



Implications of Teacher Competence and Medium of Instruction on the Implementation of Kenyan Sign Language Curriculum in Secondary Schools in Kenya: Analytical Assessment

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ABSTRACT

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Curriculum implementation is a crucial, difficult and unavoidable phase in curriculum development. It entails putting into practice the officially prescribed courses of study as intended. The way a curriculum is introduced can create a discrepancy between the proposed curriculum and the actual practice in schools. For deaf students to achieve the goals of education there was need to include Kenyan Sign Language in the curriculum. This was attempted in 2007 in standard one, five and form one classes. It was noticeable that this was the same year teachers were called upon to prepare materials and be in-serviced for the implementation. In 2008 there was an outcry of teachers expressing their discomfort in teaching Kenyan sign language without adequate preparations. The purpose of this study therefore, was to examine teacher factors during the implementation of Kenyan sign language curriculum in Kenya. Descriptive survey design was used in the study. The target population comprised of 15 sign language teachers from 4 secondary schools spread out in four districts in Kenya namely; Nyeri, Mumias, Rongo and Bondo. The sample size consisted of 13 teachers. The study employed saturated sampling technique because the population was too small. Data was collected by use of questionnaire, interview schedule and lesson observation checklist. A pilot study was conducted in one of the schools selected through simple random sampling technique. The instruments used in the study were presented to Lecturers in the faculty of Education at Maseno University to ascertain their face validity. Reliability was computed using Cranbach's Alpha which showed 0.361, 0.440, 0.481 and 0.468 for objectives, content, teaching materials and evaluation respectively. Quantitative data was analyzed using descriptive statistics and presented as frequency counts, percentages and charts. Qualitative data was collected, categorized into emergent themes which were reported. Results indicated that teachers had professional certificates, attended in-service courses and had experience; teachers used different media of instruction. Based on the findings, this study concluded that although teachers' level of competent was average they needed proficiency examination to improve. Although teachers used Kenya sign language as the language for instruction there was no uniformity in the medium of instruction.

INTRODUCTION

From earlier recorded history gestures have been used for communication between groups of different languages and cultures. The use of formalized language of signs however has been gradual until the first attempt to educate deaf children was made. The public education of the hearing impaired using sign language began in France. In 1755 Abbe Charles de l' Epee founded the first public school for the deaf. He refined and developed the language of signs into a full language from which the present sign language are derived (Berker, 2011). In America Thomas Hopkins Gallaudet, a student of De l' Epee became the developer of American education of the deaf. He also founded the first school for the deaf in America at Hartford Connecticut in 1817 in which sign language was used (Butterworth & Flodin, 1995). Historically many deaf children were not exposed to any form of sign language until after primary education (Weisel, 1998). However, students often complained that they are held back educationally as a result of teachers' pressure to learn in English, little if any creditability is awarded to sign language use in education (Gregory & Hartley, 1991).

In linguistic terms, Sign language (SL) is reported to be as rich and complex as any oral language (Liddell, 2003). Linguists explain that sign language has a complex grammar of its own and has every linguistic component required to be classified as a true language (Baker, Lee, Shenk & Padden, 1978). Stokoe (2001) outlined the building blocks of a sign as Hand shape, Orientation, Location, Movement, and Non-manual markers, which are cognitively equivalent to the phonemes of oral language. Sign language like oral language organized elementary meaningless units once called Cheremes into meaningful semantic units with a basic constituent word order of Subject-Object-Verb. Sign language as many other languages evolved resulting into countries having their own versions and variations like Kenyan sign language (Moores, 1996; Rod & Flodin, 1995). The differences is shown by signs and not by sentence structure.

Since the late seventies educators and researchers in general education have recognized the problematic nature of implementing a proposed curriculum (Snyder, Bolin & Zumwalt, 1992). The process of curriculum implementation has been described as a "black box" (O'Sullivan, 2002) in which challenges to implementation can arise. The complexities of and incongruent relationship between curriculum policy and its practice are indicators of the implementation problems (Elmore & Sykes, 1992). According to Bekalo and Welford (2000) a discrepancy often exists between what was intended and what is enacted. The view that these two objectives should match poses challenges for policy makers, administrators, and teachers in particular (Connelly & Lantz, 1991). Problems of various kinds arising from curriculum implementation have been recognized as

inevitable and therefore the implementation is inherently more complex than people anticipate (Brindley & Hood, 1990; Fullan & Stiegelbauer, 1991). This complexity can be perceived from several aspects with stakeholders at different levels interpreting the curriculum policies differently than as originally conceived.

According to Chhem (2001) one of the strategies for a successful implementation of a curriculum includes that plans must be established for an ongoing professional development for all teachers and support of new teachers. Segoria and Hudson (2009) reported one example of a curriculum which was not successfully implemented. This was the implementation of integrated English language curriculum for secondary schools in 1985 in Kenya. They reported that teachers had not been prepared to teach English Literature using the integrated methods in their pre-service teacher education. This led to unsuccessful implementation that brought about persistent complaints about falling standards of both written and spoken English. Fullan (2001) concluded that the way educational theory is introduced and especially the lack of opportunity to involve teachers in reform created a discrepancy between the teachers, in understanding the change and the initiators, in the intended change.

