#### THE LEVEL OF STAKEHOLDERS' AWARENESS ON SUITABLE INSTRUCTIONAL MATERIALS/ STRATEGIES FOR THE MANAGEMENT OF LEARNERS WITH HEARING IMPAIRMENT IN REGULAR PUBLIC PRIMARY SCHOOLS IN KAJIADO COUNTY, KENYA

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#### ABSTRACT

Inclusive education through regular schools for learners with special needs and disabilities has been embraced by many countries worldwide including Kenya. However, a critical look to the management of learners with hearing impairment in the regular primary schools tickled the researcher prompting the current study whose purpose was to investigate the level of stakeholders' awareness on suitable instructional materials for the management of learners with hearing impairment in regular public primary schools in Kajiado County, Central sub-county. The study used mixed methodology for collecting data and adopted embedded design. The target population comprised head teachers, teachers, board of management chairpersons and the District Education Officer in Kajiado central sub-county. The stratified random sampling technique was used to obtain a sample of 20 schools out of a total of 101 regular public primary schools. Purposive sampling technique was used to select 20 head teachers, 20 BOM chairpersons and the DEO while simple random sampling was used to select 117 out of 585 teachers from the schools that were chosen thus making a sample of 158 respondents out of 788 target population. Except for the DEO, twenty percent was applied in all cases to obtain the participants for the study. The study mainly used questionnaires and an interview schedule as tools. The instruments were pre-tested on 20 respondents and the split-half reliability correlation coefficient of 0.7 was used. The validity of the instruments was determined by five experts from Mount Kenya University in which a concurrence inter-rater of 0.6 was used as the threshold. Qualitative data was organized into related key themes and summarized in narratives. Quantitative data was analyzed using the Chi-Square technique with the help of the Statistical Package for Social Sciences (SPSS) version 21. The study found the major issues in Kajiado central Sub County as lack of training of stakeholders and inadequate awareness of Special Needs Education/Inclusive Education causing unpreparedness in all the institutions. The study recommended training of the stakeholders and creation of awareness of SNE/IE. Secondly, suitable resources to be availed in the schools.

**Keywords:** Regular public primary school, Hearing impairment, Instructional material, management

#### **INTRODUCTION**

Inclusive education is a process of addressing the learners' needs within the mainstream by using all available resources and creating opportunities for learning in preparing learners for life (Randiki, 2002). The right to education and demands of its systems and programmes to be designed to suit the wide diversity is confirmed by article 2 of Salamanca Statement (1994). This means an appropriate child-centered teaching and learning environment must be provided by regular schools for accommodating special educational needs. The article partly concluded that " this inclusive orientation in regular schools offer the most efficient ways of

combating discriminatory attitudes, creating welcoming communities, constructing an inclusive society and attaining education for all..." This realization originates from the UNESCO Constitution of 1945 which was founded on the expression of a notion: "in full and equal opportunities" for EFA. The demand for including children with special needs in the mainstream has its own managerial implications. The stakeholders must have adequate awareness of the policy and the personnel require training for the requisite skills in handling learners with special needs and disabilities.

According to Gallager (2003), inclusive education in many countries all over the World has been to guard the children with disabilities against discrimination in education as per the Human Rights Law (1948). About 96 percent of children with disabilities in USA are educated in the general schools and nearly half of them use most of their school day in regular inclusive classroom (US department of education, 2005). Countries like Britain, USA or Scandinavian Uganda and even Kenya are practicing inclusive education. According to Zollers, Ramanathan & Yu, (1999) the fact that inclusive education has been embraced rarely translate to action in the classrooms. They further assert that the success of inclusion depends on head teachers' attitudes and actions and the investment made by school human resource as they make the culture of the school and have the power to challenge or back up inclusion (Ainscow, 2002). African countries have embraced inclusive education policies as a new phenomenon in the field of education. The emphasis is put on policy options from integration to inclusive schools to serve all children with disabilities in the mainstream (Arbeiter 2002).

