

**IMPACT OF KENYA SIGN LANGUAGE ON WRITTEN ENGLISH GRAMMAR  
AMONG LEARNERS WHO ARE DEAF IN UPPER PRIMARY CLASSES IN  
NAKURU REGION, KENYA**

**BY**

**SAMOEI C. RUTH**

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF MASTER OF EDUCATION IN SPECIAL NEEDS  
EDUCATION.**

**DEPARTMENT OF SPECIAL NEEDS EDUCATION AND REHABILITATION.**

**MASENO UNIVERSITY**

**©2018**

## DECLARATION

### DECLARATION BY CANDIDATE

This thesis is my original work and has not been presented for examination in any other university or in any other institution of higher learning.

Sign..... Date: .....

**Ruth C. Samoei**

PG/MED/7008/2011

### DECLARATION BY SUPERVISORS

This thesis has been submitted for examination with our approval as university supervisors.

**PROF. Peter Oracha** Sign..... Date.....

Department of Special Needs Education,

Maseno University

**PROF. Edward Kochung** Sign..... Date.....

Department of Special Needs Education,

Maseno University

## **ACKNOWLEDGEMENT**

My sincere appreciation go to my supervisors Professor Peter Oracha, who guided me move past the idea phase, directing me to numerous sources and for reading multiple drafts of this Thesis. Professor Edwards Kochung for his invaluable advice and input to this work. Special gratitude goes to all Lecturers in the Department of Special Needs Education, of Maseno University. Their unceasing encouragement and moral support throughout this work was invaluable.

I feel greatly indebted to my family particularly little Vikky and Chem who were so supportive, giving up valuable family time, throughout the long process of writing this thesis. Finally my sincere appreciation to my brother David and his wife Esther for immeasurable support throughout this research work.

Thank you all.

## **DEDICATION**

To my little girls: Vikky and Serena for bearing with my too busy schedules in the course of writing this work.

Thank you so much

## ABSTRACT

Performance of English in KCPE examination by Deaf learners showed a trend of low scores as compared to their hearing counterparts in Nakuru Region. For four consecutive years; 2010, 2011, 2012 & 2013 English mean scores by Deaf learners in Nakuru Region were: 29.74, 31.41, 29.58, & 30.27 while Regular school learners English mean scores were: 48.74, 47.89, 47.87 & 56.24 respectively. A number of studies done looked at effect of language of instruction and age of onset of hearing loss as variables, yet none considered Impact of KSL on written English grammar. The purpose of this study was to analyse Impact of KSL on written English grammar among Deaf learners in Upper Primary classes in Nakuru Region. Objectives of this study were to: Analyse impact of KSL on: choice of vocabulary, syntactical patterns, and tense markers and singular//plural markers in written English grammar among Deaf learners in Upper Primary classes in Nakuru Region. Language learning was guided by Behaviourist theory based on stimuli reinforcement to get desired behaviour. Descriptive Research Design was used. The study was carried out in Nakuru Region, Kenya. Target population comprised 157 Deaf learners and 21 teachers for English. Saturated sampling technique was used to select 141 Deaf learners and 18 teachers for English. Purposive sampling was used to select regular primary schools involved in the study. Data was collected using document analysis guide and questionnaire. Reliability of research instruments with a correlation coefficient( $r$ ) of 0.75 was considered high enough in a pilot study involving 16 learners and 3 teachers, constituting 10% of research population. Face validity and content validity of research instruments was established by experts in Department of Special Needs Education of Maseno University. Qualitative data was organised into categories and reported in verbatim as themes and sub-themes emerged. Results from this study established that written English grammar by Deaf learners contained randomly written vocabulary. Syntactical patterns inclined towards KSL word order. Except for simple present tense, learners had challenges in marking tenses appropriately. This study concluded that other than singular and simple present tense markers, KSL had negative impact on written English grammar. Findings of this study might be significant in enhancing pedagogical approach in teaching of written English grammar to learners who are deaf in primary schools in Kenya. This study recommended use of bilingual approach in teaching of English grammar to Deaf learners.

## TABLE OF CONTENT

TITLE PAGE.....	i
DECLARATION .....	ii
ACKNOWLEDGEMENT .....	iii
DEDICATION .....	iv
ABSTRACT.....	v
TABLE OF CONTENT .....	vi
LIST OF ABBREVIATIONS AND ACRONYMS .....	ix
LIST OF TABLES.....	x
LIST OF APPENDICES.....	xi
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>1</b>
1.1 Background to the Study.....	1
1.2 Statement of the Problem.....	7
1.3 Purpose of the Study .....	8
1.4 Objectives of the Study.....	8
1.6 Assumption of the Study.....	9
1.7 Scope of the Study .....	9
1.9 Significance of the Study .....	9
1.10 Theoretical Frame Work.....	10
1.11 Operational Definitions of Terms .....	13
<b>CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>14</b>
2.1 Choice of Vocabulary in Written English Grammar among Learners who are Deaf .....	14
2.2 Syntactical Patterns in Written English Grammar by Learners who are Deaf. ....	17
2.3 Tense Markers in Written English Grammar among Learners who are Deaf. ....	20
2.4 Plural and Singular Markers in Written English Grammar by Learners who are Deaf. ....	22
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>24</b>
3.1 Research Design.....	24
3.3 Study Population.....	25
3.4 Sample and Sampling Technique.....	25
3.5 Instruments of Data Collection. ....	26
3.5.1 Document Analysis Guide .....	26
3.5.2 Teachers' Questionnaire .....	26

3.6 Validity and Reliability.....	26
3.6.1 Validity .....	26
3.6.2 Reliability.....	27
3.7 Data Collection Procedures.....	27
3.9 Data Analysis .....	28
<b>CHAPTER FOUR: RESULTS AND DISCUSSION.....</b>	<b>30</b>
4.1 Impact of Kenyan Sign Language on Choice of Vocabulary in use in Written English among Learners who are Deaf in Upper Primary Classes. ....	30
4.1.1 Errors Related to Limited vocabulary.....	35
4.1.2 Vocabulary Errors Related to Pronouns .....	37
4.2 Impact of Kenyan Sign Language on Syntactical Patterns of Written English .....	42
4.2.1 Errors in word order.....	43
4.2.2: Errors of Omission in Syntax.....	46
4.2.3 Errors of Commission in Syntax.....	50
4.3 Impact of Kenyan Sign Language on Tense Markers in Written English .....	56
4.3.1 Present Tense markers .....	56
4.3.2 Past Tense Markers .....	57
4.3.3 Continuous Tense Markers .....	58
4.3.4. Participle tense markers .....	60
<b>CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS.....</b>	<b>69</b>
5.1 Summary of the Findings.....	69
5.1.1 Impact of Kenya Sign Language on Choice of Vocabulary. ....	69
5.1.2 Impact of Kenya Sign Language on Syntax in Written English.....	70
5.1.3 Impact of Kenyan Sign Language on Tense Markers in Written English Grammar .....	70
5.1.4 Impact of KSL on Singular /Plural Markers in Written English Grammar .....	72
5.2 Conclusions.....	73
5.2.1 Impact of KSL on Choice of Vocabulary in Written English among Learners who were Deaf.....	73
5.2.2 Impact of Kenya Sign Language on Syntactical Patterns of Written English. ....	73
5.2.3 Impact of KSL on Tense Markers in Written English Grammar.....	74
5.2.4 Impact of KSL on Plurals/singulars in written English grammar.....	74

5.3 Recommendations.....	74
5.4 Suggestions for Further Study .....	75
<b>REFERENCES.....</b>	<b>76</b>
<b>APPENDICES .....</b>	<b>80</b>



## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>ASL</b>	American Sign Language
<b>CAH</b>	Contrastive Analysis Hypothesis.
<b>EFL</b>	English for Foreign Learners
<b>HI</b>	Hearing Impaired
<b>HL</b>	Hearing Loss
<b>KCPE</b>	Kenya Certificate of Primary Education
<b>KCSE</b>	Kenya Certificate of Secondary Education
<b>KICD</b>	Kenya institute of curriculum development
<b>KSL</b>	Kenyan Sign Language
<b>SC</b>	Simultaneous Communication
<b>SE</b>	Signed English
<b>SNE</b>	Special Needs Education
<b>TC</b>	Total Communication
<b>CELF</b>	Clinical Evaluation of Language Fundamentals
<b>DAG</b>	Document analysis Guide
<b>KNEC</b>	Kenya National Examination Council
<b>MOE</b>	Ministry Of Education
<b>SEE</b>	Signed Exact English

## LIST OF TABLES

<b>Table 1:</b> KCPE English Mean Scores for 2010, 2011, 2012, 2013 for (n=6 Primary Schools for Learners who are Deaf and 6 Regular Primary Schools) .....	5
<b>Table 2:</b> October 2014 Classes Five, Six and Seven English Grammar Mean Scores for six Primary Schools for Learners who are Deaf and six Regular Primary Schools in Nakuru Region in Kenya. ....	6
<b>Table 3:</b> Population and Sample Size.....	25
<b>Table 4:</b> Error analysis in vocabulary among learners who are Deaf (n= 141) .....	31
<b>Table 5:</b> Opinion of Teachers on Variety of vocabulary in use in Written English Grammar by Learners who are Deaf (n=18) .....	40
<b>Table 6:</b> (n=141) .....	42
<b>Table 7:</b> Rating Opinion of teachers for English on syntactical pattern in Written English Grammar among Learners who are Deaf.(n=18).....	54
<b>Table 8:</b> Impact of Kenyan Sign Language on Tense Markers in Written English(n=141) ...	56
<b>Table 9:</b> Opinion of Teachers for English on Tense markers in Written English Grammar among Learners who are Deaf (n=18) .....	61
<b>Table 10:</b> Results of pupils competence in marking singular and plurals in written English (n= 141).....	63
<b>Table 11:</b> Opinion of teachers on written English Singular and Plural Markers (n=18) .....	67

## LIST OF APPENDICES

A: Document Analysis Guide (DAG) Vocabulary in Use .....	70
B: Questionnaire for teachers for English: .....	82
C: Samples of learners' productive written work:.....	87
Excerpt 11.....	87
Excerpt 6.....	88
Excerpt 36 .....	89
Excerpt 9 .....	90
Excerpt 31 .....	91
Excerpt 12.....	92
Excerpt 15.....	93
Excerpt 76.....	94
Map of Nakuru Region.....	95
MUERC PERMIT .....	97

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Language as defined by Rice (2008) is a process or set of processes involving symbols which should carry the same meaning both to originator and receiver in order to convey intended message. Halut and Howard (2006) points out that sign language has three components other languages have form, content and use. Form deals with phonology which is the aspect of sequencing of syllables and sound in words. Morphology deals with how a part of the word holds meaning. Syntax deals with order of words to bring out meaningful sentences. Content deals with semantics which govern meaning of words and different word combinations. Use involves Pragmatics, rules which govern language used in communicative environment.

Language development in children is dependent on consistency, frequency and accessibility of the mode of communication in a child's environment. Delayed exposure to an accessible first language in early life leads to incompetent acquisition of all subsequent languages to be learnt. (Sandra 2005) argued that Children who are deaf, born of parents who are hearing, grow up in sign language deficient environments which lead to deficient acquisition of vocabulary. These children form a cohort of unique children in the world who cannot naturally acquire a mother tongue from their mothers (Mellon *et al.*, 2015)

Zaho (2009) defined Vocabulary as; the stock of fixed non-generative words. Mastery of vocabulary usage, variation and synonyms enables learners to enhance social norms and discourse ability. If vocabulary acquisition is not sufficient, learners face challenges in receptive and expressive language in written English grammar. Studies conducted in the area of English language vocabulary competence by learners who are deaf, dwelt mostly on KSL and English literacy skills, vocabulary acquisition by learners who are deaf and methods of

teaching vocabulary to learners who are deaf. Nevertheless, impact of Kenya sign language on vocabulary competence by learners who are deaf was not discussed. This study, therefore, intended to analyse Impact of Kenya sign language on choice of vocabulary used in written English by learners who are deaf in upper primary classes in Nakuru Region in Kenya.

Halut and Howard (2006) points out that Syntax deals with order of words to bring out meaningful sentences. Studies conducted in the area of syntactical structures used by learners who are deaf concentrated on critical period of language acquisition (Mayberry, 2007). Angela (2014) in her study: *Morphosyntactics Development of Preschool Children with Hearing Loss using Clinical Evaluation of Fundamental Language (CELF) Preschool Edition* involving 47 preschoolers using hearing aids or cochlear implants did an itemized analysis on *word structure* and *sentence structure* to determine whether children with Hearing Loss (HL) performed within the standard range.

The results indicated specific patterns of errors in syntactical order with this group. The study was conducted with preschoolers using hearing aids or cochlear implants who live in community whose first language is spoken English. However impact of KSL on written English syntactical pattern among learners who are deaf in upper primary classes living in communities whose first language is not English had not been looked into. This study therefore intended to establish impact of KSL on written English syntactical pattern among upper primary classes' learners who are deaf from communities where English is not the first language.

Ayoo (2012) in her study on *Morphosyntactics errors in written English of standard eight hearing impaired pupils* concentrated on effect of degree of hearing loss in relation to morphosyntactics errors among this group of learners. Findings of that study confirmed that written English for this category of learners had challenges with the verb, with partially deaf

showing better mastery of English as compared with their profoundly deaf colleagues. None of the studies looked into Impact of KSL on syntactical patterns of written English grammar among learners who are deaf in upper primary classes. This study therefore intended to establish impact of KSL syntactical structure on syntactical patterns of written English grammar among learners who are deaf in upper primary classes in Nakuru Region in Kenya.

Tenses, as put by Okoth *et al* (2006), are grammatical indication of the relationship between the time of expression of an event and the time of the reported event. The time of expressive event being termed Present, the Period before present is referred to as Past, while the period after present is the Future. Tense markers not only involve the verb and time adverbials but also the aspect which is the condition of the reported event in time and space; such as habitual, progressive or perfective. Guo *et al* (2012) conducted a study on the role of speech on the acquisition of tense markers among children who are deaf who have been fitted with cochlear implants from backgrounds where English is the first language. The results indicated that children who are deaf, fitted with Cochlear Implants have difficulty in choice of appropriate tense markers because of early deprivation of auditory input. Errors tended to be omission more than commission errors.

Angela (2014) in her study: *Morphosyntactics Development of Preschool Children with Hearing Loss using CELF* involving 47 preschoolers using hearing aids or cochlear implants did an itemized analysis which revealed a pattern of errors in Tense Markers made by this group. These errors involved using the phoneme /s/ indicative of verb tense, regular past tense-ed, and irregular past tense in which the researcher recommended further investigation into the frequency of sound factors that may prevent acquisition of morphosyntactics part of language with this population. The study was conducted with preschoolers. However, marking of tenses in written English by learners who are deaf in upper primary classes in

Nakuru Region was not looked into. This study, therefore, intended to analyse errors in tense markers in written English by learners who are deaf in upper primary classes in Nakuru Region in Kenya.

Plural is a grammatical adjective denoting more than one which could be a plural word or form. Singular and plural also called grammatical number identifies the quantity of the subjects and objects in a sentence. In KSL, plural or singular state is marked by signing of a number immediately after a noun.

Marking of plural in KSL can either be done by Use of quantifiers such as MAN MANY, or the use of reduplication of the noun such as; MAN/ MAN (Okombo et al 2006). The noun 'Men' for example, in KSL becomes *MAN MANY* or *MAN FIVE/* or *MAN MAN//* quantifier or an exact figure quoted or repetition of the noun are used to show plural number. In KSL Singular is shown by quantifiers such as: CHILD ZERO or ONE to mean 'no child' and one child respectively.

Ayoo (2012) in the study she conducted on errors in Morphosyntactics found out that learners who are deaf have a challenge Morphosyntactics in written English. However specific impact of Kenya sign language structure on singular and plural markers was not looked into. This current study, therefore, intended to establish Impact of Kenya Sign Language on singular and plural markers in written English grammar among learners who are deaf in upper primary classes in Nakuru Region.

**Table 1.1: KCPE English Mean Scores for 2010, 2011, 2012, 2013 for six Primary Schools for Learners who are Deaf and six selected Regular Primary Schools in Nakuru Region against National English mean score**

CATEGORY	YEAR			
	2010	2011	2012	2013
National mean	45.92	44.74	45.3	47.48
Regular schools	56.24	47.87	47.89	48.74
Deaf schools	30.27	29.58	31.41	29.74

**Source: schools KCPE results print out sheets from KNEC and MOEST 2014 basic educational statistical booklet**

From table 1, it is evident that learners who are deaf have a challenge in written English. For four consecutive years 2010, 2011, 2012&2013 KCPE performance scores for written English grammar by learners who are deaf never went beyond 31.41 as compared to a peak of 56.24 scored by hearing learners within the four years of the study.