Abagi (1997) reported another example of an unsuccessful implementation of 8-4-4 system of education which was carried out without first consulting with teachers. Three years later a commission carried out a review and noted that the development of secondary schools' curriculum was skewed in favour of the boys especially with regard to facilities for technical subjects. The commission recommended that the opportunities for girls to study technical subjects be increased.

Fullan (1992) reported an unsuccessful implementation of the Secondary Kiswahili Curriculum. Since the introduction of the 2002 Secondary Kiswahili Curriculum in secondary schools in Kenya in 2003, numerous challenges could be pointed out that hampered the successful implementation. One of the challenges which Fullan (1992) pointed out was that teachers encountered problems and difficulties in their attempt to implement the 2002 Secondary Kiswahili curriculum especially the integrated approach of teaching of Kiswahili language and literature. It was reported that this challenge stemmed from lack of teachers' involvement in the preparation of the curriculum.

Sign language used by the deaf people in Kenya is probably as old as their history. Documented use of sign language can be traced to early 1960s when the first schools and units for the deaf were established (Akach, 2001). In 1985 Dr. Ndurumo a graduate of Gallaudet University came to Kenya and strongly advocated the use of Sign Language in the education of the deaf students. In 1988 the government of Kenya introduced the use of Kenyan sign language in all schools and units for the deaf in Kenya under the

philosophy of Total Communication (Ndurumo, 1987). Today Kenyan sign language is recognized and is officially used as a language of instruction in the education setting. It has been approved by the Kenya Institute of Education and is taught as an examinable subject in schools for deaf students

Kenyan Language policy states that the mother tongue within the catchment area of school should be used as the language of instruction in pre-school, the first three years and in adult education program. However for deaf students it was recommended that Kenyan Sign Language (KSL) be used as the official and language of instruction from nursery to university level (Mule, 1999). More so KSL is recognized in the new constitution as one of the national and official language in Kenya (Republic of Kenya, 2010; Onyango, 2008). These justified the introduction of KSL content in 2007 in standard one, five and form one classes with the intention to assist students to master the language and have a better command of the same.

General objectives of Kenyan sign language curriculum under Special Needs Education state that the learner should be able to observe signs attentively for comprehension and respond appropriately, think creatively and critically, sign accurately, fluently, confidently and appropriately in a variety of contexts, use correct finger spelling, sign formation and facial expression and use correct grammatical form of Kenyan sign language among others (Ministry of Education, 2004). These objectives set out the required achievement standards of Kenyan sign language learners by the end of secondary education. The Subject content integrated three broad areas which included: Receptive and expressive signing skills, Grammar, and signing for fluency (Ministry of Education, 2004).

In 1985 Machakos School for the deaf became the first school to use alternative mode of instruction in sign language known as simultaneous communication. However, there were some problems in implementing this method due to various reasons (Republic of Kenya, 1999). Although the Ministry of Education finally adopted Simultaneous Communication system in their policy framework, there was confusion among teachers in the field who had not received adequate training on the use of this communication strategy (Adoyo, 2004).

At the time of this research in 2009 Kenyan sign language was taught from standard one to three, standard five to seven and from form one to form three classes. Evidence from workshop invitation letters received in schools has it that there was orientation of teachers in Kenyan sign language syllabus, text book workshop writing, artwork/graphic design workshop, video production at KIE to mention but a few. These preparations were done in 2007 the same year Kenyan sign language was being implemented. However teachers expressed their discomfort in teaching Kenyan sign language (Daily Nation, 15th July 2008). The reasons for the discomfort were not clear. It is in view of

this that the research was instituted to find out what ought to have caused it. It was therefore necessary to examine teacher factors in the implementation of Kenyan sign language curriculum in secondary schools in Kenya.

The research questions were:

(i) What level of competent had teachers attained to implement Kenyan sign language curriculum in secondary schools in Kenya?

(ii) Which media of instruction are used in the implementation of Kenyan sign language curriculum in secondary schools in Kenya?

The conceptual framework was based on the concept of interaction of teacher factors in facilitating the implementation of the Kenyan sign language curriculum. Teachers had to embrace the five variables; teachers' competence, media of instruction used, teaching methods used, teaching resources used and teachers' attitudes towards the implementation of Kenya sign language curriculum. The Kenyan sign language teachers were available in secondary schools and only needed to have competence in terms of expressive and receptive skills in order to implement the curriculum. With an average level of teachers' competence there would be appropriate choice of medium of instruction, good choice of teaching methods which would lead to teachers portraying a positive attitude and this would be an improvement in the implementation of the curriculum.

Teachers needed to employ appropriate teaching methods in teaching Kenyan sign language. In doing so they had to employ various teaching methods such as storytelling, drama, debate, discussion, activity centred and individualized education program. Each kind of special subject has its own specialized method and techniques for teaching a child with a particular handicap. The assembling of teaching resources needed to be done after establishing the teaching methods to be used. This would only be successful if the teachers' level of competence was at least average and the attitude was positive. Teaching resources were to be carefully selected and systematically integrated to support activities in the instructional program for a significant impact on the implementation to be experienced.