Children with special needs can lead independent or near normal lives. Nevertheless, history indicates that learners with special needs particularly those with hearing impairment have been excluded from schools, especially in the developing countries like Kenya (Hicks, 2011). Though with a lot of controversies, inclusion has been considered the best option to serve learners with special needs. However, due to linguistic barrier, learners with hearing impairment in the mainstream schools can have significant negative effects if proper support and special attention is not sufficiently provided (Wamae, 2004). This calls for the stakeholders to be aware of appropriate instructional materials

The Kenyan government has initiatives under a long-term perspective and allocation of resources for the adequate development of inclusive education. Children with special needs receive special capitation grants and government calls on learning institutions to be adaptive and accommodative to the children including those with hearing impairment. The question was whether the stakeholders involved were aware of suitable instructional materials for learners with hearing impairment.

# STATEMENT OF THE PROBLEM

The Government of Kenya developed a comprehensive National Special Needs Education Policy Framework in 2009 which emphasized inclusion of learners with special needs and disabilities in regular schools including those with hearing impairment. The policy did not give specific guidelines on how institutions should be prepared in terms of suitable instructional materials for learners with hearing impairment in regular schools. Educational Assessment and Resource Centres' report indicated that there had been low levels of induction courses or seminars to prepare stakeholders on the management of learners with hearing impairment. These facts prompted the researcher to investigate the level of education stakeholders' awareness on suitable instructional materials for the management of learners with hearing impairment in regular public primary schools in Kajiado central sub county.

#### LITERATURE REVIEW

The provision of appropriate instructional materials in an inclusive classroom is essential for the achievement of education for learners with hearing impairment. Onyango, (2001) explains materials and resources as resources that are designed, modified and prepared to support teaching and learning. Some of the major tasks of the head teacher as manager is the acquisition, allocation, distribution and maintenance of the resources. Learners with special needs require differentiated educational resources at individual and school levels such as white canes, machines, Braille kit, papers, adopted computers, tactile diagrams and maps, adopted desks, chairs, hearing aids among others (Kirk & Anstaiow, 2003). Muranja (2012) found that Teaching and learning resources were a major problem to most teachers.

Teachers of students with hearing loss should offer them preferential seating in their classroom (Fullan, 2014). They ought to have a seat near and facing the teacher without straining eye- contact; the better ear should be turned towards the teacher; movement allowed for demonstrations or other classroom activities when necessary. For lip-reading learner users, teachers must avail, increase and use a lot of visual information (aids) to supplement what they hear. Whenever possible, the teacher should demonstrate what the learner is supposed to understand. Gudyanga (2014) conducted a study in Zimbabwe, which portrayed students with hearing impairment at risk of exclusion from the teaching and learning unless intervention of full inclusion were taken. The study revealed that apart from communication difficulties, learners experienced feelings of wrath, thwart and isolation based on the orders of the surrounding. Literature indicates that learning is a process which occurs under observable and real situations to the level that conditions in which learners are put purposely or otherwise have big effects on them.

Eshiwani (1985), points out that lack of school resources affect learning in schools in Kenya. The size of the class, textbooks, library and visual aids are among the factors specified as school resources. Tum (1996) supports Eshiwani as he says that lack of facilities is a primary contributory factor to poor achievement, which comes as a result of poor teaching methods. According to Coombs (1995), teaching materials are used to promote learning; maintain interest, add variety to the lesson and to relate one subject to other subjects. The inadequacy of materials and equipment may have adverse effects to learners with hearing impairment especially the hearing devices for those who are hard-of-hearing. This calls for the preparedness of the head teachers in collaboration with board of management in facilitating for sufficient and appropriate resources for effective management of learners in regular primary schools.

#### MATERIALS AND METHODOLOGY

#### **Research Methodology**

The study used mixed methodology that combines quantitative and qualitative research approaches for the aim of breadth and depth of apprehension and certification (Johnson, Onwuegbuzie & Turner 2007). Qualitative and quantitative forms of data was linked for three reasons: First, for confirming or corroborating each other via triangulation; second, for elaborating or developing analysis, offering richer details and third, for initiating new lines of thinking through attention to new ideas coming up and providing fresh insight (Miles & Huberman (1994). The researcher used quantitative research supplemented by qualitative research in order to offer a holistic opinion on the level of stakeholders' awareness on suitable materials for the management of learners with hearing impairment in regular public primary schools in Kajiado County, central sub county.