Nakuru Region is in the former rift valley province which realised exemplary performance nationwide in KCPE during the period of the study as seen in table 1. Regular schools in Nakuru region posted a mean that was above the National mean during the time of this study. However English mean score realised by the Deaf learners was way below the national mean as seen in table Table 1 .This was in agreement with a study by Traxler (2000) in his work on Achievement of selected deaf and hard of hearing students which establish that learners



who are deaf complete school with English grammar competence of an 8/9 year-old hearing child

**Table 1.2: October 2014 Classes Five, Six and Seven English Grammar Mean Scores for six Primary Schools for Learners who are Deaf and six Regular Primary Schools in Nakuru Region - Kenya.**

category of school	Class	n	Scores					f (%)	
			Above 50	40-49	30-39	20-29	10-19	0-9	
Deaf	5	49	0(0%)	0(0%)	0(0%)	7(14%)	11(23%)	31(63%)	
Regular	5	323	2 (9 %)	4(13%)	63(19%)	7(24 %)	87(27%)	25(8%)	
Deaf	6	51	0(0%)	0(0%)	0(0%)	5(9%)	9(18%)	37(73%)	
Regular	6	318	27 (8%)	43(14%)	57(18%)	89(28%)	78(24%)	24(7%)	
Deaf	7	41	0 (0%)	0(0%)	0 (0%)	3(7%)	9(22%)	29(71%)	
Regular	7	311	29(9 %)	38(12%)	7(23%)	88(28%)	59(19%)	26(8%)	

**Source: End of year County mock examinations School score sheets**

From the scores in table 2, learners who are deaf have shown a trend of significantly low scores for four consecutive years, 2010, 2011, 2012 and 2013. In the highest category range of scores of above 50 mark no learner who is deaf was found in this category as compared to learners who are hearing who had 9%, 8% and 9% in classes five, six and seven respectively scoring above 50 mark category. The highest range of score attained by learners who are deaf was between 20-29. This was attained by 14% of learners who are deaf in class five, 9% of learners who are deaf in class six and 7% of learners who are deaf in class seven. The highest percentage (63%, 73% and 71%) of learners who are deaf across the three classes five, six and seven respectively, scored within the lower cadre range of scores of 0-9, as compared to only 8% of learners who are hearing in class five, 7% of learners who are hearing in class six and 8% of learners who are hearing in class seven. This trend of low scores in English grammar by learners, who are deaf in classes five, six, and seven, is the

reason this study intended to establish Impact Kenya sign language has on written English grammar among learners who are deaf in upper primary classes in Nakuru Region in Kenya.

## **1.2 Statement of the Problem**

Performance for learners who are deaf in Kenya Certificate of Primary Education (KCPE) has been notably low as compared to their hearing counterparts. In this study, Grammar constitutes: vocabulary, syntax, and tense markers, plural and singular markers. For learners to attain good grades in English language in Kenya Certificate of Primary Education (KCPE), they have to acquire competence in English grammar.

Class four is a transition class from mother tongue to English for primary school learners as regards language of instruction whereas class eight is the exit class, so how well learners who are deaf in classes; five, six and seven acquire English grammar concepts would be an indicator of their expected performance in Kenya Certificate of Primary Education (KCPE) Examination. English language is the recommended language of instruction and communication in Education system in Kenya

Table 1 show KCPE results for four consecutive years; 2010, 2011, 2012, and 2013. The highest mean score attained in English language by learners who are deaf within the four years was 31.41 mean score as compared to 56.24 mean score attained by learners who are hearing in selected primary schools within the same region. In order to ascertain the cause for this trend of low attainment in English grammar by learners who are deaf, this study, intended to establish Impact Kenya sign language has on written English Grammar in regards to: vocabulary, syntax, tense markers, singular and plural markers in written English among learners who are deaf in classes five, six and seven in primary schools in Nakuru Region in Kenya.

### **1.3 Purpose of the Study**

The purpose of this study was to establish Impact of Kenya Sign Language on written English grammar among learners who are deaf in upper primary classes five, six and seven in Nakuru Region in Kenya.

### **1.4 Objectives of the Study**

Objectives of this study were to:

- i. Analyse the Impact of Kenya sign language on the choice of vocabulary in use in written English grammar
- ii. Determine Impact of Kenya sign language on syntactical patterns of written English.
- iii. Establish Impact of Kenya sign language on tense markers in written English grammar.
- iv. Examine Impact Kenya sign language has on singular and plural markers in written English grammar.

### **1.5 Research Questions**

Pertinent research questions to guide this study were:

- i. Does Kenya Sign Language affect choice of vocabulary in use on written English grammar among learners who are deaf in upper primary classes?
- ii. How does Kenya Sign Language syntactical order affect syntactical order of written English among learners who are deaf in upper primary classes?
- iii. What Impact does Kenya sign language has on how tenses are marked on written English among learners who are deaf in upper primary classes?
- iv. In what way(s) does Kenya Sign Language affect how plural and singular are marked on written English grammar among learners who are deaf in upper primary classes?

## **1.6 Assumption of the Study**

This study was carried out on the assumption that classes five, six and seven learners who are deaf are taught written English grammar following the recommended syllabus guide lines for English language and using instructional materials for English teaching/learning in primary schools approved by Kenya Institute of Curriculum Development (KICD).

## **1.7 Scope of the Study**

The study focused on analysis of errors related to vocabulary, syntax, and tense markers, plural and singular markers in written English grammar involving 157 learners who are deaf in upper primary classes' five, six and seven in six primary schools for learners who are deaf in Nakuru Region in Kenya. Class four was deemed to be transition class from mother tongue to English whereas class eight was considered exit class.

## **1.8 Limitations to the Study**

Instructions were given in English, a language which learners who are deaf have difficulty in. This challenge was a hindrance to both receptive and expressive communication. This limitation was countered by giving an explanation whenever necessary in signed English (SE) To make sure learners had a common understanding of that which was expected of them.

## **1.9 Significance of the Study**

The findings of this study would guide in decision making in curriculum development, implementation, monitoring and evaluation for English grammar for learners who are deaf in upper primary. This would be of benefit to learners in primary schools who are deaf since curriculum content development and evaluation would be differentiated to meet the learners' needs by addressing the Deaf learners' unique way (visual gestural) for learning of a second

language. This would also act as a guide in decision making in policy formulation and implementation as regards educational matters concerning learners who are deaf.

The findings of this study would also form a basis for future research in pedagogical approaches in the teaching of English grammar as a second language for learners who are deaf in primary schools. This would be of benefit to teachers for English for learners who are deaf since they would be better prepared to handle the teaching of English grammar to Deaf learners in primary schools. Better teaching approaches, would translate to efficient second language learning techniques for learners who are deaf. These finds would also help improve quality of written English grammar by learners who are deaf for academic and functional communicative purposes in so doing enhance communication between the hearing community and the Deaf learners.

### **1.10 Theoretical Frame Work**

Behaviourists' theory including contrastive analysis hypothesis (CAH)

According to Proponents of Behaviourist theory all learning is pegged on stimuli, repetition/practice and reinforcement to create desired habits. Pavlov, skinner and Bruner who are the proponents of Behaviourist theory argued that children learn all aspects of language by practice, repetition and reinforcement. For Behaviourist, correct input (stimuli) is important since learners imitate and practice the input. Practice should be based on repetition and memorization for learners to form desired habits – in this study was mastery of written English grammar.

However Behaviourist believed that for target language learning, there is interference of first language habits an idea linked to Contrastive Analysis Hypothesis (CAH). If the first language ( $L_1$ ) and the target language are similar, the learner will be successful in mastering target language. This is referred to as positive transfer. If there are differences in first

language ( L<sub>1</sub> ) and target language the learner will have difficulty and will make mistakes. If L<sub>1</sub> grammatical structure was different from that of target language, then L<sub>1</sub> could intrude and cause difficulty in producing the new form (Horwitz 2008). That was referred to as negative transfer or interference.

If errors are not corrected they become permanent and resistant to change, forming undesired language structures. This is referred to as fossilization. Prompt ongoing error correction, reinforcement and practice are of paramount importance for formation of desired habit (target language mastery). Accurate visual–gestural inputs are important based on repetition and reinforcement for desired habit formation.

Impact of Kenya sign language transcription on written English grammar among learners who are deaf in classes five, six and seven was based on behaviourist theory including contrastive analysis hypothesis (CAH). Behaviourists argued that we gradually build up associations between the words and groups of words. Vocabulary acquisition by learners who are deaf (behaviour change) could be influenced by consistency in practice/reinforcement in the level of vocabulary in language of instruction (input/stimulus) or communicative language with learners who are deaf. When L<sub>1</sub> grammatical syntactical structures were different from that of target language, L<sub>1</sub> could intrude and cause difficulty in producing the desired form (Horwitz 2008). Lozonova and Satchev (2009) syntactically correct patterns in written English (Stimulus) consistently used (repetition/reinforcement) could result in mastery of correct sentence pattern acquisition (desired habits) among learners who are deaf. This applied to tense markers and singular and plural markers in written English grammar. Behaviourist theory based on stimuli repetition and reinforcement to lead to behaviour change was applicable in this current study.

Written English grammar, which in this study was limited to vocabulary, syntax, tense markers and plural and singular markers were the stimuli to be reinforced /practiced with the aim of bringing about mastery of target language (desired habits formation) was expected to be depicted in correct written English Grammar).

## 1.11 Operational Definitions of Terms

**Deaf** (with upper case): when used as a noun to refer to a community of persons with profound hearing loss

**deaf** (with lower case) when used as a verb to denote the inability to sensibly perceive sound stimuli

**Grammar:** Set of rules governing a particular language usually taken as consisting of syntax, morphology, semantics and vocabulary.

**Impact:** A result or condition produced when one thing acts on another.

**L<sub>1</sub> :** First language acquired from family set up

**L<sub>2</sub> :** Second Language deliberately learnt

**Language Acquisition:** Natural almost automatic language development by constantly listening and participating in that language,

**Learning of a Language:** Deliberate conscious effort under formal instruction in which grammar of a new language is learnt

**Nakuru Region:** A consortium of residential schools for learners who are deaf located within Baringo, Keiyo/Marakwet, Kericho, Nakuru, Nandi, and Uasin-Gishu counties

**Simultaneous communication:** Use of speech together with signs, gestures and body language in communicating with learners who have hearing impairments.

**Syntactical Pattern:** Word order in sentences to bring out intended meaning.

**Upper primary classes:** classes five, six and seven

**Vocabulary:** All the appropriate relevant words in English that enhances fluent communication including spelling and pronouns

**Vocabulary Variety:** Diversified word choice such as synonyms and antonyms.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Choice of Vocabulary in Written English Grammar among Learners who are Deaf

According to Zaho (2009) Vocabulary is defined as the stock of fixed non-generative words. Mastery of vocabulary usage, variation and synonyms enables learners to enhance social norms and discourse ability. If vocabulary acquisition is not sufficient, learners face a challenge in receptive and expressive language in written English grammar. Vocabulary plays a crucial role in acquisition of a language. Lexical chunks are retrieved and processed as whole units which may not only enhance accuracy and fluency of language but also speed up language processing significantly especially in English for Foreign Language Learners (EFL) Zaho (2009). Effective vocabulary acquisition requires learners to use vocabulary correctly and consistently. Learners who are deaf lack exposure to conversational language as they live amongst the hearing community who are not proficient in signing (Adoyo 2002, Kimani 2012, Muranda 2015, Goldin-meadow, 2001) Knowledge of vocabulary of a language, how vocabulary elements are expressed and combined to form sentences, forms linguistic competence.

A study by Alber and Foil (2003) on activities that promote and extend students' vocabulary proficiency argue that deliberate effort has to be made to enhance both L<sub>1</sub> and L<sub>2</sub> vocabulary development among learners who are profoundly deaf. The ability to be an active participant in a conversation enhances vocabulary acquisition and literacy skills. (Kuntze, Golos & Enns, 2014; Svartholma, 2010). Adoyo (2004) posits that there are limited operational vocabularies in signs used in regular communication by learners who are deaf. This limitation in the deaf learner's first language limits vocabulary in use in their everyday conversation. Empirical study by Irokabo (2006) points out that among other problems facing deaf education in Africa, teachers simplify the English they use during lesson instruction thus watering down

the vocabulary acquisition among other concepts taught, however Impact of KSL on choice of vocabulary in written English grammar was not mentioned.

Peabody Picture vocabulary (Dunn & Dunn 2007) argued that vocabulary learning by learners who are deaf may involve more than receptive vocabulary knowledge. In order to distinguish closely related vocabulary it may involve signing the word coupled with finger spelling of the same. Example: 'Tortoise' would be signed the same as 'Turtle'. Thus finger spelling is the only way to distinguish between the two. Research on challenges faced by learners of language who are deaf, by Lazanova and Savtchev (2009) agree that English being a second language(L<sub>2</sub>) for learners who are deaf need careful instruction for them to master new concepts. Nonetheless impact of KSL on choice of vocabulary in written English by learners who are deaf in primary schools in Kenya was not looked into.

Mulonda (2013) in; Situational Analysis on the use of Sign Language in the Education of the Deaf in Zambia, found out that among challenges both students and teachers face in learning/teaching was limited available signs for vocabulary. This was handled by code switching between English and sign language during lesson instruction. However Impact of Sign Language on choice of vocabulary in written English grammar was not considered. This Study therefore intended to establish Impact of Kenya Sign Language on choice of vocabulary in written English Grammar among primary school learners who are deaf.

A study conducted by Ogada (2012) to ascertain challenges of written English composition among class seven learners with hearing impairment in the then Nyanza province dwelt in teaching strategies, methods and resource materials used in the teaching of English composition. Results from that study indicated that teaching methods, strategies and instructional resources used in teaching English composition needed deliberate improvement. However impact of Kenya sign language on the choice of appropriate vocabulary used in

written English by learners who are deaf was not considered as a factor contributing to challenges in composition writing among learners in upper primary classes who are deaf. This study therefore intended to establish Impact of Kenya sign language on vocabulary in use in written English among learners who are deaf in Upper Primary in Nakuru Region, Kenya

Use of appropriate vocabulary, vocabulary variation, synonyms and antonyms enables learners to enhance social norms and discourse ability. Lucas (2001) points out that, while a dictionary for English will define a word, give its correct pronunciation in phonetics, explain its origin and give its correct use in sentences; Kenya Sign language (KSL) dictionary will only define a sign by providing an equivalent translation in written English. This makes it hard for learners who are deaf to use vocabulary in sign language dictionary appropriately on written English as the sign language dictionary has a lot of details missing. The 5<sup>th</sup> draft Kenya sign language (KSL) dictionary currently in use in primary schools for learners who are deaf is lacking in a lot of vocabulary content intended to be learnt and mastered by primary school learners as outlined in primary school syllabus course outline for English. Finger spelling a new vocabulary does not in any way make the new word get understood any better by learners of English as a second language. Finger spelling is an equivalent of reading out aloud the spelling of any new word and does not bring out the meaning of the new word spelt vocally.

When vocabulary acquisition is not sufficient learners face a challenge in receptive and expressive written English. Ogada (2012) argues that children who are deaf, born of parents who are hearing grow up in sign language deficient environments leading to deficient vocabulary acquisition. However impact Kenya sign language has on vocabulary used in written English by learners who are deaf in primary school was not seen as a factor on choice

of vocabulary among learners who were deaf. This study, therefore, intended to establish Impact of Kenya sign language on the choice of vocabulary on written English by learners who are deaf in upper primary classes in Nakuru Region in Kenya.

## **2.2 Syntactical Patterns in Written English Grammar by Learners who are Deaf.**

Deleterious effects of delayed First Language (L1) are apparent at all levels of linguistic structures namely; syntax, phonology and lexicon. Early language acquisition not only bestows facility with linguistic structure at the L<sub>1</sub>, but it also bestows ability to learn linguistic structure throughout life (Mayberry 2006). Delays and deficits in language input for children who are deaf due to limited or lack of auditory input limit incidental learning of first language. This hinders fluent communication with the hearing community.

Universal Grammar theory by Chomsky argues that Learning of a second language (L<sub>2</sub>) is not so much an isolated thing as it builds on the rules and grammar of the first language (L<sub>1</sub>) by discovering how to set parameters for the new language (Cook 2007). Children who are deaf do not have a written or spoken language on which to pin their second language learning since sign languages are entirelyly visual gestural languages Angela (2014) in her study: *Morphosyntactics Development of Preschool Children with Hearing Loss using Clinical Evaluation of Fundamental Language (CELF) Preschool Edition* involving 47 preschoolers using hearing aids or cochlear implants did an itemized analysis on *word structure* and *sentence structure* to determine whether children with Hearing Loss (HL performed within the standard range.

The results indicated some specific patterns of errors with this group. Delayed exposure to an accessible first language in early life leads to incompetent acquisition of all subsequent languages as earlier mentioned. Mayberry (2006) argue that deleterious effect of delayed L<sub>1</sub> are apparent at all levels of linguistic structures namely; syntax, phonology and lexicon. Early

language acquisition not only bestows facility with linguistic structure at the L<sub>1</sub>, but it also bestows ability to learn linguistic structure throughout life. Knowledge of lexical items, rules of morphology, semantics and phonology are crucial in language mastery. Lozanova and Satchev (2009) argue that Consistency in the use of syntactically correct patterns in written English determine mastery of correct sentence patterns.