Finally teachers needed to have a positive attitude towards Kenyan sign language. The teachers' positive attitude would lead to appropriate medium of instruction, appropriate teaching methods and use of teaching resources. For instance, a teacher may choose media of instruction, teaching methods, and teaching resources depending on the negative or positive attitude that prevailed which would eventually either hinder or promote the implementation of Kenyan sign language curriculum. The relationships of these factors were developed and conceptualized by the researcher as indicated in Figure 1.

Conceptual framework

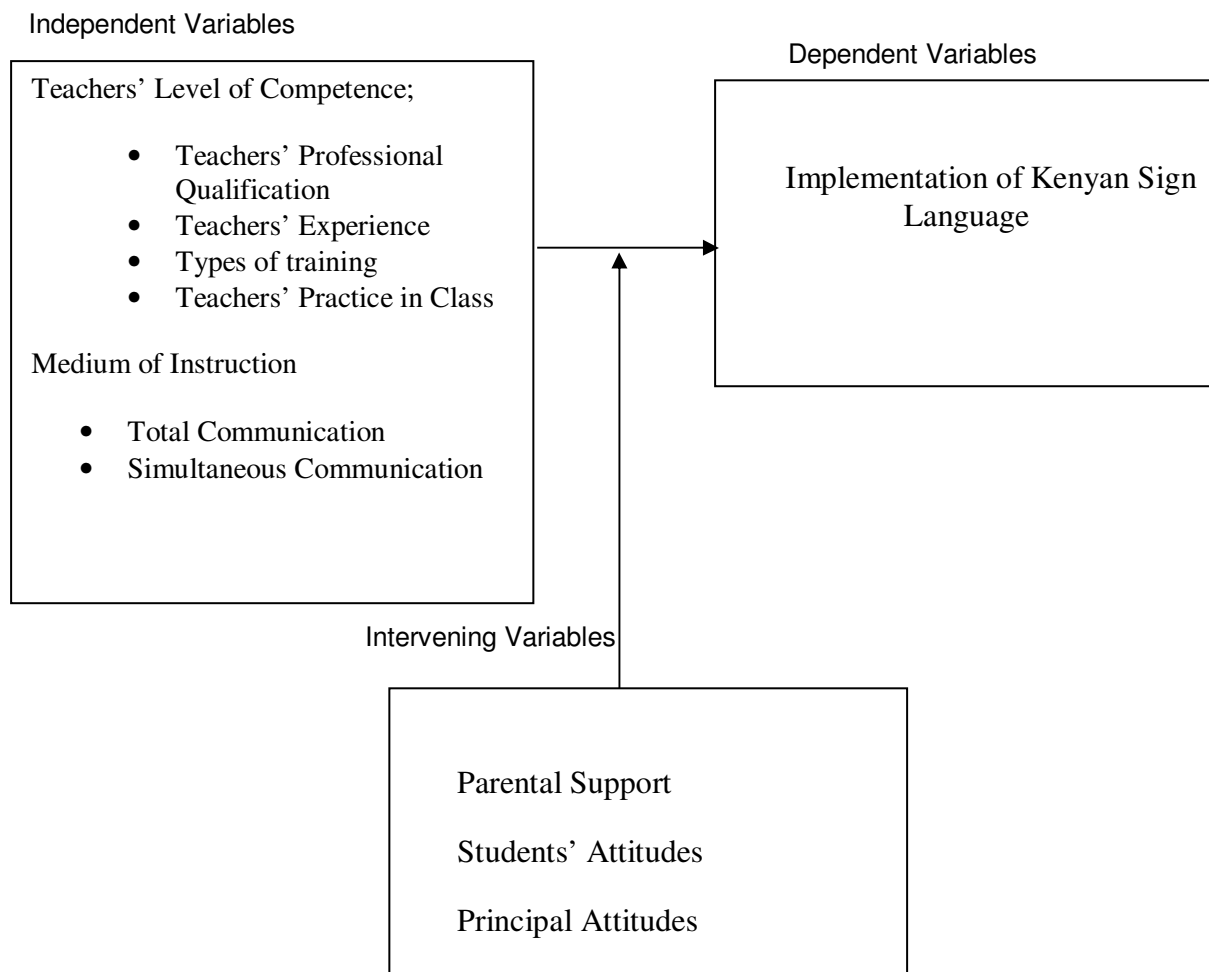


Figure 1: Conceptual framework

METHODOLOGY

This study was conducted through a descriptive survey design. Descriptive survey design is based on the premise that problems can be solved and practices improved and observation described (Sani & Todman, 2006). Descriptive survey design is appropriate in educational fact finding which yields accurate information (Cohen & Manion, 1994). This design enabled the researcher to collect data, summarize and interpret information on the examining teacher factors in the implementation of Kenyan sign language. The schools are Rev. Muhoro mixed boarding school for the deaf in Nyeri district, St. Angela boarding secondary school for deaf girls in Mumias district, Kuja mixed boarding secondary school for the deaf in Rongo district and Nyangoma mixed boarding secondary school for the deaf in Bondo district. The target population of this study consisted of 15 teachers teaching Kenyan sign language in the secondary schools in the year 2009. By the time of this study Kenyan sign language was taught in form one,