# Sample and Sampling Procedures

Orodho & Kombo, (2002) refer sampling as a process of choosing a number of individuals or objects from a population such that the chosen group consists components representative of characteristics found in the whole group. Rohilla (2010) defines Sampling as "the act, process or technique of selecting a suitable or representative's part of a population for the purpose of determining parameters or characteristic of the whole population". Sampling technique is a description of the strategies which the researcher used to select representative elements/subjects/respondents from target /accessible population (Oso & Onen, 2009). Gay (1981, cited by Mugenda and Mugenda, 2003) asserts that, for descriptive study 10% to 30% of the accessible population is enough for a sample size. A sample is the segment of a target population which is selected for a study or it is a subset of the target population (Byman & Bell, 2003). Except for the DEO, twenty percent was applied to the total target population to get the sample size. Kajiado Central sub-county has five educational zones with 585 teachers and therefore stratified random sampling technique which divides the population into groups (strata) based on some characteristics was used to obtain a sample of 20 schools out of 101 regular public primary schools. Purposive sampling technique was used to select 20 head teachers, 20 BOM chairpersons and the DEO while simple random sampling was used to select 117 teachers from the 20 schools that were chosen making a total of 158 respondents out 788 target population.

# **Research Instruments**

The researcher mainly used Questionnaires and an interview schedule to facilitate gathering of data

# Questionnaires

The researcher prepared 3 sets of questionnaires on level of stakeholders' awareness on suitable instructional material for the management of learners with hearing impairment in regular public primary schools for head teachers, teachers and BoM chairperson. Each set of questionnaire were slightly different for the three groups. Questionnaires were used due to their advantages: Practical and cheap, can collect large amount of information from a big number of respondents in a little time and in relatively cost effective way. The results can usually be easily quantified by the researcher or through use of software packages and can be analyzed more scientifically and objectively than other forms of research. The prepared questionnaires consisted of 2 parts. Part one had two parts A and B on demographic details and other information on level of stakeholders' awareness on suitable instructional material for the management of learners with hearing impairment in regular public primary schools in Kajiado county, central sub county

# Interview Schedule

Floyd (2013) asserts that an interview schedule is used when conducting a semi -structured interview. It is also a set of questions with structured answers to guide the interviewer. The researcher used interview schedule because it leads to more in- depth responses; can collect accurate information; it is free of biases; can study more difficult situations and both educated and uneducated can use it. The researcher prepared semi-structured interview schedule for the District Education Officer in Kajiado central sub-county. The interview schedule comprised questions on demographic information and questions about learners with hearing impairment in regular primary schools basing on instructional materials. Questions consisted of both open and closed ended to enable provision of data on the two approaches used in the study such as quantitative and qualitative but a bit m allow interaction with the interviewee.

#### Methods of data analysis

Qualitative data was organized into related key themes and summarized in narratives and interpretative assertions. The quantitative data obtained through closed-ended questions on the association between the level of stakeholders' awareness on suitable instructional materials and the management of learners with HI was analyzed using the Chi-Square technique with the help of the Statistical Package for Social Sciences (SPSS) version 21. The analyses was done through calculating frequencies, percentages and tabulating them appropriately using frequency tables, graphs and pie charts.