Syntactically correct English sentence patterns differ as determined by sentence type. Such sentences are; affirmative, negative, imperative, interrogative and declarative sentences. Competence in variation on: subject/ verb/ object (SVO ) order shapes proficiency in written English for learners who are deaf. Whenever the SVO order is disturbed, the resulting sentence pattern often poses a challenge for students who are deaf in acquiring syntactically correct sentence in written English such as in passive formations, questions, participles and gerunds among others.

Examples in sentences;

- i. Lions eat meat.  
S V O (The common sentence pattern in written English)
- ii. What do lions eat?  
O V S V (patterns for questions)
- iii. The girl asked the mother what food to cook.  
S V O O S V (Reported speech pattern)

In sentence i Subject Object Verb (SVO) word order for English sentences was observed. In sentence ii a wh-question ‘*what*’ represents the object of the verb ‘*eat*.’ However the position of *eat* and *what* had to move to the beginning of the sentence in accordance with the rules of English syntax. This gives rise to a different word- order (OVSV). In sentence iii typical of reported speech word order, the fist clause conforms with SVO word order but the

auxiliary clause has a different word order of OSV. Such adjustments confuse learners who are deaf (Adoyo 2004)

Cited study was conducted among college learners who were deaf in Europe where L<sub>1</sub> is English language., Impact of Sign Language syntactical structure on written English syntax among learners who are deaf living among communities where English was not the first language had not been looked into. This study therefore intended to establish impact KSL syntax had on written English syntactical patterns among learners who are deaf in Upper Primary classes in Nakuru Region in Kenya.

A study conducted by Raga (2014) to investigate the cause for poor performance by students with hearing impairments in Kenya certificate of secondary education (KCSE) in Kuja secondary school for the deaf, Migori county. He did Comparison of grammatical pattern of written KSL syntax in relation to written English syntax. The findings indicated that mixing KSL sentence structure with written English sentence patterns was the reason for low academic scores in KCSE among deaf learners in high school. However, Impact of KSL on written English grammar among learners who are deaf in upper primary schools was not taken into consideration as a factor in academic performance among this category of learners. This study therefore intended to establish Impact of KSL on written English grammar among learners who are deaf in upper primary classes in Nkuru Region in Kenya.

Hochgensang (2007) in his study on Literacy among deaf children in Kenya established that areas of difficulty particularly include acquisition of morphology, syntax and vocabulary such as inflectional affixes, function words, deviation from canonical word order and limited breadth and depth of lexical knowledge. However impact of KSL word order on written English syntactical patterns was not put into consideration as a factor that could impact on mastery of written English syntax among learners who were deaf..This current study,

therefore, intended to establish impact of Kenya sign language on syntactical patterns of written English grammar among learners who are deaf in upper primary classes in Nakuru Region in Kenya.

### **2.3 Tense Markers in Written English Grammar among Learners who are Deaf.**

Tenses as put by Okoth *et al* (2006), are grammatical indication of the relationship between the time of expression of an event and the time of the reported event. The time of expressive event being termed Present, the Period before present is referred to as Past, while the period after present is the Future. Tense markers not only involve the verb and time adverbials but also the aspect which is the condition of the reported event in time and space; such as habitual, progressive or perfective. Every verb form has five patterns that distinguish tense. The verb 'eat' for example will have the following verb forms:

*Eat-* Being the root verb for the present tens

*Ate-* Is the simple past form of the root verb.

*Eats-* Is used for the 3<sup>rd</sup> person singular to indicate habitual concept.

*Eating-*Being the continuous form used in making continuous constructions.

*Eaten-* Indicates perfect and the passive forms of the verb.

Deleterious effects of delayed First Language (L<sub>1</sub>) are apparent at all levels of linguistic structures namely; syntax, phonology and lexicon. Early language acquisition not only bestows facility with linguistic structure at the L<sub>1</sub> but it also bestows ability to learn linguistic structure throughout life (Mayberry 2006). Delays and deficits in language input for children who are deaf due to limited or lack of auditory input limit incidental learning of first language. This hinders fluent communication with the hearing community. Universal

Grammar theory by Chomsky argues that Learning of a second language (L<sub>2</sub>) is not so much an isolated thing as it builds on the rules and grammar of the first language (L<sub>1</sub>) by discovering how to set parameters for the new language (Cook 2007).

Children who are deaf do not have a written or spoken language on which to pin their second language learning since sign languages are entirely visual gestural languages Bochner and Bochner (2009) on 'limitation on reading as a source of linguistic input: Evidence from deaf learners', argue that for Learners who are deaf it takes deliberate efforts to learn grammatical rules for both L<sub>2</sub> and often L<sub>1</sub>, if such a child is born of hearing parents who are not competent in structured sign language. On the contrary Hearing children acquire language competence almost automatically by listening to others and self during conversation and continually improving on their language skills. If grammar concepts are missed out from the start by learners who are deaf, later on fossilization occurs with error patterns tending to be highly resistant to remediation.

Learners who are deaf depend on memory and categorization to learn new language concepts. A study by Adoyo (2004) on Sign Language and Simultaneous communication established that English tense markers mix up a learner who is deaf quite easily. This occurs as the L<sub>1</sub> of learners with hearing impairment, do not have distinct specific signs to mark tenses in its different forms. Instead this aspect of grammar is marked by descriptive adjectives such as PAST, PRESENT and FUTURE. However, impact of KSL on mastery of tenses markers by learners who were deaf was not put into consideration by any of the above studies. This study therefore, intended to establish impact of Kenya sign language on mastery of tense markers in written English grammar among learners who are deaf in upper primary classes in Nakuru Region in Kenya.



## **2.4 Plural and Singular Markers in Written English Grammar by Learners who are Deaf.**

Plural is a grammatical adjective denoting more than one which could be a plural word or form. Singular and plural also called grammatical number identifies the quantity of the subjects and objects in a sentence. To acquire competence in any language one of the skills required is to be able to express grammatical number appropriately. As mentioned earlier, information about grammatical number in a sentence can be expressed in two ways; either by use of numerals such as one, two, three, four etc or by the use of grammatical properties on the subject or object, noun or pronoun which denotes grammatical number. Okoth et al (2006) posits that discussion on number as a grammatical aspect usually focuses on plural formation since singular is usually not given any special marking in written English. However this study will want to find out if KSL has any Impact in the way learners who are deaf in upper primary classes in Kenya mark plural and singular in written English grammar.

Plural and singular markers in sign language are denoted by the use of quantifiers or a doubling of the noun. A quantifier or a quantity figure is used to show number. For example English noun 'Children'; becomes CHILD CHILD// in KSL (repeat of the noun). Use of an exact quantity for example *Three children* become CHILD THREE// in KSL Likewise singular in KSL is shown by quantifiers such as CHILD ZERO// to mean *no child* or MAN FEW// to mean *a few men* (Adoyo, 2009). Social linguistic competence requires the understanding of social context in which a particular language is used, roles of the participants and the roles they play during interaction process. Hearing children learn sociolinguistic naturally during interaction with others. For children who are deaf the process has to be deliberately learnt. Otherwise children who are deaf grow up impoverished in social linguistic (Medel & Flexer 2008).

Hochgesang (2007) argues that learners with hearing impairment are not stupid based on their written English, rather it is their lack of readiness to work with a second language. Learners who are deaf find it hard to write correct English in general. Lack of knowledge of the language used to read and write resulted in poor performance in English language in KCPE by learners who are deaf in primary school.

Studies conducted dwelt generally on language competence and approaches of teaching of English language to learners who are deaf. Nevertheless Impact of Kenya sign language on the use of plural and singular markers in written English among learners who are deaf in upper primary classes was not covered. This study, therefore, intended to establish Impact of Kenya sign language on the use of plural and singular markers in written English by learners who are deaf in upper primary classes in Nakuru Region in Kenya.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Design**

This study used Descriptive Research Design. Descriptive research design is recommended by Creswell (2013) as being ideal for gathering information on Educational issues as it is not restrictive to fact finding only but often result in the formulation of important principles of knowledge and solution to significant problems. Descriptive research design was used as it is suitable for data collection at a particular point in time with the intention of describing the nature of existing conditions and determine relationship that exist. Descriptive research design was, therefore, appropriate for this study as results were qualitatively analysed to determine relationships that exist and make generalizations

#### **3.2 Area of Study**

The study was carried out in Residential schools for learners who are deaf within Nakuru region in Kenya. The region lies within coordinates 0<sup>0</sup> and 36<sup>0</sup>E. Nakuru Region is in the heart of the Great Rift Valley in the western block of Kenya.

There are several physical features in the region: forest, game reserves and the Great Rift Valley escarpments. A Large expanse of agricultural land support animal husbandry, horticulture, tea, wheat and maize farming. Scattered mining activities take place in this region as well. This area is a centre of communication, commerce, sports and Education.

The area has a truck record of posting good results in KCPE performance as was the case in 2011,2012,and 2013 consecutively when it was ranked the top nationwide (<http://www.standardmedia.co.ke.mobile>).However KCPE performance by learners who are deaf in this Region had not been impressive as seen from the tabulated results in table 1. Based on this incoherence of KCPE English grammar scores realised by learners who are

deaf as compared to their hearing counterparts this study intended to find out Impact of KSL on written English grammar among learners who are deaf in upper primary classes in Nakuru Region.

### 3.3 Study Population

The study involved 157 learners who are deaf in classes; five, six and seven in six primary schools for learners who are deaf and 21 teachers for English in classes five, six and seven in schools for learners who are deaf in Nakuru Region in Kenya.

### 3.4 Sample and Sampling Technique

Purposive sampling technique was deemed appropriate in selecting Regular Schools for the study. Purposive sampling technique is a non probability sampling technique and explains cases that are average and normal. This sampling makes generalisation possible from the results being studied (Saunders *et al*) On the other hand saturated sampling technique was used to select 141 pupils and 18 teachers in six primary schools for learners who are deaf. Saturated sampling technique is a non-probability sampling technique where all the members of the target population are selected since they are too few to make a sample out of them (Orodho, 2009). In this study, therefore, saturated sampling technique was deemed the most appropriate since target population was too small to be sampled out. Table 3, shows population and sample size.

**Table 3: Population and Sample Size.**

<b>Respondents</b>	<b>Population (N)</b>	<b>Sample (n)</b>	<b>Percentage (%)</b>
Pupils	157	141	90
Teachers	21	18	86

### **3.5 Instruments of Data Collection.**

Document analysis of learners' written English text on a familiar topic such as "my school" was used to analyse errors in the use of vocabulary, errors in syntax, errors in tense markers, errors in singular and plural markers in written English among classes; five, six and seven learners who are deaf in upper primary classes in schools for the Deaf in Nakuru Region in Kenya. Questionnaires for teachers for English in the same classes were analysed.

#### **3.5.1 Document Analysis Guide**

Document analysis guide was used to analyse errors in written English work by learners who are deaf as regards to variety of vocabulary, Vocabulary errors in relation to the use of Pronouns, spelling errors, errors in word order, Errors of Omission in syntax, Errors of Commission in Syntax, errors in Tense Markers in Written English and errors in Singular and Plural Markers in written English grammar by learners who are deaf. Documents analysed were learners' written English grammar work.

#### **3.5.2 Teachers' Questionnaire**

Teachers' questionnaire was used to collect data on opinion of teachers for English for primary school learners who are deaf. Data collected was teachers' opinion on mastery of written English grammar by learners who are deaf as regards errors in vocabulary used, errors in syntactical patterns, errors in tense markers and errors in singular and plural markers in written English.

### **3.6 Validity and Reliability**

#### **3.6.1 Validity**

Validity, as defined by Mugenda and Mugenda (2003) is the degree to which results obtained from the analysis of the data represents the phenomena under study. To verify face validity and content validity of the instrument used in this study, the research instruments were

presented to experts at the department of Special Needs Education faculty of Education of Maseno University for scrutiny. Recommendations from the experts were used to make the necessary changes before the instruments were used in the field.

### **3.6.2 Reliability**

Reliability of a research instrument is the consistency in eliciting the same results every time it is administered to the same group of subjects (Orodho, 2009). Reliability of research instruments that were used in this study were established through Test Retest with a pilot study involving 16 learners who are deaf and 3 teachers constituting 10% of the study population. The test–retest administered to the sample population gave a correlation coefficient ( $r$ ) of 0.75 which was considered high enough to ascertain reliability of research instruments.

### **3.7 Data Collection Procedures**

Before visiting the target schools for data collection, Research permit was obtained from Maseno University Ethics and Review Committee (MUERC) through School of Graduate Studies, Maseno University. Permission was sought from each of the involved school through Head Teachers before interacting with classes; five, six and seven learners and teachers for English. Written English prose exercise was given to learners and later pupils written work was collected, analysed and qualitatively reported.

### **3.8 Ethical Consideration**

This research sought approval from Maseno University Ethics and Review Committee (MUER) to collect data from schools for learners who are deaf in Nakuru Region. An introductory letter from MUER presented as appendix E, granted the Researcher authority to collect data from the target population.

Reassurance was given to research respondents that the research undertaking would uphold anonymity and confidentiality as concerns parameters of the information supplied by them (Mugenda 2011) That was formalised by respondents willingly signing an informed consent form. The essential purpose of ethical Research was to protect the welfare and the rights of research participant.

Anonymity for research participants was upheld by the researcher by concealing identity of schools and people involved in data collection. During data collection respondents to questionnaires were not supposed to indicate their identity on the questionnaires. Pupils written work did not bear the pupils names nor school name as much as was possible for the purpose of anonymity. Data collected was strictly used for the purposes of this research work only.

### **3.9 Data Analysis**

Qualitative data from Itemized analysis on vocabulary, syntax, plural and singular markers and tense markers was analysed by content analysis method. Descriptive Research design was used. Quantitative data was analysed by use of descriptive statistics in the form of means, percentages and frequencies which will be reported descriptively. Qualitative data was transcribed and organised into themes and reported in verbatim. Likert scale was used to establish mean scores of the responses from teachers. Five point Likert scale responses was scored as follows: Strongly Agree (SA) was scored 5. Agree (A) was rated 4, Undecided (UD) was assigned a score of 3, Disagree (D) was assigned a score of 2 and finally Strongly Disagree (SD) was represented by a score of 1. Seen in Appendix B: Questionnaire for teachers for English

For each Respondent the scores of the responses for each statement was summed up and divided by the number of the respondents to get the mean of the statement. A mean score greater than 3.00 would mean that the respondents agreed with the statements. While a mean score less than 2.5 would mean that the respondents disagreed with the statements, Quantitative data collected using the questionnaire was analyzed using descriptive statistics such as frequencies and percentages as they easily communicate research findings at a glance.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### **4.1 Impact of Kenyan Sign Language on Choice of Vocabulary in use in Written English among Learners who are Deaf in Upper Primary Classes.**

Kenya sign language is deemed the first language for learners who are deaf. In this regard learners who are deaf may experience Mother-tongue interference such as limited signs of vocabulary as they learn written English grammar.

The first objective of this study was to establish effect of Kenya sign language on the choice of vocabulary in use in written English among learners who are deaf in classes five, six and seven. The study analysed vocabulary used in written English grammar among learners who are deaf in classes five, six and seven. Document analysis guide was used as a tool of data collection. Data on the opinion of teachers for English in the three classes was collected using a questionnaire.

The Research Question responded to was: Does Kenya Sign Language affect choice of vocabulary in use on written English grammar among learners who are deaf in primary schools? Document analysis guide was used to ascertain the Impact of Kenya Sign Language on choice of vocabulary in written English grammar among learners who are deaf in primary schools.

Students prose work was analysed using document analysis guide. All the 141 students' work was available for analysis as the schools involved were residential schools for learners who are deaf. Data obtained was summarised and tabulated as shown in Table 4.1.1

**Table 4.1.1: Error analysis in vocabulary among learners who are Deaf (n= 141)**

<b>Competence in vocabulary</b>	<b>f</b>	<b>%</b>
<b>VHL</b>	<b>0</b>	<b>0.0</b>
<b>HL</b>	<b>0</b>	<b>0.0</b>
<b>ML</b>	<b>2</b>	<b>1.42</b>
<b>LL</b>	<b>7</b>	<b>4.96</b>
<b>VLL</b>	<b>132</b>	<b>93.62</b>
<b>Total</b>	<b>141</b>	<b>100.0</b>

**Key**

**VHL-** Very high level: 0 to 3 errors in use of appropriate vocabulary

**HL-**High level: 4 to 6 errors in use of appropriate vocabulary

**ML-**Medium level: 7 to 9 errors in use of appropriate vocabulary

**LL-**Low level: 10 to 12 errors in use of appropriate vocabulary

**VLL-**Very low level: above 12 errors in use of appropriate vocabulary.

**f-** Frequency

**%-** percentage

From Table 4.1.0, most 132 (93.62%) learners who were deaf had a Very Low Level (VLL) of mastery of vocabulary with learners who are deaf making 12 or more errors in the use of vocabulary on a single page. Low level (LL) category comprised of learners who made errors ranging from ten to twelve on a single page. Within this category there were 7 (4.96%) learners. Only 2 (1.42%) of learners who are deaf had medium level (ML) mastery of vocabulary making nine or less errors involving appropriate use of vocabulary on a single page of writing.. None 0% of learners who are deaf had high level (HL) or very high level (VHL) mastery of vocabulary.