two and three classes. Saturated sampling is a technique used in research which involves all the respondents in the study provided the respondents' number is too small (Cohen & Manion, 1994). Respondents were drawn from the four secondary schools for the deaf in Kenya. Saturated sampling was used to select teachers. Since teachers' population was too small hence saturated sampling technique justified. Data was collected using a questionnaire, interview schedule, lesson observation checklist and Likert scale. The selection of the tools was guided by the nature of data to be collected, time available as well as the objectives of the study. Teachers' questionnaire had closed and open-ended items. It was used to collect data on the level of teachers' competence and media of instruction used in the implementation of Kenyan sign language curriculum as indicated in Appendix A. Teachers' interview schedule was preferred in this research because interviewers would probe respondents' answer to obtain more information and respondents would clarify any emerging vague

statements. For this study, interview schedule was used to complement the questionnaire for data collection. As shown in Appendix B it collected data on the level of teachers' competence and media of instruction used. Lesson observation checklist was used to systematically record observable behaviors of teachers in a specific lesson as indicated in Appendix C. It provided an alternative source of data for verifying the information obtained by questionnaire and the interview schedule data collecting instruments. It was preferred in this study because the researcher would be able to observe the level of competence and the media of instruction used in the classroom set up.

According to Mugenda and Mugenda (1999) validity is the degree to which several measures of concepts accurately measure the concepts. Face validity of the instruments was established by presenting them to lecturers in research methodology in the faculty of education of Maseno University. The lecturers examined the instruments, advised and ascertained face validity. Their comments and suggestions were incorporated in the preparation of the final instruments. Reliability measures the degree to which a particular measuring procedure provides similar results over a number of repeated trials (Orodho, 2004). A pilot study was undertaken in one of the public secondary schools not included in the actual study. The pre-test study helped to identify inconsistencies and weaknesses of the research instruments. The necessary adjustments were made and were incorporated in the preparation of the final instruments. Cranbach's Alpha was employed to compute the level of reliability which showed 0.7. Quantitative data from closed ended items was analyzed by first coding them. The responses were then transferred into a summary sheet by tabulation. This was

tallied to establish frequency counts, which were converted to percentages and finally presented as charts and graphs. Data from interviews and open ended items were summarized qualitatively by recording word for word to determine frequency counts of each response. The numbers of respondents with similar response were tallied to illustrate related levels of opinion and reported. Information from lesson observation schedule was summarized through classification and judgment and was also reported. To find out the level of competence of the teacher, the teacher should have qualified with a professional certificate, have experience of 2 or more years in teaching, attend in-service courses on the implementation of Kenyan sign language curriculum and practically prepare the professional records as required. The schemes of work should have been prepared termly, progress record monthly, Lesson plan, marking students work and students register should have been done daily respectively. To examine the media of instruction used the researcher based on the Kenya language policy which advocates for the deaf students to use Kenyan sign language from standard one up to university level of education.

RESULTS

Research Question 1 What is the teachers' level of competence attained to implement Kenyan sign language curriculum in secondary schools in Kenya? The responses to the research question were as shown in Figures 2, 3, and Tables 1, 2, and 3. The teachers' level of competence varied, that is Professional qualification, teaching experience, types of training and teachers practice in class.

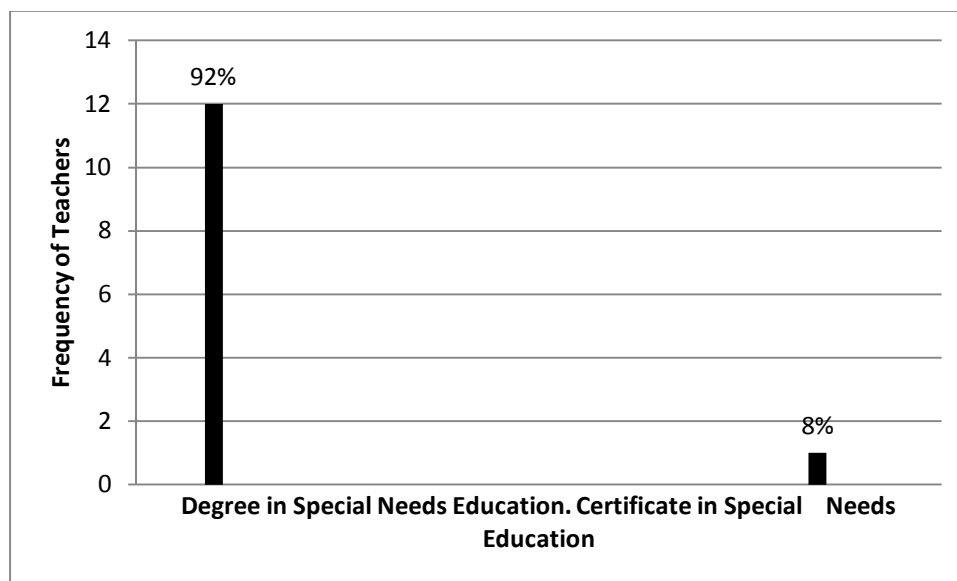


Figure 2: Teachers' Professional Qualifications (n=13)