# RESULTS

#### Head teachers' preparedness on Instructional Materials for learners with HI

Head teachers were required to agree or disagree on the 7 items given in Likert scale that were meant to determine how they were prepared on instructional material for learners with HI in regular primary schools. The findings are as stated in table 1 below:

Statements		SA	A	U	D	SD	Total
Concrete variety of visual learning aids are used to teach learners with HI		3	2	4	4	6	19
		15.8	10.5	21.1	21.1	31.6	100.0
Relevant books are availed for the learners with HI		2	3	1	5	8	19
		10.5	15.8	5.3	26.3	42.1	100.0
Teachers simplify English written books to the hearing impaired learners	f	2	4	5	5	3	19
	%	10.5	21.1	26.3	26.3	15.8	100.0
Additional time is always provided for the learners with HI for completion of assignment or exam		2	9	3	4	1	19
		10.5	47.4	15.8	21.1	5.3	100.0
There is manual quidaling for III loomans	f	2	3	2	7	5	19
There is manual guideline for HI learners		10.5	15.8	10.5	36.8	26.3	100.0
Instructions to HI learners are kept brief		2	4	2	8	3	19
		10.5	21.1	10.5	42.1	15.8	100.0
We mind eye-contact in any kind of communication with pupils with HI		5	10	1	3	0	19
		26.3	52.6	5.3	15.8	0.0	100.0

Table 1. Head teachers' responses on instructional materials preparedness

As shown in Table 1, the majority of head teachers (52.7%) disagreed, 26.3% disagreed while 21.1% were undecided on whether concrete variety of visual learning aids were used to teach learners with HI. 68.4% of them disagreed, 26.3% agreed while 5.3 neither agreed nor disagreed on whether relevant books were availed for the learners with HI. The inquiry on teachers simplifying English written books for the pupils with hearing impairment, 42.1% disagreed, 31.6% agreed while 26.3% were undecided. With respect to additional time for the learners with HI to complete assignments or exam, 57.9% agreed and 26.4% disagreed while 15.8% were undecided. Likewise majority of head teachers (63.1%) disagreed, 26.3% agreed while 10.5% were undecided on whether there were manual guidelines for HI learners in the

schools. Similarly 57.9% disagreed, 31.6% agreed whereas10.5% neither disagreed nor agreed on whether instructions to HI learners were kept brief. As concerns whether respondents minded eye-contact in any kind of communication with pupils with HI, majority (78.9%) agreed while 15.8% disagree while 5.3% were undecided. About what appropriate instructional material were put in place to support learners with hearing impairment in regular school, the DEO stated, "nothing" was put in place.

# Teachers' preparedness on Instructional Materials for learners with HI

Teachers were required to agree or disagree on the 5 items given in Likert scale that were meant to determine how they were prepared on instructional material for learners with HI in regular primary schools. The findings are as shown in Table 2 below:

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Statements		SA	A	U	D	SD	Total
Concrete and variety of Visual learning aids		68	24	8	4	12	116
are more important to learners with HI e g charts, diagrams	%	58.6	20.7	6.9	3.4	10.3	100.0
Teachers simplify English written books to the hearing impaired learners	f	18	40	19	18	21	116
	%	15.5	34.5	16.4	15.5	18.1	100.0
I mind eye- contact whenever speaking to pupils with HI	f	40	50	10	4	12	116
	%	34.5	43.1	8.6	3.4	10.3	100.0
T I A A A II VIIIT		26	49	11	10	20	116
I use short sentences to pupils with HI	%	22.4	42.2	9.5	8.6	17.2	100.0
I add time to pupils with hearing impairment for exam and completion of assignments		23	44	15	11	23	116
		19.8	37.9	12.9	9.5	19.8	100.0

Table 2. Teachers'	responses	on instructional	materials	nrenaredness
Table 2. Teachers	responses	on mon actional	materials	prepareuness

As shown in Table 2 the majority of teacher respondents (79.3%) agreed, 13.7% disagreed while 6.9% were undecided on whether concrete and variety of visual learning aids were more important to learners with HI. The quest of teachers simplifying English written books to the learners with hearing impairment, 50.0% agreed, 33.3% disagreed while the rest (15.5%) were undecided. In respect to minding eye-contact whenever teachers were speaking to pupils with HI, 77.6% agreed, 13.7% disagreed while 8.6% neither agreed nor disagreed. Likewise most teachers 64.6% agreed, 25.8% disagreed while 9.5% were undecided on use of short sentences to pupils with HI. Similarly the respondent 57.7% agreed, 29.3% disagreed while 12.9% were undecided on whether the teachers added time to pupils with hearing impairment for exams and completion of assignment.