From content analysis of learners productive writing of English composition, most common vocabulary errors ranged from spelling errors, repetition of same words, writing of new words in capital and small letters. In addition, the vocabularies were used in the wrong position within the sentence. This was in agreement with Ogada (2012) who argued that when vocabulary acquisition is not sufficient learners face a challenge in receptive and expressive written English

All the 141 learners who were deaf (100.0%) had vocabulary errors related to spelling. For example Learner 47 presented as excerpt 11, like most learners who are deaf, made numerous errors in the use of vocabulary.

Excerpt 11: Vocabulary errors related to spelling

No 4 | The <sup>sp</sup>ham of my school is ~~KARAK~~ SHOOL SOY  
<sup>sp</sup>thas  
 MY SOY FIVE FOOD all SWALLOW The SOY FIVE  
<sup>sp</sup>clall matte soy COOK BOY same you GIGES  
WOTHE AVE some SIVALL GIRL SOAS The SOLLWIR  
DEARVE GIOB COOK FIVE FLOS DOEF SOI all  
<sup>sp</sup>soy COH AKH HOM AVE MOTHER MOCH RES ISH  
KAPABET FOY SOLMA COOW all GIG FIVE FOY  
 you is SAM KAZB this CONGIG HALL HAVE AVE  
 thas take the BOY UOY FOY COOK MOTH OTHE FO  
BAE SIVE MAVK is MOKE BOY THA MOY FOY SIVE FOY  
SCHOOL DOTHE GIG MY FOY TO MOTH QAY GIG COW  
 you COOM SHAV WIE SOY KAPSABET FOU SCH S  
HOW MOE FIVE SOLLW CAVCH GIG HOW DOING  
FOU MAVE CALL GIGA COOK OUR DAMING  
FOU COLL AVE FIVE SOU MY FO SOLL ARE SOU FIVE  
 That the GIG MALL MOTIEY MAHLO OSSICENT the  
TAV OUR GIG YOU DOOR AGPP SOOT OUR COW GIG  
SCHOOL AME FIOK COU SIVAY COW LAW AVE  
 The are GIAY COOY AND OTHE BLAD TO MOTH BOY  
CHES YOU FOY BE YOU SOME FIVE OTHE GIMONCHOU  
THALL HIS MPAS ANS SOM AVE SOA JOH FOU  
TIAY OS MOYCH AVE DEAS WIAS TATE COU MOU  
SOU COOK ONTARIS COOS OTHE MATIE OTHE SOU SITS  
SAMI take HOLL CLAY SAVE THE THE ARE SIMAC  
SCHOOL CHOUSE ON VIMCH OUR FOU FOHE FOOR  
MAPPICH OTHE SOY FOU FIVE COOW BICY AVE AIS  
MOH SOU OTHE SIVE ONE ROY SOOG MOTHER FOR  
OUR FOU OTHE SIVE FOU SOLLW FIVE GIG HOY  
DOCT OUS FIVE AVE SCHOOL PKAB KA <sup>sp</sup>

Randomly written words, which are -

From content analysis of excerpt 11, written by learner 47 made several vocabulary errors ranging from spelling errors to repetitions of syllables and words. These evidently proved that the learner had no mastery of written English grammar. For example, 'nam' should have been 'name', 'thaf' should have been 'deaf', 'mahe' should have been *mother*. In addition, impact of KSL was apparently evident on the way the learner glossed the whole work in upper case and the incorrectly spelt words. This observation was in agreement with Zaho (2009) who argued that Effective vocabulary acquisition requires learners to use vocabulary correctly and consistently. The composition was about my school. Vocabulary errors ranged from serious errors in spelling such as, *mame* to mean *name*, *Neme* to mean *name*, *withe* to mean *with*, *babe*, *Fkish*, *shawn*, *seare*, *earebese*, *weh*, *sawh*, *windise*, *mbas*, *Wrar*, *whts*, *Rwn*, *sisRn* just to point out a few.

These errors imply that most learners who are Deaf experienced complex errors in vocabulary ranging from spelling to wrong use of the word. This finding agreed with Ogada (2012 who posited that when vocabulary acquisition is not sufficient learners face a challenge in receptive and expressive written English.) The findings of this study confirmed that The Deaf learners had limited vocabulary and spelling challenges. Such errors were: *ham* means home, *mathe*, *MAPPICH*, *Flok cou*, *MPAS*, *Gom*, *giG*, *glar*, *sou*, *fou*, *ROV*, *Fou*, *MORCH* and, *HOUS* to mean house, *atmosphes* to mean *atmosphere*.

This observation is in agreement with Ogada (2012), Geers et al (2009) Burman, Nunes and Evans (2006) who established that vocabulary levels for learners who are deaf were lagging behind. The current study was significant as it established the impact Kenya sign language had on choice of vocabulary in written English grammar among learners who are deaf in Upper Primary classes in Nakuru Region. From the findings of this study it was concluded

that Lack Of mastery of written English vocabulary distorts meaningful communication in written English by learners who are deaf. This agreed with

From the analysis of students' written English prose work the following sub themes emerged:

#### **4.1.1 Errors Related to Limited vocabulary**

From content analysis it is apparent that learners who are deaf experienced repetitions in vocabulary due to limited functional vocabulary in use in sign language. From the analysis of the written work of learners who are deaf, 63 (96.92%) of the learners experienced some form of repetition of words and phrases. For example, content analysis of written work of learner number 31 had 12 repetitions of the same words and phrases as a result of limited vocabulary. From excerpt 6, some of the repetition errors learner 36 experienced in the written work was the phrase '*my school*' which was repeated 16 times in a single page of the written work, while the word *help* was repeated five times within one page.

Repetitions of phrases and words by Deaf learners was as a result of lack of appropriate synonyms of vocabulary commonly used to replace with the repeated phrases and words and break the monotony of repetition. Most learners in this study experienced repetition of word and phrases. From one of the learners written work repetition of the phrase, "*the name of my school is...*" was repeated seven times. A repetition of the phrases was experienced among most learners who are Deaf.

Repetition of words and phrases in written work was an indicator of inability by learners to vary vocabulary. This finding agreed with Adoyo (2004) who argued that there are limited operational vocabularies in signs used in regular communication by learners who are deaf. This limitation in the deaf learner's first language limits vocabulary in use in their everyday conversation Lack of variance of vocabulary was as a result of limited signs in KSL which is the medium of communication during lessons for learners who are deaf. As seen in excerpt 6.



**Excerpt 6: Errors Related to Limited vocabulary**

my school

(31) my school called is KAPSABET school for the deaf. SCHOOL class five teacher all children my school book story read much us school the.

*KSL SYMBASE OSV* → my school book and read story in see like bus transport school to go teacher and people alot star nice beauty go shool to transport finish. People alot play work class. five nice fine happy story finish that you.

*transport*

my school is KAPSABET school for the deaf welcome visit tell poor school thank you school alot bye story and people school alot happy.

*Repetition:* my school transport help story tell Deaf bus welcome help like is Pease help bus in transport visit in beauty happy thank you.

my school welcome visit in tell Pease help school poor alot from KAPSABET little school KAPSABET are deaf help tell Pease poor mp visit nice school <sup>s</sup> children. my

my school Pease alot help like bus called transport school in visit welcome see beauty nice school happy Pease government tell is poor welcome Pease bus KAPSABET

my school welcome People tell government you bus poor called.

**Key- R - Repetition**

Analyses of the written work by the Deaf learners in Upper Primary classes in Nakuru Region indicate limited vocabulary in use in expressive language in written English. Findings from this current study concurred with Mulonda, (2013) Ogada (2012), Lucas (2001) who established that among challenges learners who are deaf face in learning of vocabulary was limited available signs for vocabulary. Sign language deficient environments led to deficient vocabulary acquisition. The current study was important as it demonstrated how KSL negatively impacted on choice of vocabulary in written English grammar by learners who are deaf in Upper Primary classes in Nakuru Region, Kenya

Results from this present study indicate that lack of mastery of vocabulary in written English grammar is a contributing factor to low academic performance in written English grammar in Kenya Certificate of Primary Education (KCPE) terminal examination among learners who were deaf in Nakuru Region-kenya.

#### **4.1.2 Vocabulary Errors Related to Pronouns**

From content analysis of written work, most learners who are Deaf, 132 (93.62%) used the pronouns wrongly. For example, from Content analysis of the written work presented as excerpt 36(written work by learner 25).



**Excerpt 36: Vocabulary Errors Related to Pronouns**

Nd 25 My school Kapsobet school for the deaf,  
children I am a greet <sup>WP</sup> me the for deaf pupils  
class all people good best <sup>WP</sup> me happy you ~~are~~  
have read pupil happen when see welcome  
for visit give books have school friend have  
obey many ~~are~~ thank you ~~me~~ you are it  
a pleasure have school story ~~me~~ friend.  
That <sup>WP</sup> me pupils have school come teacher your  
activity teach people class you have for read  
are how story your book there borrow good  
say all school your welcome children of deaf  
we again was not good <sup>WP</sup> you time have does  
today by which is deaf students person identify  
them have move and your student go to help

**Key: WP** -Wrong pronoun

Errors in pronouns included misplacement and or wrong use of pronouns marked as WP in the excerpt. Examples of Such errors in learners' written work were phrases such as; “*children i our... ,*” the two pronouns are misplaced and wrongly used. The child got mixed up with the pronouns: *I-* for first person pronoun and *our-*first person possessive pronoun. In correct English the child would have written ‘*our children and I.....*’ this character of presentation of ideas is a KSL since Sign languages are topical in nature KSL included. So that object in the sentence came first. In the same excerpt, wrongly used pronouns such as, ‘*thank you me.....*’ to mean “*you have to thank me...*”. Impact of sign language on written English grammar was evident from the learners' written when it comes to appropriate use of pronouns.

Finding of this present study agreed with Zaho (2009), who observed that, vocabulary plays a crucial role in acquisition of a language. However the present study held a contrary opinion on Lexical chunks retrieved and processed as whole unites which may not enhance accuracy and fluency of English language for learners who are deaf. This may significantly hinder or slow the process of mastery of written English especially in English for Foreign Language Learners (EFL) who are deaf.

Findings from this current study indicated that learners who are Deaf had little mastery on use of pronouns, which forms part of vocabulary. The learners either were unable to use the pronouns correctly or misplaced the pronouns. These findings are in agreement with Irokaba (2006) who concluded that learners who have limited knowledge of a second language (L<sub>2</sub>) will experience lack of effective communication when using L<sub>2</sub> as an expressive language.

To triangulate the findings of learners' written work, the researcher used teachers' questionnaire to get views from teachers for English teaching respective classes for learners who are deaf as regards learners' competence in English vocabulary. The findings were

coded and analysed using frequency counts, percentages and means. The results were summarized and tabulated in Table 4.1.2.

**Table 4.1.2: Opinion of Teachers on Variety of vocabulary in use in Written English Grammar by Learners who are Deaf (n=18)**

Statement	SA	A	U	D	SD	mean
Randomly written words difficult to make sense	17(94%)	1(6%)	0	0	0	4.9
Written English vocabulary repeatedly used	15(83%)	3(17%)	0	0	0	4.83
Fairly broad written English vocabulary used in context	0	0	0	1(6%)	17(94%)	1.06
Broad written English vocabulary used in context	0	0	0	0	18(100%)	1.06

**KEY**

**SA**-Strongly Agree    **A**-Agree    **U**-Undecided    **D**- Disagree    **SD**- Strongly Disagree

As seen in Table 4.1.2, Ninety four percent of teachers who participated in the study Strongly Agreed (SA) with the statement: *Randomly written words were difficult to make sense*. A mean of 4.9 being above 3.00 which is the threshold score of being in agreement with the statement indicated that teachers who took part in this study were in agreement with the statement. In the same way those teachers were in agreement with the statement, *Written English vocabulary repeatedly used*. That was confirmed by a mean of 4.83 representing participants responding in agreement with the statement. The statement *Fairly broad written English vocabulary used in context* was Strongly Disagreed (SD) with by over ninety percent of teachers who took part in the study. The entire population 18 (100%) of teachers also Strongly Disagreed (SD) with statement: *written English by learners who are deaf mostly contain very broad and varied correctly used vocabulary*, both statements were confirmed by a weak mean of 1.06 as a mean below 2.5 meant that respondents were not in

agreement with the statement. The findings from this study, therefore, confirmed that in primary schools learners who are deaf were faced with a challenge in acquisition of sufficient vocabulary in English to aid meaningful self expression in written English grammar. As Lucas (2001) pointed out in his study that while a dictionary for English will define a word, give its correct pronunciation in phonetics, points out different ways how that word is spelt, explain its origin and give its correct use in sentences; Kenya Sign language (KSL) dictionary will only define a sign by providing an equivalent translation in written English. For example, the current online KSL dictionary only shows how a word is signed (articulated) without explaining its meaning.

The findings were summarized and tabulated in table 5, a criterion mean score of 3.00 or above meant that the respondents were in agreement with the statements, while a mean score less than 2.5 meant that the respondents disagree with the statements. In this regard therefore a mean of above 4.00 meant that respondents in this study were in agreement with the statement that *learners who are deaf use randomly written words difficult to make tense in written English* in the same way they did with the statement that *learners who are deaf had written English vocabulary repeatedly used*. On the contrary respondents in this study were neither in agreement with the statements that *learners who are deaf used fairly broad written vocabulary in English used in context* nor *broad varied vocabulary correctly used in written English*. as seen from the findings which posted a mean of 1.06 each.

The findings from this current study were in agreement with Geers *et al* (2009) who established that if vocabulary acquisition was not sufficient and efficient; learners were faced with a challenge in receptive and expressive language in written English. However the finding of this present study specifically demonstrate how Kenyan Sign Language affected choice and use of pronouns in written English by learners who are deaf in upper primary

classes in Nakuru Region. Results from this current study indicated that lack of mastery of appropriate choice and use of pronouns as element of vocabulary is a contributing factor to low academic performance in written English grammar in Kenya Certificate of Primary Education (KCPE) terminal examination among primary school learners who are deaf in Nakuru Region-Kenya.

#### **4.2 Impact of Kenyan Sign Language on Syntactical Patterns of Written English**

Written work by learners who are deaf was analysed using content analysis to determine impact of Kenyan Sign Language (KSL) on syntactical patterns of written English. Students prose work was analysed using document analysis guide. All the 141 students' work was available for analysis as the schools involved were residential schools for learners who are deaf. Data obtained was summarised and tabulated as shown in Table 4.2.

**Table 4.2 (n=141)**

<b>Syntax correctly expressed in</b>	<b>f</b>	<b>%</b>
<b>L<sub>1</sub></b>	137	97.16
<b>L<sub>2</sub></b>	3	2.84

From content analysis of pupils' written English grammar the following themes emerged in regard to Impact of Kenyan Sign Language on written language grammar among primary school learners who are deaf.

### 4.2.1 Errors in word order

From content analysis of learners' written work, out of 141 learners who are deaf who formed the study sample population 137 (97.16%) had errors in word order. For example from the written work of learner 30, excerpt 9 was extracted with the following errors in word order.

#### Excerpt 9: Errors in word order

30  
Sent Mouth three Mother is Kapsabet  
school car bad Scott foresman and  
Company people picture what Children observe  
KSL assembly mornings girl in front Teacher test  
test teacher write Time Learn child stock pupil  
KSL exam Do exam Do which exam cheat people greet  
Repeat KSL Boy girl compound sweep teacher parada teacher  
of KSL where teacher sit children all how Many Look  
years  
at the picture below we See a young boy who fell  
down along the road being helped by his friend By  
helping other people when they are in need we show  
that we are good neighbours we should be confident and  
feel great about ourselves since we are all special  
and unique children with special needs playing is  
Cerebral work  
school formal learning in a classroom. Many orphans  
are take care of in childrens home we do different  
things to keep our school clean our teachers  
are in authority in school Today adults are also taught  
how to read and write Catholics celebrating pas-  
ter Sunday. An angry man we should use our  
talents creatively while working for God Mother  
school take care of BUS playing is many orphan

Errors noted were common to most learners who are deaf: such error were, /...*Company people picture* ...., / to mean: '*picture of the company workers*' /.... *Test teacher write*.. /instead of '*teacher wrote the test.*' Both these phrase; *company people picture* and *test teacher write* evidently adhere to KSL sentence word order of Object/Subject/Verb (OSV) Instead of the learner using Subject/verb/object (SVO) English word order, to have: '*picture of the company workers...*' and '*Teacher wrote the test*'. The phrase *compound sweep* by learner 30 is KSL word order-OSV, instead of SVO English word order, so that the sentence would have been *sweep the compound*. Likewise, Learner 31 made various errors in word order as seen in pupils written work presented as excerpt 73.



