fact, majority (50%) of head teachers assert that teacher preparation of professional documents was wanting. This could suggest teachers do not prepare well for lessons, content delivery is inadequate and syllabi coverage may not be met and all these could possibly lead to poor performance among learners with hearing impairment in KCPE.

## **6. Conclusion**

The study concluded that teachers in special primary schools for LWHI are highly qualified and experienced. This could positively impact on the academic performance of the learners for better

results which was not the case in the findings as performance of LWHI in KCPE in special schools in the selected counties is still below average. The study also concluded that teacher absenteeism from school was at minimal as well as lesson attendance. If this was so then performance of LWHI in KCPE could have improved since most teachers could be attending to the needs of the learners well. Inadequate preparation by teachers seemed to negate the realization of better results by LWHI. Furthermore, the study conclude teacher pedagogical knowledge on varied teaching/learning methods, evaluation, interests and provision of individualized attention to the LWHI could go a long way in assisting them achieved good results in KCPE.

Therefore, the government through her agencies can organize seminars and workshops for teachers and ensure there is a thorough functional internal supervision structures to monitor teaching/learning processes. Adequate support of LWHI to realize their dreams is called for by the study through provision and maximum use of teaching/learning resources, guidance and proper completion and implementation of the academic curriculum that is examined as a whole by KNEC at the end of primary cycle.

## **7. Recommendations**

The study findings revealed that teachers handling learners with hearing impairment in special primary schools are qualified though the academic performance of these learners remains low. Teachers and head teachers in the special primary schools for learners with hearing impairment need be further trained on the effective use of Kenyan sign language as a medium of instruction as well as other forms that could be of benefit towards proper interaction among the learners and teachers during the instruction process.

Having more experienced teachers who have taught over 15 years in special primary schools for learners with hearing impairment could be a pointer of the need for teachers service commission (TSC) to have new young teachers be posted to mingled with the experienced one and aged. This will aid during retirement the schools shall not be hit hard by teacher shortage as well as ensuring smooth transition in the schools.

Though the findings showed most teachers attend school regularly, there could be a scenario of teachers being in school but not going to class. The study recommend head teachers and field officers carry out frequent supervision of curriculum implementation and lesson attendance by teachers.



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