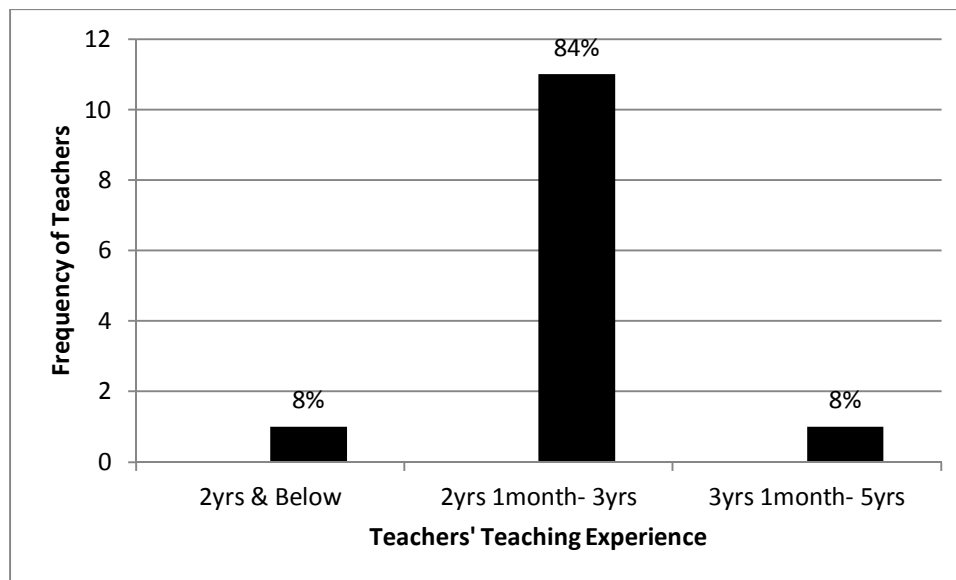


Figure 3: Teachers' Experience in Kenyan Sign Language (n=13)

Table 1: Types of Training (n=13)

Types of Training	Frequency of Teachers Attendance	
	(f)	(%)
In-service	9	(69)
Induction	1	(08)
Workshop/Seminar	3	(23)
No In-service Training	0	(00)
Total	13	(100)

Table 2: Period of In-service Training for Teachers (n=13)

Period of Training	Frequency of Teachers Attendance	
	(f)	(%)
Before Implementation	0	(00)
During Implementation	9	(69)
No In-service Training	4	(31)

Table 3: Areas Covered during the In-Service Training (n=13)

Areas Covered	Frequency of Teachers' Response in Areas Covered	
	(f)	(%)
Supervision of Curriculum	3	(23)
Teaching and Learning resources	9	(69)
Medium of Instruction	3	(23)
None of the Areas Above	0	(00)

Figure 2 showed that 12 (92%) teachers had a degree in special needs education while 1 (8%) teacher had a certificate in special education. During the interview all teachers had attained degrees in special needs education apart from one teacher who had a certificate. This meant that the teachers were all professionally qualified hence equipped with knowledge, attitudes and

special skills required to perform their tasks effectively in the school and classroom as concerned the implementation of Kenyan sign language curriculum.

Figure 3 indicated that 11 (84%) teachers had experience of between 2years 1 month and three years. Figure 3 also showed that 1 (8%) teacher had teaching

experience of between three years and one month to five years. This meant that the teacher must have started teaching sign language earlier before it was implemented as an examinable subject in the year 2007. This meant that with such a teaching experience, the teachers were therefore capable to successfully facilitate the implementation of Kenyan sign language curriculum and this was likely to improve the implementation of Kenyan sign language.

In Table 1 whereas 9(69%) teachers indicated having attended in-service course in Kenyan sign language since the attainment of their professional certificates, three teachers had not attended any workshop or seminar. During the interview nine teachers indicated that they had attended in-service training. They further agreed that in-service training was necessary since this was the first time Kenyan sign language was taught as an examinable subject. There was 1(8%) teacher who indicated he attended induction program. During the interview the teacher indicated that this was usually done in form of briefings held ones per week at seven thirty o'clock in the morning. This meant that the teachers were aware of the new developments in knowledge as far as Kenyan sign language was concerned and this was likely to improve the implementation of Kenyan sign language curriculum.

Meanwhile 9(69%) teachers and 1(8%) teacher who had been in-serviced and inducted respectively were asked to indicate when the programs were organized. In Table 2, there were 9(69%) teachers who indicated having attended the in-service and induction programs during the implementation of Kenyan sign language. During interview teachers argued that as

much as the in-service courses were important, they needed to be in-serviced before the implementation in order to prepare them fully for the same.

However, when teachers were asked what aspects of Kenyan sign language were focused on during in-service and induction in Table 3, 9(69%) teachers indicated that they were in-serviced in teaching resources while three in medium of instruction and supervision respectively. This concurred with the finding in Table 1 whereby 9(69%) teachers claimed having attended in-service course.

Whereas 11(84%) teachers prepared the lesson plan on daily basis 9(69%) teachers never marked registers daily while 7(54%) teachers never marked students' work as expected. The progress records were to be prepared monthly of which 4(31%) teachers practiced. They were also expected to prepare the Kenyan sign language scheme of work at the beginning of every term of which 7(54%) teachers did prepare. Contrary, in the lesson observation eleven teachers were found not ready with the Kenyan sign language scheme of work.