**Excerpt 6: Errors in word order**

my school

(31) my school called is Kapsabet  
 school for the deaf. school class  
 five teacher all children my school  
 book story read much us school the.  
my school book and read story  
 in see like bus transport school to  
 go teacher and people alot star nice  
 beauty go shool to transport finish  
 People alot play work class. five nice  
 fine happy story finishing thak you.

my school is Kapsabet school for  
 the deaf welcome visit tell poor school  
 thank you school alot bye story and  
 people school alot happy.

my school transport help story  
 tell deaf bus welcome help like is  
 please help bus in transport visit  
 in beauty happy thank you.

my school welcome visit in  
 tell please help school poor alot  
 from Kapsabet little school Kapsabet  
 are deaf help tell please poor mp  
 visit nice school <sup>s</sup> children. my

my school please alot help  
 like bus called transport school  
 in visit welcome see beauty nice

school happy please government tell is  
 poor welcome please bus Kapsabet

my school welcome people tell  
 government you bus poor called.



Evident from excerpt 6; appendix C, written English grammar by learners who are deaf tended to have an inclination towards KSL word order as was the case in most 137 (97.16%) pupils English grammar work. There were a lot of phrases written directly as signed in KSL. Such as '*...book story read...*' should have been, '*... read the story book.*' '*....people school alot happy...*' should have been, '*A lot of people in school were happy*', it is evident learners who are Deaf use OSV word order, which is used in KSL. The same effect is transferred to written English grammar. This observation is in agreement with Angel (2014), Adoyo(2004) who established that learners who are deaf portrayed specific patterns of errors in word order. The finding of this present study were important as it specifically showed how Kenyan sign language impacted on written English word order pattern by Upper Primary classes learners who are deaf in Nakuru Region. Results from this current study indicate that lack of mastery of written English word order was a contributing factor to low academic performance in written English grammar in Kenya Certificate of Primary Education (KCPE) terminal examination among primary school learners who were deaf in Nakuru Region-Kenya.

#### **4.2.2: Errors of Omission in Syntax**

From content analysis of written English work of Deaf learners in Upper Primary classes in Nakuru Region, there was evidence of various omissions. Majority, 139 (98.58%), of learners who were Deaf in upper primary had errors related to omissions of grammatical items. Pupils' written work presented as excerpt 31 was a typical example of written English grammar among this category of learners.

**Excerpt 31: Errors of omission in syntax**

No. 62  
 Kapsabet School for the deaf teacher children went.  
 Classroom children in read alway worke please rice.  
 Children went well Pupil School have talk come skill.  
 Teacher tall all Pupil please alway hard work in class.  
 Children Classroom please why what is how they went all.  
 People Primary Children need Pupil Classroom in <sup>ommission of</sup> ~~in~~ well.  
 many Pupil in your school do not hear bell run went.  
 What you Pupil Classroom many ready head run best.  
 Teacher education said happy alway look head class.  
 Children page law dirty <sup>ommission of</sup> ~~many~~ school clean ready.  
 People run ready flag <sup>ommission of</sup> ~~paper~~ teach ten believe respect.  
 Classroom school sweep dirty clean out tank in many.  
 Children out leisure people game ball run basket.  
 Children but children encouraged to take optene way.  
 head teach teacher primary education need Pupil take  
 place with Classroom needce teacher thing hand skill.  
 Children <sup>ommission of</sup> ~~many~~ responsibility hardword dirty come fair well.  
 People game run work alway morning and afternoon go out.  
 Children teacher obey all Children responsible good.  
 teacher through tall different worried happy like sorry.  
 Children you feel how school Pupil in afternoon nail cut.  
 People clean nail cut help flag sea good well.  
 Sign cut what happen Children run go school need  
 Children next picture happen afternoon who wash the  
 Sweep ready Children problem here trustme if  
 choose school bring cheer nothing night morning  
 People friend run in school tall look for ask me.  
 Children polite good thank-you teacher blackboard.  
 Children help new please help me true me well.  
 Children <sup>ommission of</sup> ~~school~~ classroom help dirty clean.

KSE  
 OSVI  
 Omission of  
 or helping  
 verbs the  
 article

Teases  
 can not  
 well heard

Omission of  
 preposition  
 (with)

Omission of  
 verb to go  
 are

Nouns  
 don't show  
 plural

Miss helping  
 verb

Syntax

From excerpt 31 the following sentence “...*classroom children in read*” is an example of how written work by learners who are deaf had numerous errors of omission. /...*classroom children in read*/ should have been ‘*children read in the classroom.*’ Article ‘the’ has been omitted. From the same excerpt, the phrase, /..... *People game ball run basket*/ should have been: ‘...*in basket ball, people run with the ball.*’ Two prepositions ‘in’ and ‘with’ were omitted in such a short statement. This is an indicator of the fact that KSL mode of communication is practically short and topical in nature, leaving out words which may crowd the sentence. KSL sentence structure has a negative effect on written English grammar work by learners who are deaf. written work by Learner 52, displayed as excerpt 12 had omission of article; *the* and auxiliary verb *with*, as a result of effect of Kenya Sign Language which does not use articles and often leaves out auxiliary verb in its morphosyntactics. These findings are in conformity with Raga (2014) Hochgensang (2007), Adoyo 2004 who established that areas of difficulty particularly include acquisition of syntax. This was reflected in written work by most learners who are deaf represented by Excerpt 12: Errors of omission in syntax



Bahasa  
denoted  
by  
F1  
Some  
signs

AVO

case - net

(57)

School out BIRD Two (GATE) STAND STAND  
 ONE RED BLACK OTHER SMAND Books cow RED  
 THING SIGN NAME BEDROOM Room SIT KITCHEN  
 NEIGHBOUR School THE Fog woom School THE  
 School Susawa School tho shoon Hoop the  
 Pool school ONE ohr out BLACK OTHER SMAND  
 milk milk cow eat sat NIE woom school S  
 Com-Ga my I yasa Banana Pool school  
 many School THE FOT sat OTHER SMAND The  
 school Pool NEIGHBOUR school THE Room SIT out  
 othe ohr Pool my school GATE STAND STAND  
 Books school DEAF THE wasum BUS eat wonse  
 SPet school ONE one Fog woom school THE  
 GATE STAND STAND school out BIRD Two  
 BUS car ER woom sunns school ohr Tho  
 Impora atmospher Policy school ohr Tho  
 school Com-Ga my yasa Banana Pool school  
 wonse Two GATE STAND STAND school  
 school out BIRD Two GATE STAND  
 school ohr Bus Book ohr my siloh GATE  
 othe ohr many school Susawa school THE  
 Books school DEAF THE wasum BUS car won  
 BUS wonse Two out BIRD Two GATE STAND  
 Impora atmospher Punns school ohr Tho THE  
 BUS car ER woom sunns school ohr Tho ohr  
 Books ONE RED ONE BLACK OTHER Two out  
 BUS STAND STAND Fog woom school  
 school DEAF-HEI wasum Bus Banana THE  
 school Por & Susawa Banana Pool scho

Syntax

PLIST - crossing

Plural Singular

PLS

The written work by Learner 52, displayed as excerpt 12 omission of ‘the’ and, ‘with’ in the was as a result of effect of KSL which does not use articles in its morphology. This was reflected in written work by most learners who are deaf.

It is evident from excerpt 12, omission of plural marker morpheme/s/ within the noun in the phrase, “..... *BIRD TWO*....” which should have been “..... *two birds*..” the morpheme /s/ in the word bird was omitted as a result of impact of KSL on written English. In KSL plural is marked by signing of singular noun proceeded by a specific number reduplication of the noun. Such morphological impacts were evident in excerpt 12 above. The finding of this present study agrees with. Bochner and Bochner (2009) established that Sign languages are limited in the use of English language articles. This limitation distorts the intended meaning of written English sentence.

Finding of this present study, however, specifically demonstrated how lack of articles and auxiliary verbs in Kenyan sign language results in omission of articles and auxiliary verbs in syntactical patterns of written English grammar by learners who are deaf. Results from this current study indicated that lack of mastery of syntactical patterns in written English grammar is a contributing factor to low academic performance in written English grammar in Kenya Certificate of Primary Education (KCPE) terminal examination among upper primary learners who are deaf in Nakuru Region-Kenya.

#### **4.2.3 Errors of Commission in Syntax**

From the content analysis, most learners 135 (95.74%) who are deaf had errors of commission either in spellings or repetition and reduplication of words in their written work.

From excerpt 19 and excerpt 43, errors of commission were noted as follows: The phrase “..... *teacher first work come come happy*....” the error of commission is seen in the repetition of the word come. Other than this lack of proper punctuation was common in the

written work of learners who are deaf. In the second phrase, “..... *well cook cook many.....*” Repeating of the word cook is an error of commission and written in present tense, while actually the child was talking of a past event. Error of commission were evident in most learners’ written English grammar work such as seen displayed as excerpt, 12



**Excerpt 12: Error of reduplication and repetition of words**

School out BIRD TWO (GATE) STAND STAND  
 ONE RED BLACK OTHER SMAND Books cow BED  
 THING SIGNNAME BEDROOM Room SIT KITCHEN  
 NEIGHBOUR SCHOOL THE Fog woom school THE  
 School Susawa School<sup>SP</sup> tho shoo<sup>SP</sup> Hoop the  
 Pool school ONE ohr<sup>SP</sup> out BLACK OTHER SMAND<sup>V SP</sup>  
mank<sup>SP</sup> milk cow caid<sup>Repeat</sup> sat NIE woom school S  
 Combsa my I yasa Banana Pool school  
 many school THE FOT sat OTHER SMAND<sup>SP</sup> The  
 school Pool NEIGHBOUR school THE Room SIT out  
 othe ohr Pool my school GATE STAND STAND  
 Books school DEAF THE wasum<sup>V</sup> BUS eat wonse  
 spet school ONE one<sup>Repeat</sup> Fog woom school THE  
GATE STAND STAND school out BIRD TWO  
 BUS car ER woom sunns school ohr Thow  
 Impora atmospher Policy school ohr Thow  
 school combsa my yasa Banana Pool school  
 wonse Two GATE STAND STAND school  
 school out BIRD TWO GATE STAND  
 school ohr Bus Book ohr my siloh GATE  
 othe ohr many school Susawa school THE  
 Books school DEAF THE wasum BUS eat won  
 BUS wonse Tow out BIRD TWO GATE STAND  
 Impora atmospher Punns school ohr Thow THE  
 BUS car ER woom sunns school ohr Thow ohr  
 Books ONE RED ONE BLACK OTHER Two out  
 BUS STAND STAND Fog woom school  
 school DEAF-HEI wasum BUS Banana THE  
 school Par & Susawa Banana Pool scho

From excerpt 12, various errors of commission were observed. Such as in the phrase “.....

*BIRD TWO GATE STAND STAND.....*” stand was an error of commission. Although, the same has numerous errors of ambiguity in terms of error in word order, and the word bird is not pluralised yet the learner had mentioned two birds.

In the phrase, “..... *man milk cow cow...*” the word cow in the phrase has been repeated.

In KSL reduplication of a verb denotes; emphasis or habitual occurrence. Reduplication of a noun denotes plurality of the same. Error of reduplication or and repetition of words in written English grammar among learners who are deaf is an effect of KSL. This occurrence is evident in learners’ written work presented as excerpts 19 and 13, These findings are in conformity with Raga (2014) Hochgensang (2007), Adoyo 2004 who established that areas of difficulty particularly include acquisition of syntax such as deviation from canonical word order and limited breadth and depth of lexical knowledge of language. However findings from this present study from content analysis of written work of learners who are deaf in primary schools, show how Kenya Sign Language syntactical word order reduplicating or repetition of words directly transferred to written English grammar by learners who are deaf. These findings confirmed that Kenyan sign language had a negative Impact on written English syntax by learners who are deaf.

Results from content analysis of learners’ work were triangulated with views from teachers for English in schools for learners who are deaf. Questionnaires were used to collect teachers’ opinion on effect of KSL on syntax of written English by learners who are deaf. The results were tabulated in Table 4.2.1.



**Table 4.2.1: Rating Opinion of teachers for English on syntactical pattern in Written English Grammar among Learners who are Deaf (n=18)**

Statement	SA f (%)	A f (%)	U f (%)	D f (%)	SD f (%)	Mean
Word order not grammatically correct in English	18(100%)	0	0	0	0	5
Omission of written English grammar items such as articles	16(89%)	2(11%)	0	0	0	4.89
Reduplication and or Repetition of words	17(94%)	1(6%)	0	0	0	4.94
Writing full word or sentences in capital letters	18(100%)	0	0	0	0	5

**KEY**

**SA**-Strongly Agree    **A**-Agree    **U**-Undecided    **D**- Disagree    **SD**- Strongly Disagree

Syntactically correct English sentence patterns differ as determined by sentence type. Such sentences are; affirmative, negative, imperative, interrogative and declarative sentences Adoyo (2004). Competence in variation on: subject/ verb/ object (SVO) order shapes proficiency in written English for learners who are deaf. Whenever the SVO order is disturbed, the resulting sentence pattern often poses a challenge for students who are deaf.

Results tabulated in table 4.2.1 confirmed that. The entire 18 (100%) respondents strongly agreed (SA) with the statement: *Word order in written English grammar by learners who are deaf were not grammatically correct.*

On errors of omission 16 (89%) of 18 respondents strongly agreed (SA) that Written English sentences show omission of articles (a,an,the) or affixes eg -/s/,/\_ation/, /un-/; the remaining 2

(11%) agreed(A) with the statement as well. 17(94%) of respondents strongly agreed (SA) that written work of learners had reduplication and repetition of words. 94% strongly agreed (SA) with that statement, only 6% agreed (A). All the 18 (100%) of teachers for English were in agreement with the statement that learners who are deaf *Write full words or sentences in capital letters.*

A mean score of more than 3.00 meant that the respondents were in agreement with the statement. From the findings in this study all the respondents were in agreement with all the statements as the mean representing respondents responses were above 4.89. From these findings therefore, it was evidently concluded that deviation from canonical word order, limited breadth and depth of lexical knowledge pose a challenge in mastery of appropriate sentence structure in written English grammar by learners who are deaf. Syntactical grammatical errors ranging from incorrect word order, omission of English grammar articles, multiple misspelled words and writing entire words or sentences in capital letters.

The current study findings are in concurrence with Ogada (2012), power (2002) and Traxler (2000) all established that learners who are deaf had challenges in mastery of expressive written English grammar. However, findings from the current study confirmed specific impact Kenyan Sign Language has on syntactical pattern of Written English grammar among upper primary school learners who are deaf. Results from this current study indicate that lack of mastery of correct syntactical pattern in written grammar was a contributing factor for low academic performance in written English grammar among learners who are deaf at Kenya Certificate of Primary Education terminal examination in Nakuru Region-kenya.

### 4.3 Impact of Kenyan Sign Language on Tense Markers in Written English

The researcher aimed at establishing the effect of KSL on various tense markers in written English. Tense markers analysed included present tenses, simple past, continuous tenses and participles. Document Analysis of the written work by learners who are deaf was done. All the 141 students' work was available for analysis as the schools involved were residential schools for learners who are deaf. Data obtained was summarised and tabulated as shown in Table 4.3.1

**Table 4.3.1: Impact of Kenyan Sign Language on Tense Markers in Written English(n=141)**

Competence in tense markers	f	%
Present	139	98
Past	2	1.42
Continuous	4	2.83
Participles	3	2.13

From the findings tabulated in table 4.3.1 the following sub-themes emerged:

#### 4.3.1 Present Tense markers

None of the learners had difficulties in marking simple present tense 139 (98%) had fair mastery of marking present tense in written English grammar. This is because in KSL verbs are signed in simple present tense which is either preceded or preceded by a NOW/ PAST/ FUTURE sign to show the tense.

The way in which simple present tense is marked in KSL had a positive impact on marking simple present tense in written English grammar. The majority, 139 (100%) of 141 learners who are deaf were able to express verbs in simple present competently. Only 2(1%) could not write coherent sentences. This finding was in conformity with (Cook 2007) who established that Learning of a second language (L<sub>2</sub>) is not so much an isolated thing as it builds on the rules and grammar of the first language (L<sub>1</sub>) by discovering how to set parameters for the new language.

The findings of this study established that sign language way of signing verbs in their simple present form had a positive impact on how learners who are deaf express simple present in written English grammar. However, the challenge was seen to be with the effect of KSL on correct use of other forms of the tense markers such as, past, continuous and participle form of the tense.

#### **4.3.2 Past Tense Markers**

From analysis of learners written work only 2(1.41%) learners were able to indicate past tense in written English fairly well. Majority, 139(97.59%), of learners in this study could not express past tense correctly in written English. Past tense markers of *-ed* and *-d were* either missing or wrongly marked, irregular verbs were not written correctly in past tense form. Example from excerpt 43 the learner wrote /... *bird two gate stand...*/ instead of '*two birds stood...*' learner 62 wrote /...*school clean..* / should have been '*... school was cleaned...*', /...*people run...*/ instead of '*... people ran...*', /*classrrom receive...*/ instead of '*classroom received*'.