# BoM chairpersons' preparedness on Instructional Materials for learners with HI

The researcher sought to find out whether the board budgeted for the appropriate/teaching materials in schools for learners with HI. The results were indicated as shown in Figure 4.1.



Figure1: BoM chairpersons' responses on whether they budgeted for the learners with HI in schools

As portrayed in figure1 majority of BoM respondents (71%) indicated that they didn't have a budget for learners with hearing impairment 23% indicated they budgeted for appropriate learning materials in schools for learners with hearing impairment and only 6% respondents didn't respond.

# Preparedness on appropriate instructional materials and management of learners with hearing impairment

management of learners with H1						
	Value	Df	Asymp. Sig. (2-sided)			
Pearson Chi-Square	22.028 <sup>a</sup>	12	.037			
Likelihood Ratio	16.762	12	.159			
Linear-by-Linear Association	1.698	1	.193			
N of Valid Cases	116					

 

 Table 3. Chi-square statistical test between appropriate instructional materials and management of learners with HI

Table 3 shows results on a Chi square test between preparedness on appropriate instructional materials and management of learners with hearing impairment ( $x^2=22.028$ , df=12, p<0.05). The results of the test indicated that there is a significance relationship between appropriate instructional material preparedness and management of hearing impairment.

# **STUDY FINDINGS**

The Chi-square test of significance ( $x^2=22.028$ , df=12, p<0.05) revealed a significant relationship between preparedness on appropriate instructional materials and management of learners with hearing impairment. The findings showed that the majority of the head teacher respondents (52.7%) disagreed on whether concrete variety of visual learning aids were used to teach learners with HI. This contrasted with the majority of the teachers (79.3%) who indicated that concrete and variety of visual learning aids were more important to learners with HI. The question on whether relevant books for the learners with HI were available

depicted most of head teachers (68.4%) disagreeing. Regarding teachers simplifying English written books for the learners with HI, majority of head teachers (42.1%) disagreed. This contrasted with a half of teachers (50%) who indicated that they simplified English written book for the pupils with HI. Findings on whether additional time was always provided for the learners with HI for completions of assignment or exam, 57.9% of head teachers agreed. This was almost equivalent to teachers (57.7%) who also agreed.

The quest of whether there were manual guidelines for HI learners for use in schools, majority of the head teacher respondents (63.1%) disagreed. In regard to whether instructions to HI learners were kept brief, many of head teachers (57.9%) disagreed. The quest of whether appropriate instructional materials were put in place to support learners with hearing impairment in regular school, the Education Officer stated, "nothing"

In general 46.6% of head teachers disagreed, 39.9% agreed while 13.5% were undecided on suitable instructional materials for learners with HI in regular schools. On the other hand, 65.9% of teachers agreed, 23.3% disagreed while 10.9% were undecided on availability of suitable instructional materials. Both the education office which indicated "nothing" as noted earlier with the BoM (70.5%) signal lack of awareness on the suitable instructional materials for learners with hearing impairment.

#### CONCLUSIONS

Looking critically at the findings and the implication through the discussions, the following conclusions were made:

- 1. Majority of the education stakeholders in public regular primary schools in Kajiado central sub-county lacked awareness on the suitable instructional materials for learners with hearing impairment.
- 2. Major problem seemed to be lack of training of teachers on inclusive education or special needs education in general.

# RECOMMENDATIONS

Basing on the study findings and conclusions, the following recommendations are suggested:

- 1. Teachers need to have knowledge of suitable instructional materials to help learners with HI in regular primary schools.
- 2. The National SNE policy framework which emphasizes inclusion of learners with special needs and disabilities through regular schools should include guidelines on how institutions should be prepared in order to come up with suitable instructional materials in regular schools.
- 3. The Ministry of Education should organize regular in service courses to update all educators such as head teachers and teachers on relevant instructional materials for the learners with hearing impairment.

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