Research Question 2

Which media of instruction are used by teachers in the implementation of Kenyan sign language curriculum in secondary schools in Kenya?

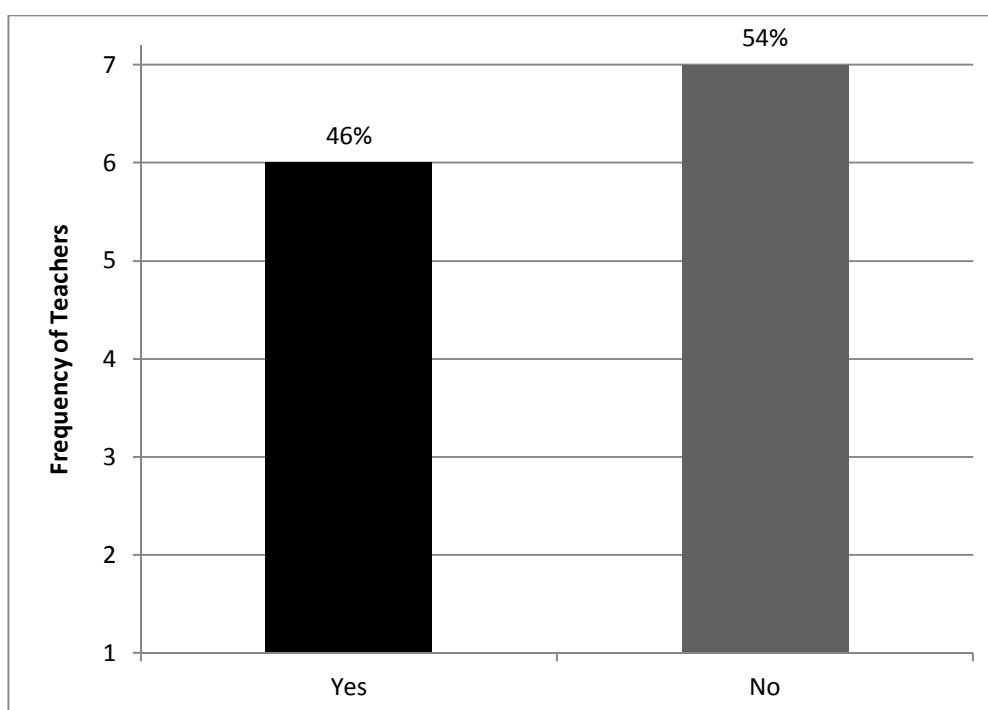
The responses to the research question were as shown in Figures 4, 5, and Table 5. The teachers used varied media of instruction that is Total communication and Simultaneous.

Table 4: Teachers' Preparation of Records (n=13)

	Daily	Weekly	Monthly	Termly	Yearly	None
Professional Records by Teachers	(f) (%)	(f) (%)	(f) (%)	(f) (%)	(f) (%)	(f) (%)
Schemes of work	0(00)	3(23)	3(23)	7(54)	0(00)	0(00)
Lesson plan	11(84)	2(16)	0(00)	0 (00)	0(00)	0(00)
Progress record	0 (00)	6(46)	4 (31)	3(23)	0(00)	0(00)
Marking Students' work	6(46)	4(31)	0(00)	0(00)	0 (00)	3(23)
Students' register	4(31)	7(54)	0(00)	0(00)	0(00)	2 (16)

Table 5: Media of Instruction Used by the Teacher (n=13)

Media of Instruction	Frequency of Teachers' Response on media of instruction Used	
	(f)	(%)
Kenyan sign language	9	(69)
Signing Exact English	2	(16)
Simultaneous Communication	3	(23)
American Sign Language	2	(16)
Total Communication	4	(31)
Signed English	2	(16)
KSL and SEE	2	(16)

**Figure 4: Teachers' Adherence to Language Policy (n=13)**

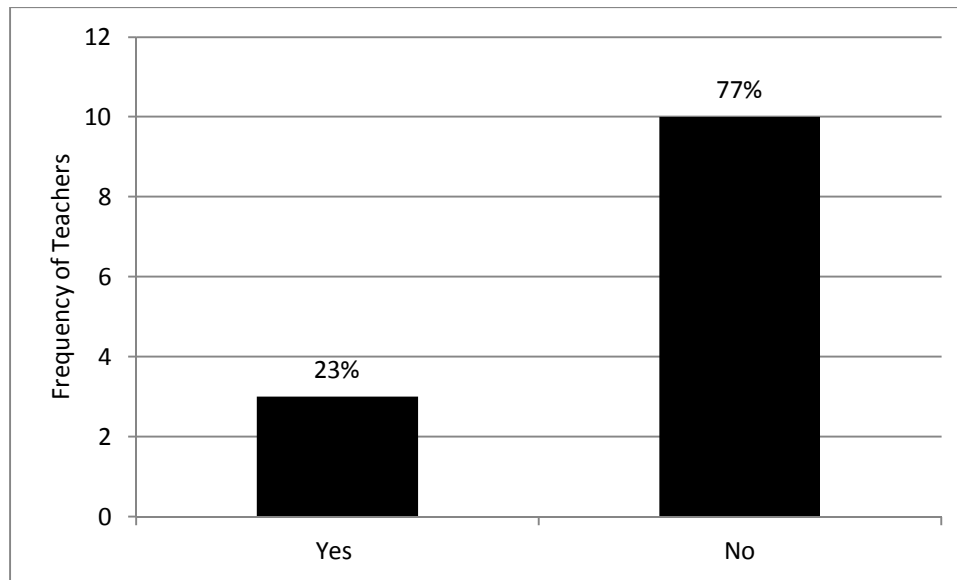


Figure 5: Kenyan sign language Syllabus Coverage (n=13)

Kenyan Language policy states that Kenyan sign language should be used by deaf students as a medium of instruction from year one in school up to university level.