These findings were consistent with Angela (2014) who established that there are some specific patterns of errors with learners who are deaf. These errors involved lack of mastery

in use of phoneme /s/ indicative of verb tense, regular past tense-ed, and -d, and irregular past tense markers. However the findings of this present study specifically showed how lack of proper tense marker signs in Kenya sign language negatively impacted on the way primary school learners who are deaf mark past tense in written English grammar.

Results from this study therefore are indicators that lack of mastery of appropriate tense markers in written English grammar is a contributing factor to low academic performance in written English grammar in Kenya Certificate of Primary Education (KCPE) terminal examination among primary school learners who are deaf in Nakuru Region-Kenya.

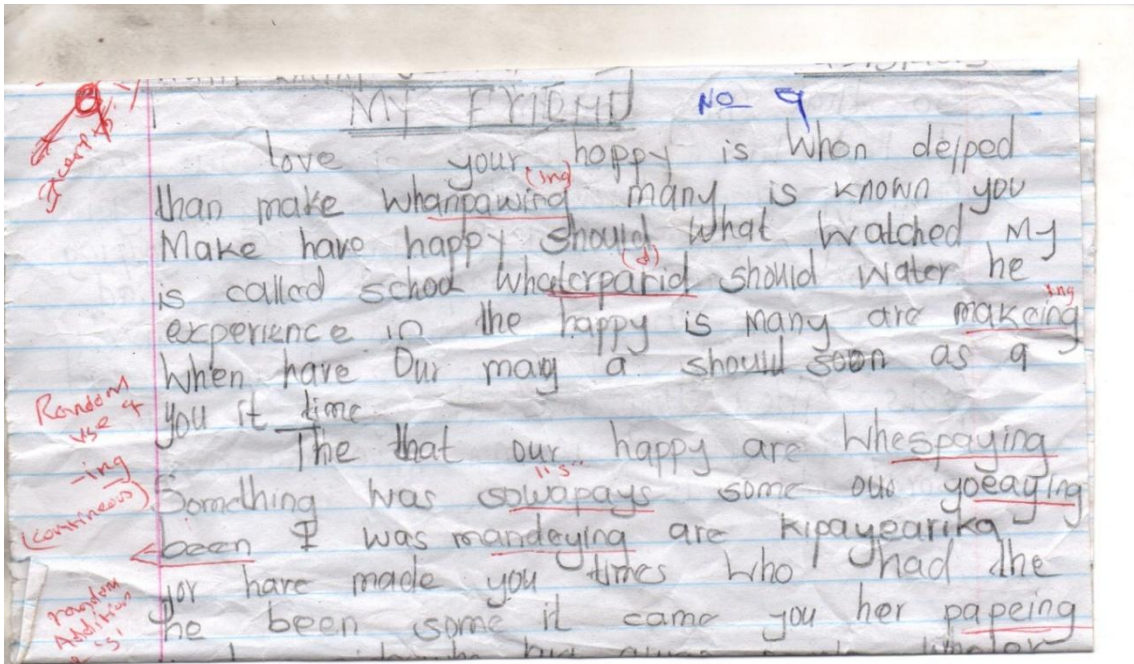
#### **4.3.3 Continuous Tense Markers**

In the present study, errors in marking present continuous tense were noted from content analysis of learners written English. A majority of learners, 137 (97.17%) who are Deaf implied poor mastery of continuous tense such as seen in the written English work of learner 9 excerpt 15. This kind of error was common to most 137 (97.17%) learners who are deaf. For example, learners marked present continuous tense as follows /... *i was mandeying..*” , “*whanpawing*”, “...*papeing*”, “...*yoeaging*”, “*friending*” are indicators of lack of mastery of the use of continuous marker /-ing/ in written English by learners who are deaf. this is so since KSL does not have the element of indicating continuous tense except when signing in Signed Exact English (SEE). Consequently learners who are Deaf were seen to use /-ing/ tense marker indiscriminatively in written English grammar work.

These findings agreed with Adoyo (2004) who established that English tense markers mix up a learner who is deaf quite easily. This occurs as the L<sub>1</sub> of learners with hearing impairment, do not have distinct specific signs to mark tenses in its different forms. However results from this present study specifically show how primary school learners who

are deaf indiscriminatively use /-ing/ tense marker in written English grammar indicative of negative Impact of KSL on written English grammar among learners who are deaf as is evident in excerpt 15 appendix C.

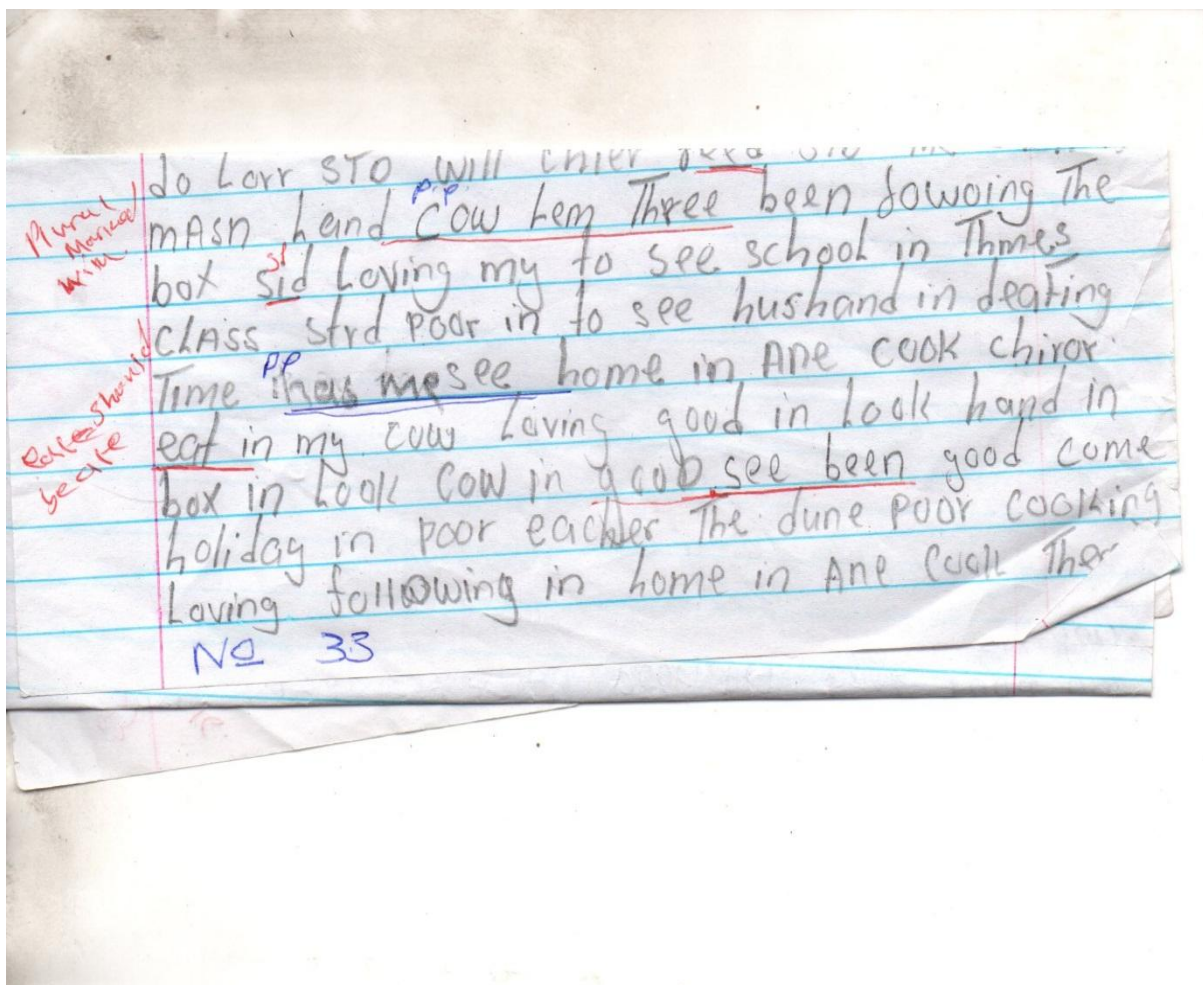
**Excerpt 15: Errors in Continuous tense**



#### 4.3.4. Participle tense markers

From content analysis of learner's written work, errors in marking participles such as pointed out was because the learner thinks in KSL while putting it down as written English. Kenyan sign language has a different marker '... **FINISH...**' used to denote past participle in KSL. This being different from the marker for participles in written English poses a challenge to learners who are deaf when expressing the same in writing in English as seen in written English work by learner 33 labelled as Excerpt 76 in appendix C: Errors in Participle tense markers marked as pp in the excerpt

#### Excerpt 76: Errors in Participle tense markers



From excerpt 76, the phrase “..... *cow in good see been good....* ” to mean, ‘.....*the cow has been good.*’ The phrase was supposed to have been in past participle. However, the learner had limited mastery of the tense marker for past participle in written English. Current study findings concur with (Adoyo 2004, Cook 2007). Who established that learning of L<sub>2</sub> is influenced by pre determined rules and norms of L<sub>1</sub>. The majority, 138 (97.87%) ,of Learners who are deaf were faced with a challenge of marking participles form of the verb in their written work as a result of effect of KSL (L<sub>1</sub>) on written English grammar(L<sub>2</sub>). Only 3 (2.13%) could express participle aspect of the verb fairly well in written English

Triangulation of these findings was done using questionnaire for teachers teaching English to the respective classes for learners who are deaf. Results were analysed, summarized and presented in table 9

**Table 4.3.2: Opinion of Teachers for English on Tense markers in Written English Grammar among Learners who are Deaf (n=18)**

Statement	SA	A	U	D	SD	Mean
Simple present tense is easily mastered	18(100%)	0(0%)	0(0%)	0(0%)	0(0%)	5
Past tense is easily mastered	0(0%)	0(0%)	1(5%)	3(17%)	14(78%)	1.28
Continuous tense is easily mastered	4(22%)	14(78%)	0(0%)	0(0%)	0(0%)	4.22
Perfect/ passive tense is easily mastered	0(0%)	0(0%)	0(0%)	0(0%)	18(100%)	1

**KEY**

**SA**-Strongly Agree    **A**-Agree    **U**-Undecided    **D**- Disagree    **SD**- Strongly Disagree

All 18(100%) teachers for English for primary school learners who are deaf were in strongly in agreement with the statement: *Present simple tense is easily mastered by learners who are*



*deaf*. On the statement on continuous tense: Continuous tense is easily mastered *by learners who are deaf*, 4 (22%) strongly agreed (SA) with the support of 14 (78%) who agreed (A) with the statement. 14 (78%) strongly disagreed (SA) with the statement: *Past tense is easily mastered by learners who are deaf*. Statement on mastery of perfect/passive: *Perfect/ passive tense is easily mastered by learners who are deaf*, was strongly opposed by all the 18 respondents who strongly disagreed with the statement.

A mean greater than 3.00 meant that the respondents were in agreement with the statements. While a mean less than 2.5 meant that the respondents disagreed with the statements. It was therefore apparent that respondents were in agreement with the statement *Simple present tense is easily mastered and Continuous tense is easily mastered and Continuous tense is easily mastered*, With a mean of 5 and 4.22 respectively. While respondents did not agree with the statements: *Past tense is easily mastered and Perfect/ passive tense is easily mastered*, represented by a mean of 1.8 and 1.0 respectively.

From the finding KSL had a positive impact on mastery of simple present tense among learners who are deaf as agreed by 100% of respondents with a mean of 5. On the other hand KSL had a negative impact on how tenses were marked in written English by primary school learners who are deaf. Results from this current study agreed with the findings by Adoyo (2004) and Angela (2014) who established that learners who are deaf show a particular pattern in errors which include plural markers. However this study specifically demonstrated how Kenya sign language had a negative impact on the way tenses were marked in written English grammar upper primary school learners who are deaf. Results from this current study confirmed that lack of mastery of tense markers in written English grammar was a contributing factor to low academic performance in written English grammar in Kenya

Certificate of Primary Education (KCPE) terminal examination among upper primary classes learners who are deaf in Nakuru Region-Kenya.

#### 4.4 Impact of Kenyan Sign Language on Singular and Plural Markers

Data on objective four was analysed using content analysis method on pupils written English prose work. Results from document analysis of learners written English were analysed summarized and tabulated as presented in table 10.

**Table 4.3.3: Results of pupils competence in marking singular and plurals in written English (n= 141)**

<b>mode</b>	<b>Plural f (%)</b>	<b>Singular f (%)</b>
<b>KSL</b>	134 (95%)	135 (96%)
<b>English</b>	2 (1%)	3 (2%)
<b>Indefinite</b>	5 (4%)	3 (2%)

These results showed that majority, 134 (95%), of learners who are deaf expressed plural items in the same way plurals are marked in KSL. This finding is a confirmation that KSL negatively affect the way learners who are deaf mark plural forms in written English grammar. Only 2(1%) of learners who are deaf were able to fairly mark plurals appropriately in written English grammar. 5 (4%) of 141 learners who are deaf showed no definite structured way in the way they marked plurals in their written work. The trends seem to be the same with singular markers. Majority, 135 (96%), of learners who are deaf expressed singular items in the same way singular is marked in KSL. This result is a confirmation that KSL negatively Impact on the way learners who are deaf mark singular forms in written English grammar. Only 3 (2%) of learners who are deaf were able to fairly mark singulars

appropriately in written English grammar. 3 (2%) of 141 learners who are deaf showed no definite structured way in the way they marked singular in their written work.

Written work of learner 52 presented as excerpt 12 is typical of errors in plural and singular markers in written English work by learners who are deaf in upper primary classes in Nakuru Region

Excerpt 12: Errors in plural and singular markers in written English (Appendix C)

School out BIRD TWO (GATE) STAND STAND  
 ONE RED BLACK OTHER SMAND Books cow RED  
 THING SIGN NAME BEDROOM Room SIT KITCHEN  
 NEIGHBOUR SCHOOL THE Fog woom school THE  
 School Susawa School tho shoon Hoop the  
 Pool school ONE ohr out BLACK OTHER SMAND  
 milk milk cow cow sat NIE woom school S  
 Comesa my I yasa Banana Post school  
 many school THE Fot sat OTHER SMAND The  
 school Pool NEIGHBOUR school THE Room SIT out  
 othe ohr Pool my school GATE STAND STAND  
 Books school DEAF THE wasum BUS eat wonse  
 spet school ONE one Fog woom school THE  
GATE STAND STAND school out BIRD TWO  
 BUS car ER woom sunns school ohr Thow  
 Impora atmospher Policy school ohr Thow  
 school Comesa my yasa Banana Post school  
 wonse TWO GATE STAND STAND school  
 school out BIRD TWO GATE STAND  
 school ohr Bus Book ohr my siloh GATE  
 othe ohr many school Susawa school THE  
 Books school DEAF THE wasum BUS eat won  
 BUS wonse two out BIRD TWO GATE STAND  
 Impora atmospher Punns school ohr Thow THE  
 BUS car ER woom sunns school ohr Thow ohr  
 Books ONE RED ONE BLACK OTHER TWO out  
 BUS STAND STAND Fog woom school  
 school PEAT-HEI wasm BUS Banana THE  
 School Por & Susawa Banana Post scho

Plura  
 denoted  
 by Fig  
 same  
 sing

(57)

Syntax

ABAB  
 sense - not

From content analysis of the learners' work, the following errors were noted on how plurals were marked in written English by primary school learners who are deaf. Content analysis of Learner 52 written work presented as excerpt 12, showed errors in marking plurals such as "..... *BIRD TWO*" to mean two birds '..... *FAMILY MANY*' to mean: '*many families*'. The phrase bird two is the direct transcription of KSL way for marking of plurals; noun followed by a number. KSL transcription of plural marker was noted in written English work by majority of learners who are deaf. learners who are deaf marked plural in written English by writing a noun in its singular form followed by a plural descriptive word such as '*many*'. This implied Impact of KSL transposition on marking plurals in written English among learners who are deaf. Inflection of KSL Impact on the way plurals are marked in written English. Therefore, it was evidently conclusive that KSL affected the marking of plurals in written English among learners who are deaf. However, there was no evidence suggestive of KSL affecting the marking of singular in written English among Deaf learners in primary schools.

Findings from the current study, concurs with study findings by Hochgensang (2007), who observed that learners who are Deaf had difficulty in literacy in areas such as syntax and vocabulary such as inflectional affixes, function words, deviation from canonical word order and limited breadth and depth of lexical knowledge. From findings of the present study it was evident that, learners had difficulties in marking plurals in written English. For example, from pupils written work shown in excerpt 89: plural form was denoted by a number after a noun written in its singular form, '*bird two*', to mean: '*two birds*', '*food many*' to mean: '*a lot of food*' '*water many*', instead of: '*much water*'. The findings of the current study Evidently established that KSL transposition had negative Impact on the way plurals were marked in written English grammar by learners who are deaf.

Triangulation of this finding was done using teachers questionnaire on how KSL affected marking of singular and plurals in written English among learners who are deaf. The data was analysed using frequency counts, percentages and mean. Results were presented in table 4.3.3

**Table 4.3.3: Opinion of teachers on written English Singular and Plural Markers (n=18)**

Statement	SA	A	U	D	SD	Mean
Plural/ singular markers Grammatically correct in KSL often used	17(94%)	1(6%)	0(0%)	0(0%)	0(0%)	4.94
Plural/singular markers grammatically correct in written English often used	0(0%)	0(0%)	0(0%)	2(11%)	16(89%)	1.11

**KEY**

**SA**-Strongly Agree    **A**-Agree    **U**-Undecided    **D**- Disagree    **SD**- Strongly Disagree

From results on table 11 showed that all respondents either strongly agreed 17 (78%) or just agreed 1 (22%) with the statement: *Grammatically correct KSL singular/ plural markers are commonly in use*. The mean of 4.94 representing teachers opinion confirm that respondents were in agreement with the statement. . All respondents of which 2 (22%) disagreed and 16 (78%) strongly disagreed with the statement: *Grammatically correct English singular/ plural markers are commonly in use*, with a mean of 1.11. Findings from this current study is in concurrence with the findings by (Medel & Flexer2008), Traxler (2000) who established that sign language being a first language for learners who are deaf do not have distinct specific signs to mark plurals. However the finding of this present study is important as it specifically show how Kenyan sign language impacted on the way the marking of plural and singular in

written English by learners who are deaf is done. This study therefore was important as it specifically established Impact of transposition of Kenyan sign language on plurals markers in written English grammar among learners who are deaf in primary school in classes five, six and seven in Nakuru Region in Kenya. Results from this current study indicated that transposition of KSL on plural marker in written English grammar is a contributing factor to low academic performance in written English grammar in Kenya Certificate of Primary Education (KCPE) terminal examination among upper primary classes learners who are deaf in Nakuru Region-Kenya.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

#### 5.1 Summary of the Findings

##### 5.1.1 Impact of Kenya Sign Language on Choice of Vocabulary.

The first objective of this study was to analyse Impact of KSL transcription on choice of vocabulary in use in written English Grammar among upper primary classes' learners who are deaf. Results from this study established that: Majority of learners who are deaf, 132 (93.62%) had Very Low Level (VLL) of mastery of vocabulary. Low level (LL) ability Deaf learners (7) formed 4.96%. Only 2 (1.42%) of learners who are deaf had Medium Level (ML) mastery of vocabulary. None (0%) of these learners had High Level (HL) or Very High Level (VHL) mastery of vocabulary. All, 141 (100%) had difficulties in spellings, appropriate use of pronouns and used repetition of words as a result of limited vocabulary.

Of 18 teachers 17 forming 94% Strongly Agreed (SA) with the statement that learners who are deaf wrote words randomly which were difficult to make sense. The remaining 1 (6%) also Agreed (A) to the same statement. 15 forming 83% of the teachers Strongly Agreed (SA) that written English by learners who are deaf mostly contained vocabulary repeatedly used. The remaining 3(17%) were in agreement (A) as well. None (0%) of the interviewed teachers was of the opinion that this group of learners had broad or fairly broad and varied vocabulary in their written English.

These results, therefore, established that Kenyan sign language transcription negatively impacted on choice of vocabulary used in written English grammar by learners who are deaf in upper primary classes in Nakuru Region in Kenya.



### **5.1.2 Impact of Kenya Sign Language on Syntax in Written English**

The second objective of this study was to determine Impact of Kenyan sign language transcription on syntactical patterns of written English grammar by learners who are deaf. Results from this study with sample population of 141 (100%) learners who are deaf had 137 (97.16%) had their written English work depicting great orientation towards Kenyan sign language word order of Object/Subject/Verb (OSV). Only 3 learners forming 2.84% managed to put down written English in fairly correct basic syntactical word order of Subject/Verb/Object (SVO).

139 (98.58%) learners who are Deaf experienced a lot of errors related to omissions of grammatical elements such as omission of articles and plural markers auxiliary verbs. Flossing of words or whole phrases. 135 (95.74%) learners who are deaf had errors of commission in written English grammar, these errors were reduplication, repetition or wrong spelling of words and inappropriate use of pronoun

The findings of this study established that majority (97.16%) of learners had KSL sentence structure direct transcription on written English grammar. Sentences Written by primary school learners who are deaf had a great orientation towards KSL sentence structure of Object/Subject/Verb (OSV) word order contrary to English grammar word order which is basically Subject/Verb/Object (SVO) word order. Majority (97.16%) of learners who are deaf wrote entire word or prose work in capital letters which was direct flossing of KSL on written English grammar among upper primary learners who are deaf.

### **5.1.3 Impact of Kenyan Sign Language on Tense Markers in Written English Grammar**

The third objective of this study was to establish impact of Kenyan sign language transcription on tense markers in written English grammar. Findings from this study

established that none of the learners had difficulties in marking simple present tense. 139 (98%) of 141 had fair mastery of marking present tense in written English grammar. This is because in KSL verbs are signed in simple present tense which is either preceded or followed by a descriptive adjective of time to show the tense. The way in which simple present tense is marked in KSL had a positive impact on marking simple present tense in written English grammar. Only 2 (1%) were unable to write coherent sentences. Majority 139 (98%), of learners in this study could not express past tense correctly in written English, past tense markers of *-ed* and *-d* were either missing or wrongly marked, irregular verbs in past tense were not written correctly. These findings established errors in use of phoneme /s/ indicative of verb tense, regular past tense-ed, and -d, and irregular past tense markers.

Errors in marking continuous tense were noted from content analysis of learners written English. Majority of learners, 137 (97.17%) who are Deaf implied poor mastery of continuous tense in written English. learners who are Deaf were seen to use /-ing/ continuous tense marker indiscriminatively in written English grammar work.

The majority 138 (97.87%) of Learners who are deaf were faced with a challenge of marking participles form of the verb in their written work as a result of impact of KSL transcription on written English grammar. Only 3 (2.13%) could express participle aspect of the verb fairly well in written English grammar.

All the 18 (100%) teachers for English for learners who are deaf strongly agreed with the statement: *Present simple tense is easily mastered by learners who are deaf*. 14 (78%) strongly disagreed and 3 (17%) disagreed with the statement: *Past tense is easily mastered by learners who are deaf*. On the statement on continuous tens: *Continuous tense is easily mastered by learners who are deaf*, 14 (78%) strongly disagreed with the support of 4 (22%) who agreed with the statement. Statement on mastery of perfect/passive: *Perfect/ passive*

*tense is easily mastered by learners who are deaf*, was strongly disagreed by all the 18 respondents. Results from this research work clearly indicated that transcription of KSL on written English grammar had a negative impact on how tenses were marked in written English by upper primary classes' learners who are deaf. This study specifically demonstrated how transcription of KSL had a negative impact on the way tenses were marked in written English grammar by upper primary classes' learners who are deaf.

#### **5.1.4 Impact of KSL on Singular /Plural Markers in Written English Grammar**

The fourth objective of this study was to examine Impact of Kenya sign language on singular and plural markers in written English grammar.

Results from this study showed that majority, 135 (96%), of primary school learners who are Deaf used KSL directly transcribed KSL mode to express plural and singular forms in written English grammar. Negative effect of KSL transcription was evident in the way learners who are deaf marked plural in written English by writing a noun in its singular form followed by either a singular or plural numeral to denote plural or singular. Use of Quantity descriptive words such as '*many*' a lot...' were also used to mark plurals in written English. Only 3(2%) of learners who are deaf were able to mark plurals and singulars fairly well in written English grammar.

From 18 teachers, 17 (78%) strongly agreed, and 1 (22%) agreed with the statement: *Grammatically correct KSL singular/ plural markers are commonly in use.* 2(22%) disagreed and 16(78%) strongly disagreed with the statement: *Grammatically correct English singular/ plural markers are commonly in use....*, This established that upper primary classel learners who are deaf experience

challenges in marking plural/singular in written English due to impact of KSL transcription on written English grammar.

## **5.2 Conclusions**

The following conclusions were made based on the findings per objective of the study:

### **5.2.1 Impact of KSL on Choice of Vocabulary in Written English among Learners who were Deaf**

This study concluded that KSL had negative impact on choice of vocabulary used in written English among primary school learners who are deaf. Learners had difficulties in spelling, appropriate use of pronouns and limited vocabulary. These were considered to be among major factors which contributed to low academic performance in written English grammar in Kenya Certificate of Primary Education (KCPE) realised by primary school learners who are deaf.

### **5.2.2 Impact of Kenya Sign Language on Syntactical Patterns of Written English.**

Based on findings of the study, KSL transcription had negative impact on syntax in written English grammar. Written English work of learners who are deaf had errors in canonical word order, Object/Subject/Verb (OSV) which is KSL basic word order was commonly written instead of Subject/Verb/Object (SVO) which is written English basic word order. This was considered to be among major factors which contributed to low academic performance in written English grammar in KCPE realised by Upper Primary classes learners who are deaf.

### **5.2.3 Impact of KSL on Tense Markers in Written English Grammar**

Based on the findings of the study, transcription of KSL on written English simple present tense had a positive impact on marking simple present tense in written English grammar by Upper Primary classes learners who are deaf. However the challenge was with past tense. The way learners marked simple past tense conformed to the way past tense was signed in KSL. Past tense markers of *-ed and -d were* either missing or wrongly marked irregular verbs were neither written correctly in past tense form. Learners who are deaf demonstrated incompetence in marking of participle form of the verb in written English attributed to negative impact of KSL transcription on written English grammar

### **5.2.4 Impact of KSL on Plurals/singulars in written English grammar**

Based on the findings of the study it was concluded that written English plural and singular markers by learners, who are deaf, conformed to the way plural/singular are marked in KSL. Impact of KSL on written English grammar was concluded to be among major factors which contributed to low academic performance in written English grammar in KCPE realised by upper primary classes' learners who are deaf.

## **5.3 Recommendations**

Based on the findings of this current study, the following recommendations were made:

**5.3.1** There is need for deliberate effort by teachers to expose learners who are deaf to a variety of words and their synonyms as early as is possible in school by use of abstract and visual aids such as simple picture books for discussion .New words should be thoroughly practiced by signing and finger spelling

**5.3.2** Bilingual approach should be used for face to face lesson discussion and explanations of concepts but written work on the chalk board should be done in English. These way learners who are deaf will be able to make meaning of the lesson concepts.

**5.3.3** Deliberate effort should be made by teachers to expose learners to different forms of the tense for irregular verbs and use of continuous tense markers by use of Signed English(SE) and Signed Exact English (SEE).

**5.3.4** Deliberate effort should be made to expose learners to plural and singular markers in written English by use of SE and SEE.

#### **5.4 Suggestions for Further Study**

Based on the findings of the present study, the study suggested that further investigation be carried out on the following research topics

- i. Impact of written English grammar on KSL among learners who are deaf in primary school.
- ii. Impact of School going age on written English grammar among learners who are deaf.
- iii. Impact of social economic status of families of learners who are deaf on mastery of written English grammar in primary school

## REFERENCES

- Abaya E.(2006) An analysis of lexical errors in the written English of standard eight pupils in Rigoma division-Nyamira District(unpublished master's thesis –Maseno University)
- Adoyo P.O.(2004)Kenya Sign Language and simultaneous communication.Differential effectson memory in deaf children in Kenya.Kisumu:Lake publishers and Enterprise Limited
- Adoyo,P.O (2002) Emergent approaches towards sign bilingualism in deaf education in kenya
- Aduda, D.(2008 December 30)*Girls shine in KCPE*. daily Nation. Retrieved from;<http://mobile.nation.co.ke/news/-/1290/508980/-/format/xhtml/items/2/t10rzpz/-/index.htm>
- Akach,P.A.O.(2010).Application of south African sign language(SASL),in bilingual bicultural in Education of the deaf.Retrieved from [etd.uavv.ac.za/ETD-db/theses/available](http://etd.uavv.ac.za/ETD-db/theses/available)
- Anderson Angela, (2014).Assessment of morphosyntactics development of pre-school children with hearing loss using the clinical evaluation of language fundamentals second edition (2014) retrieved from: <http://digitalcommons.usu.edu/grandreports/369>
- Ayoo, E.A. (2009) *Morphosyntactic in the written English of standard eight Hearing impaired pupils*.(Unpublished master of education Thesis Kenyatta university - kenya).
- Bochner &Bochner(2009).A limitation on reading as a source of linguistic input: Evidence from deaf learners.(October2009,volume21.No2,pp143-158).Retrieved-from <http://nflrc.hawaii.edu/rfl>
- Burman, D.,Nunes,T., & Evans.D.(2007).Writing profiles of deaf children taught through British Sign language . Assessing the writing of Primary school deaf children-grammar. Retrieved from – [www.nuffieldfoundation.org>sites>files](http://www.nuffieldfoundation.org/sites/files)
- Creswell,J.W.(2003).ResearchDesign:Qualitative,QuantitativeandMixedmethods Approaches.(2<sup>nd</sup> Edition).California: Sage Publications
- Cook V.J Mark Newton (2007) Chomsky's Universal Grammar:An Introduction 3<sup>rd</sup> Edition – Willey-Black Well.retrieved from <http://www.Willey.com/Willey/CDA/Section/35>
- DFID(2010).DFID Disability and Education:Bridging the implementation Gap,London:Results,UK.
- Dunn,L.M & Dunn D.M(2007)Peabody picture vocabulary Test(4<sup>th</sup> edition).Minneapolis,MN:NCS Pearson.
- Gathumbi,A.W., & Masembe,S.C.(2005). Principles and techniques in language teaching: A Text for teacher educators, teachers and pre service teachers.Nairobi. Jomo Kenyatta Foundation.

- Goldin-meadow,S.& Mayberry,R.I.(2001).How do profoundly deaf children learn to read?  
*Learning disabilities research and practice*,16(4),222-229:<https://goldin-meadow-lab.uchicago.edu/files/uploads/PDFs/2001-GM-Mayberry.pdf>
- Geers ,A.E,Moog,J.S.,Biedenstain,J.,Brenner,C., &Hayes,H.(2009)Spoken language scores of children using cochlear implants compared to hearing age-mates at school entry. Oxford University Press, retrieved from <http://jdsde.oxfordjournals.org/>
- Government of Kenya constitution (2010) Nairobi. Government printers.
- Hallahan, D.P.& Kauffman,J.M. (2008).*Exceptional Learners: Introduction to Special Education.(12th ED)*.Inc.Upper sadle River:New Jersey.
- Hamers,J.F. & Blanc,M.H.A.(Eds.) (2000). *Bilinguality and Bilingualism*. Cambridge:Cambridge University Press.
- Hochgesang,J.(2007 ).Literacy in deaf children in Kenya: Empowering deaf Kenya.
- Horwitz,E.K.(2008) Becoming a language teacher : A practical guide to second language learning and teaching. Boston: pearson education ,Inc
- Huilut,L.M,&Howard,M.R.(2006).Born to talk(4<sup>th</sup>.ed).Boston:Allyn&Bacon.
- Irokabo,G.(2006).Effectiveness of the applications of the principles of ASL/English bilingual philosophy in the Pedagogy in Deaf Education in Africa. Retrieved from <http://www.pfi.uio.no.konferance/LEA2006/assets/docs/Irokaba-paper.pdf>.
- Kimani,C.W.(2012).*Teaching Deaf learners in Kenyan classrooms*. Retrieved from:<http://sro.susex.ac.uk/>
- Kochung' Report(2009) The National Special Needs Education Policy Framework: Nairobi ,Government Printers.
- Koda,K.(2007)Reading and Language Learning: *Crosslinguistic constrains on second Language Reading development. Language Learning*, 57 (Supplement 1), 1-44.
- Kombo,D.K & Tromp,D.L.A. (2006).*Thesis and Thesis Writing*. Pauline's Publications Africa:Nairobi.
- Kothari,C.R.(2004).*Research methodology: Methods and Techniques(2<sup>nd</sup> Ed)*.New Delhi: New Age International Publishers.
- Kuntze,M.,Golos,D.&Enns,C.(2014).Rethinking literacy: Broadenning opportunities for visuallerners.*Signlanguagestudies*,14(2),203-224.<http://dx.doi.org/10.1353/sls,2014.0002>
- Lazanova,S., & Savtchev,B.(2009).The Deaf Port Project: Analysis of needs, constraints,Practices and challenges to the Deaf and Hearing Impaired learners of Languages. Retrieved from [http://www.deafport.eu/Deaf\\_Preliminary\\_Research.pdf](http://www.deafport.eu/Deaf_Preliminary_Research.pdf)
- Ling-Yu Guo,linder j Spencer,J.Bruce Tomblin Acquisition of Tense Marking in English-Speaking Children with Cochlear implants