In Table 5 9(69%) teachers indicated they used Kenyan sign language. However, the response from teachers in an interview showed that various media of instruction were used in teaching Kenyan sign language. There were 2(15%) teachers who indicated they used Signing Exact English. However when teachers were asked why they used this medium, they indicated that SEE represented fully the spoken English and hence the signs were produced sequentially in English word order which was contrary to the Kenyan sign language sign order. There were 7(77%) teachers who never indicated Simultaneous Communication as the medium of instruction argued that attempting to speak at the same time sign what was spoken offered neither normal speech nor normal signs. They clarified that speech was slowed down and also fragmented. Whereas 2(15%) teachers indicated the use of American Sign Language 11(85%) teachers did not use American Sign Language. During an interview teachers indicated they did not use the American Sign Language because it was quite different from KSL in signs and therefore it was not possible to use it in teaching Kenyan sign language. Meanwhile 4(31%) teachers who had indicated the use of Total Communication as a medium of instruction were asked why they were using it. Teachers gave reasons that, it improved deaf students' linguistic and academic attainment which in the past had been persistently and unacceptably low.

Whereas 2(15%) teachers indicated the use of Signed English 11(85%) teachers did not use Signed English. During an interview teachers indicated the signed component had serious omissions, notably not only grammatical features but also of important content

words. There were 2(15%) teachers who indicated they used Kenyan sign language and Sign Exact English. In an interview teachers indicated that Signing Exact English represented fully the spoken English and hence the signs were produced sequentially in English word order. They argued that this violated the Kenyan sign language word order and made it impossible for the student to access the correct form of Kenyan sign language.

Figure 4 showed that 7(54%) teachers indicated No which meant that the language policy concerning Kenyan sign language had not been put into practice in their schools. Teachers argued that the language policy did not give clear guidelines on what medium was to be used. They claimed that some teachers were confusing sign language with other signed systems. While 6(46%) teachers who indicated Yes meant that the language policy had been put into practice in schools. This finding showed that some teachers were not using Kenyan sign language in teaching deaf students. However, this was contrary to the finding in Table 5 on the media of instruction which showed that 9(69%) teachers used Kenyan sign language in teaching.

Whereas 10(77%) teachers did not cover the syllabus, 3(23%) teachers covered the syllabus. Teachers were asked to explanation as to why the syllabus was not covered. The teachers answered that they took much time in explaining same concepts over and over. One teacher further explained that "in a class of deaf students, various children required varied teaching approaches in order to meet their individual needs". "This demanded for more time which was not available according to the school timetable." This means that the curriculum should be reviewed in order for the teachers to cover the syllabus in the time allocated.

DISCUSSION

This finding concurred with Garet (2001) who claimed that a professionally trained teacher was known to have acquired the communication skills, professional attitudes, abilities and values necessary for the implementation of a curriculum. He explained that what teachers taught and the type of strategies they employed depend greatly on previous training. Furthermore the teacher in the school was expected to interpret the objectives and content in the curriculum and manage the learning situations through which intention was transformed into actual practice (Hawes, 1981). Competence was the combination of skills, attitude and behavior which lead teachers to teach Kenyan sign language. Professional development was the route to building and maintaining competence. Teachers were to present evidence during the lessons which proved their competence in Kenyan sign language. They were to explain the concepts to the students in Kenyan sign language. In addition, they were supposed to understand the explanation, answers and questions signed from students. The finding on teachers' experience concurs with Richards and Farrell (2005) who pointed out the difference between experienced and novice language teachers, arguing that the former possess a richer knowledge base and deeper understanding of their students and student learning, and therefore are more capable of solving teaching problems.

The teacher was supposed to attend different types of training since they all played different roles in the implementation. As Brindley and Hood (1990) puts it that in-service training is conducted during a break in the individuals' work schedule. Whereas according to Godblatt & Smith (2005) induction programs provide a transition from supportive teacher pre-service education to the formal teaching job by providing new teachers additional training. In addition, the in-service training was supposed to act as an impetus for teachers for a smooth beginning in the implementation. This could only be achieved if the training would have been offered before the implementation. Furthermore in-service training was supposed to cover more areas related to Kenyan sign language so that teachers would use that information in the implementation. Never the less in-service training needed to be continued during the implementation of the curriculum for the teachers to keep abreast of the developments throughout the implementation. This concurred with Brindley and Hood (1990) who claimed that an ongoing in-service training constitutes important components of any projected implementation. This is consistent with the views of (Shiundu & Omulando, 1992; Okumbe, 1998) who stated that teachers should adopt the philosophy of lifelong learning in their own professional activities to keep abreast of new developments in knowledge.

Induction program did not have enough time for discussion especially when held at seven thirty o'clock in the morning. This was usually a very short time and teachers were divided between calling registers in

classes, preparing to start lessons and listen to the brief. A well organized induction program could present an opportunity for teachers in the implementation of Kenyan sign language since it would reinforce opportunity for sharing information. However for the induction to be effective it needed to have a program specifically designed to meet the needs of the target group. Workshops were supposed to focus on the implementation of Kenyan sign language so that teachers would use this information effectively in the implementation. These workshops would play a supplementary role to the induction of teachers and also shed light on how to organize their internal workshops.

Schemes of work as a guideline define the structure and content of the course. It maps out clearly how resources like books, equipment, time and class activities like teacher-talk, group work, practical, discussions and assessment strategies like tests, quizzes, homework will be used to ensure that the learning aims and objectives of the course are met successfully. The scheme of work was an interpretation of a specification or syllabus and would be used as a guide throughout the course to monitor progress against the original plan. A well planned and followed scheme of work would ensure syllabus coverage in Kenyan sign language which would ensure effective implementation.

Preparation of a lesson plan was an important issue in the implementation of Kenyan sign language curriculum. Lesson preparation showed the magnitude of seriousness the teacher had to implement a curriculum. The lesson would also give information on what a teacher planned to teach the students at a certain period of time. In a lesson plan objectives were very important because they were the specific targets that the teacher aimed to achieve at the end of the lesson. Depending on how objectives were achieved the teacher would then plan for the next lesson.

Progress record keeps data on students' academic performance on termly basis. This record would monitor students' academic progress during the implementation of Kenyan sign language. The academic progress was connected to the topics taught in Kenya sign language. The teacher would observe the trend and find out whether it's an upward or downward trend of which appropriate measures would be taken.

Marking students work was one of the activities the teacher needed to perform after every lesson. This would alert the teacher on the areas the student had grasped and those they had not understood. This would enable the teacher to have a better understanding and therefore better planning for the next lesson. Students register provided necessary data which would be requested from time to time by teachers, researchers, planners or ministry officials. This information would assist the teacher to identify sick students, truants, absentees and those who attend school regularly and therefore prepare a remedial time table suitable for those categories.

Medium of instruction as noted in the literature was important in this study as asserted by (Adoyo, 2002)

that many teachers in schools for the deaf had great difficulties in communicating ideas to the deaf students. At the same time Upton and Fulton (1988) reported that students who were deaf need to be instructed in the language that was most comprehensible to them. This was supported by Okombo (1994) who argued that it was not enough to use just sign language rather an ideal local variety by the name Kenyan sign language. Adoyo (2004) asserted that if students were not able to use the language they know and interact with teachers who were unable to present information in a language they understand with ease then learning would be slow and unsuccessful. The fact that teachers were using inappropriate media of instruction other than Kenyan sign language would be the root cause of not covering the syllabus. Therefore this would probably be a drawback in the implementation of Kenyan sign language curriculum.

Total communication opens out to all methods of communication which brings in other media with grammar different from that of Kenyan Sign Language. The use of Sign Exact English in the teaching of Kenyan sign language should not occur. The two have different grammar and different word order which brings confusion among the learners. This concurred with Adoyo (2004) who reported that there was confusion among teachers in the field who had not received adequate training on the use of communication strategy. The use of Signed English in teaching Kenyan sign language had serious omissions in the signed component. Consequently, students would never acquire age appropriate English Proficiency through signed English because of its characteristics of communication. Okombo (1994) argued that although teachers interacted daily with the deaf students, there was still a low attitude towards this indigenous Kenyan sign language as a medium of instruction. He reported that teachers felt Kenyan sign language was not viable as a medium of instruction. This would be the reason why the teachers were using other media of instruction and this was likely to deteriorate the implementation of Kenyan sign language curriculum.

As reported by Mule (1999) Kenyan Language policy states that the mother tongue within the catchment area of school should be used as the language of instruction in pre-school, the first three years and in adult education program. Deaf students should use Kenyan Sign Language as the official and language of instruction from nursery to university level. Kenyan sign language is a language for the deaf students which they are well vast and therefore it is the best language to be used to explain concepts in class. Teaching the language, or educational content, through the target language increases the amount of exposure the learner gets and the opportunities they have to communicate in it, and therefore develop control of it. However, different media of instruction used in teaching Kenyan sign language were contrary to the Kenyan language policy.

In most cases topics from the syllabus may not be arranged in the order in which they are supposed to

be taught. Some topics will require the knowledge of the previous ones while others are quite independent. The teacher should not only identify the essential learning content but also arrange the content in logical teaching order considering the proceeding and succeeding syllabus content.

CONCLUSIONS

Teachers' level of competence was average. The media of instruction included sign language, simultaneous communication, sign exact English, and Total communication. It was concluded that there was no uniformity of the medium of instruction.

RECOMMENDATIONS

In regard to the teachers competence in the implementation of Kenyan sign language the study recommends that the Ministry of Education should introduce proficiency examination in Kenyan sign language to improve on the level of teachers' competence.

In regard to the medium of instruction to be used in the imple

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