- Maina,N. (2011).Curriculum factors influencing performance of deaf students in Mathematics inKenya Certificate of Secondary Education. (Unpublished master of Education Thesis Maseno University –Kenya)
- Mayberry,R.I.(2007)When timing is everytning:Age of first-language acquisition effects of second language learning. Retrieved from [grammar.ucsd.edu/courses/hdp1/mayberry](http://grammar.ucsd.edu/courses/hdp1/mayberry).
- Medell,J.R.&Flexer,C.(2008)*Pediatric Auditory diagnosis,technologyand management*.Retrievedfrom [http://www/books.google.com/books?d=nfudP2x\\_20c&printers=frontcover&janet+regre+and+carol\)+flexer&h](http://www/books.google.com/books?d=nfudP2x_20c&printers=frontcover&janet+regre+and+carol)+flexer&h).
- Mellon,N.K.,Niparko,J.K.,Rathman,C.,Mathur,G.,Humpries,T.,Napoli,D.J.,Handley,T.,Scambler,S.&Lantos,J.D.(2015) Should all deaf children learn sign language?*pediatrics,136(1),170-176*.<http://dx.doi.org/10.1542/peds.2014-1632>
- Mugenda,O &Mugenda,A(2003)Research methods: Qualitative approaches.Nairobi:ACTS Press MOE (2009)The National Special Needs Education Policy Framework: Nairobi Government Printers.
- Namalwa, M.C.(2012)Challenges to Learning of Kiswahili Among Children with Hearing Impairment :A Case Study of Mumias Primary School for the Deaf , Kakamega County- Kenya.(Unpublished Master of Education Thesis ,Kenyatta University)).
- Ogada ,R.(2012)Challenges of written English composition Among class seven Learners with Hearing Impairment : Nyanza Province –Kenya.(Unpublished)
- Okombo.O,Akaranga .W, Mweri G.J & Adera O.T.A(2006) Introduction to theory and skills teaching Kenya sign language. A handbook for Teachers
- Omutsani Jane Aulela (2012) Factors Affecting KCPE Performance of learners with Hearing Impairments in Special Schools in selected counties, Kenya Retrieved from <http://www.ir-library.ku.ac.ke/handle/123456789/3605>
- Orodho,J.A.(2005).Elements of Education and Social Science Research Methods. Nairobi: Masola Publishers.
- Orodho,A.J. (2009).Elements of Education and social sience Research Methods (2<sup>nd</sup>Ed).Kanezja: Maseno. [owitie.blogspot.com/2012/10/.ke](http://owitie.blogspot.com/2012/10/.ke)
- Raga A Joyce: Sign Language and English Language use: Examination Performance Implication for Deaf students at Kuja Secondary School, Migori County. Retrieved from [library.ku.ac.ke/bitstream/handle/1234](http://library.ku.ac.ke/bitstream/handle/1234).
- Rice-Johnson,W.(2008) Language:Adefinition from first principles-thee grand over truckspot.Phlicia.Com.
- Saunders,M.,Lewis,P.& Thornhill,A.(2012) ‘*Research methods for business students*’ 6<sup>th</sup> edition,Pearson Education Limited
- Sandra.J. (2005).Language and literacy development in children who are hearing Impaired. Retrieved from [http://find articles.com/p/articles/mi\\_qa4009/-](http://findarticles.com/p/articles/mi_qa4009/)

- UNESCO (2010a) *Reaching the marginalized; Education for all Global monitoring Report*. Retrieved from; [www.oxford/Paris,oxford](http://www.oxford/Paris,oxford) university press/UNESCO.
- UNICEF (2014) *MOEST 2014 Basic Educational Statistical Booklet* Nairobi Government Printers from;
- Svartholm,K. (2010) Bilingual education for deaf children in Sweden.<http://dx.doi.org/10.1080/13670050903474077>
- Wamae Getrude Musurave Inimah (2012). Retrieved from; <http://www.ir-library.ku.ac.ke/handle/123456789/3605>
- Wambiri,G.&Muthee,D.(2010).Research monitoring and evaluation in ECDE .Nairobi:Longhorn [www.standardmedia.co.ke.mobile](http://www.standardmedia.co.ke/mobile) visited on 11 august 2013
- Zarchy,R.(2008) Deaf language acquisition and transfer to literacy. Retrieved from <http://www.lifeprint.com/as1101/topics/literacy6.htm>

## APPENDICES

### APPENDIX A DOCUMENT ANALYSIS GUIDE

#### I: Vocabulary rating

**Table 4: Error analysis in vocabulary among learners who are Deaf (n= 141)**

Competence in vocabulary	f	%
VHL		
HL		
ML		
LL		
VLL		
TOTAL		

#### Key

**VHL-** Very high level: 0 to 3 errors in use of appropriate vocabulary

**HL-**High level: 4 to 6 errors in use of appropriate vocabulary

**ML-**Medium level: 7 to 9 errors in use of appropriate vocabulary

**LL-**Low level: 10 to 12 errors in use of appropriate vocabulary

**VLL-**Very low level: above 12 errors in use of appropriate vocabulary.

**f-** Frequency

**%-** percentage

**Source:** Adapted from: Kenya National Examination Council English composition Marking Scheme (2011).

## II: Syntactical pattern in written English

**TABLE 6**

Syntax mode	f	%
KSL		
English		

**Abbreviations to be used:**

L<sub>1</sub>.Grammatically correct sentence structure in KSL

L<sub>2</sub>. Grammatically correct sentence structure in English

**Source** –Adapted from: English for deaf students: Assessing and addressing learners’ grammar development (Berrent 2001)

## III: Tense markers

**Table 8**

Competence in tense markers	f	%
Present		
past		
continuous		
Participle/passive		

#### IV: Singular and Plural Markers

Table 10

<b>mode</b>	<b>Plural f (%)</b>	<b>Singular f(%)</b>
<b>KSL</b>		
<b>English</b>		
<b>Indefinite</b>		

**APPENDIX B: Questionnaire for Teachers for English**

Kindly respond to all the questions in this questionnaire. Information given will be treated with utmost confidentiality and will be strictly used for the purpose of this Research only. There is no wrong answer since your opinion matter.

Using the scale provided below; tick in the table below the response that best represent your opinion.

**SA** –Strongly Agree      **A**-Agree      **U**-Undecided      **D**-Disagree      **SD**-Strongly Disagree

Statement	SA	A	U	D	SD
In composition writing, vocabulary used by learners who are deaf mainly contain Randomly written words that are difficult to make sense.					
In composition writing, vocabulary used by learners who are deaf mostly contain some English vocabulary repeatedly used					
In composition writing, vocabulary used by learners who are deaf mostly has fairly broad vocabulary in English used in context.					
In composition writing the vocabulary used by learners who are deaf mostly contain very broad and varied vocabulary in English which is correctly used					

From your experience as a teacher for English for learners who are deaf, how would you rate mastery of different forms of tenses as marked by learners who are deaf?

<b>Tense form</b>	<b>Opinion</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
Present tense: e.g. eat	Easily mastered					
	Challenging					
	Very challenging					
Habitual: e.g. Tom eats / They eat always	Easily mastered					
	Challenging					
	Very challenging					
Continuous: e.g. eating	Easily mastered					
	challenging					
	Very challenging					
Simple past: e.g. ate,	Easily mastered					
	Challenging					
	Very challenging					
Perfect/passive forms: e.g. It has eaten, It was eaten	Easily mastered					
	Challenging					
	Very challenging					

Respond to the following statements by indicating the code in the space within the brackets with the answer that best represents your opinion. Choose from the alternatives below:

**A**-Strongly agree                      **B**-Agree                      **C**-Undecided                      **D**-Disagree                      **E**-  
Strongly disagree

- (12) The way learners who are deaf sign or mark singular and plural in KSL word order, they tend to write the same word order for written English. (.....)
- (13) KSL has limited word signs for plural form. Example; CHILD/CHILD or CHILD MANY to mean Children. This affects how learners who are deaf write plurals in written English for nouns such as the example given above (.....)
- (14) Learners who are deaf who sign competently singular or plural in KSL often make mistakes in expressing the same concept appropriately in grammatically acceptable written English. (.....)
- (15) How would you rate the type of errors commonly committed by learners who are deaf when marking singular/plural in written English? Kindly use the rating codes given to fill the table below.

<b>Error</b>	<b>Opinion</b>	<b>SA</b>	<b>U</b>	<b>A</b>	<b>D</b>	<b>SD</b>
Reduplication of noun such as Cat Cat	Very common  Not common  No consistency					
Omission of plural markers such as - es	Very common  Not common  No consistency					
Both the above	Very common  Not common  No consistency					
Use of quantifiers such as: <i>man two</i> or <i>man many</i>	Very common  Not common					



	No consistency					
Others(please specify)	Very common Not common No consistency					
	Very common Not common No consistency					
	Very common Not common No consistency					
	Very common Not common No consistency					

Thank you for taking time to respond to this questionnaire.

No 47

The <sup>sp</sup>ham of my school is ~~KARAWA~~ <sup>sp</sup>SHOOL SOY  
<sup>sp</sup>thais  
 MY <sup>sp</sup>SOY FIVE Food all <sup>sp</sup>SWALLOW The SOY FIVE  
 CIALL <sup>sp</sup>MATTE <sup>sp</sup>SOY COOK BOY SAME YOU SIGES  
 WOTHE ARE SOME <sup>sp</sup>SIVALL GIRL SOAS The <sup>sp</sup>SOLLIR  
 DEAYVE <sup>sp</sup>SIJB COOK FIVE FIOS DOEF SOIL ALL  
 SOY COH ARH HOME ARE <sup>sp</sup>MOTHER MOCH RES IISH  
<sup>sp</sup>KAPABET FOY <sup>sp</sup>SOIMA COOW all GIG FIVE FOY  
 YOU IS SUM. <sup>sp</sup>YAZB THIS CON GIG HALL HAVE ARE  
 THAS TAKE THE BOY WOR FOY COOK <sup>sp</sup>MOTH OHE FO'S  
 BAE SIVE MAYK IS MOBE BOY THA MOY FOYX SIVE FOY  
 SCHOOL DOTHE GIG MY FOY TO MOTH OAY GIG COW  
 YOU <sup>sp</sup>COOM SHAV WIE SOY KAPSABET FOY SCH G  
 HOW <sup>sp</sup>MOE FIVE <sup>sp</sup>SOLLIR <sup>sp</sup>CAVCH GIG HOU DOINIS  
 FOY <sup>sp</sup>MAVE CALL <sup>sp</sup>SIGA COOK OUR DOMINIS  
 FOY COLL ARE FIVE <sup>sp</sup>SOY MY FOYOLL ARE <sup>sp</sup>SOY FIVE  
 THAY THE <sup>sp</sup>SIGIMALL MOTIEY <sup>sp</sup>WALHO OSSICENT THE  
 TAV OUR <sup>sp</sup>GIG YOU DOOR <sup>sp</sup>AAPP SOOT OUR COW GIG  
 SCHOOL ARE <sup>sp</sup>FIOK COU SIVAY COW LAW ARE  
 THE ARE <sup>sp</sup>SIAY COOY AND OHE BLAD TO MOOT BOY  
 CHES YOU FOY BE YOU SOME FIVE OHE <sup>sp</sup>GIMONCHOU  
 THALL THIS <sup>sp</sup>MPAS ANS <sup>sp</sup>SOM ARE <sup>sp</sup>SOA JOT FOY  
 TIAY OS <sup>sp</sup>MOYCH ARE DEAS <sup>sp</sup>WIAS TATE <sup>sp</sup>COU MOU  
 SOU COOK <sup>sp</sup>ONTARIS COOS OHE <sup>sp</sup>MATTE OHE SOU SIBS  
 SAWI TAKE HOLL DAY SAVE THE THE ARE <sup>sp</sup>SIMAC  
 SCHOOL <sup>sp</sup>CHOUSE ON <sup>sp</sup>VIMCH OUR FOY FOHE <sup>sp</sup>SOOR  
<sup>sp</sup>MAPPICH OHE SOY FOY FIVE COOW BICY ARE AIS  
 MOH SOU OHE SIVE ONE ROY <sup>sp</sup>SOOG MOTHER FOR  
 OUR FOY OHE SIVE FOY <sup>sp</sup>SOLLIR FIVE <sup>sp</sup>GIG HOU  
 DOCT OUR FIVE ARE SCHOOL <sup>sp</sup>PKAB KA<sup>sp</sup>

Randomly written words, which are -

Sent Mouth three Mother is Kapsabet  
 school car bad Scott foresman and  
 Company people picture what children observe  
 assembly mornings girl in front Teacher test  
 test teacher write time Learn child stock pupil  
 exam Do exam Do which Exam great people greet  
 Boy girl compound sweep teacher parade teacher  
 where teacher sit children all how Many Look  
 at the picture below we see a young boy who fell  
 down along the road being helped by his friend by  
 helping other people when they are in need we show  
 that we are good neighbours we should be confident and  
 feel great about ourselves since we are all special  
 and unique children with special needs playing is  
 school formal learning in a classroom. Many orphans  
 are take care of in childrens home we do different  
 things to keep our school clean our teachers  
 are in authority in school Today adults are also teach  
 ing how to read and write Catholics celebrating pal  
 m Sunday. An angry man we should use our  
 talents creatively while working for God Mother  
 school take care of BUS playing is many orphan



my school

(31)

KSL  
SYMBASE  
OSV

my school called is KAPSABET  
school for the deaf. SCHOOL class  
five teacher all children my school  
book story read much us school the.

transport

my school book and read story  
in see like bus transport school to  
go teacher and people alot star nice  
beauty go school to transport finish  
people alot play work class. five nice  
fine happy story finishing that you.

my school is KAPSABET school for  
the deaf welcome visit tell poor school  
thank you school alot bye story and  
people school alot happy.

Repetition:

my school transport help story  
tell deaf bus welcome help like is  
pease help bus in transport visit  
in beauty happy thank you.

my school welcome visit in  
tell pease help school poor alot  
from KAPSABET little school KAPSABET  
are deaf help tell pease poor mp  
visit nice school children.

my school pease alot help  
like bus called transport school  
in visit welcome see beauty nice

school happy pease government tell is  
poor welcome pease bus KAPSABET

my school welcome people tell  
government you bus poor called.

KafSaket School for the deaf teacher children well.  
 Classroom children in read alway worke pleasure nice.  
 Children went well Pupil School have talk come skill.  
 Teacher tall at Pupil pleasure alway hardwork in class.  
 Children Classroom Pease why what is how thing went all.  
 People Primary Children read Pupil Classroom in <sup>amusement of</sup> ~~run~~ well.  
 many Pupil in your school do not hear best run went.  
 What you Pupil Classroom many ready head run best.  
 Teacher education said happy alway best head class.  
 Children page low dirty many school clean ready.  
 People run ready flag <sup>s</sup> ~~paper~~ teach feel believe respect.  
 Classroom school sweep dirty clean out tank in many.  
 Children out leisure people game ball run basket.  
 Children best children encouraged to take optime way.  
 head teach teacher primary education read Pupil take  
 Place with Classroom necece teacher thing hand skill.  
 Children <sup>Plumbe</sup> many responsibility hardword dirty come fair well.  
 People game run work alway morning and afternoon go out.  
 Children teacher obey all children responsible Good.  
 teacher through tall different worried happy cry sorry.  
 Children you feel how school Pupil in afternoon ~~hand~~ cut  
 People clean nail cut help flag sea good well.  
 Sign cut what happen children run go school need  
 Children next picture happen afternoon when wash the  
 Sweep ready children problem there trustme if  
 check school bring check nothing night morning  
 People friend run in school feel look for ask me.  
 Children polite good thank-you teacher blackboard.  
 Children help new please help me true me well.  
 Children <sup>Synthes</sup> school classroom help dirty clean.

KSE (OSVI)

Omission of helping verbs the article

Omission

Teases show work well word

Omission of preposition (with)

Omission of

Want to go there

Nouns don't show plural

Miss helping verb



my name naeray friend and mother donothy  
sister smart teacher first world <sup>Repeat</sup> come come  
happy <sup>Repeat</sup> boy bykeen school girl together first  
always God head world cheven respect  
cane <sup>st</sup> well <sup>Repeat</sup> leabra cook many <sup>WW</sup> could more  
cool food box cook you Pray tomatoes to  
would burner could annoy few suddenly became  
belongs father children shoul a ciny baby  
see mother brother that musas Piss window  
go to do your canen book teach whose a  
become Presline very sick annoy nather floor then

9  
9  
9

MY FRIEND No 9

love your happy is when depped  
than make whanpawind many is known you  
Make have happy should what bratched my  
is called sched whaterparid should water he  
experience in the happy is many are makeing  
when have Our many a should soon as a  
you it time

Random  
use of  
-ing  
(connectives)

The that our happy are whespaying  
Something was swapays some our yoeying  
been I was mandeying are kipayearika  
you have made you times who had the  
he been some it came you her papeing

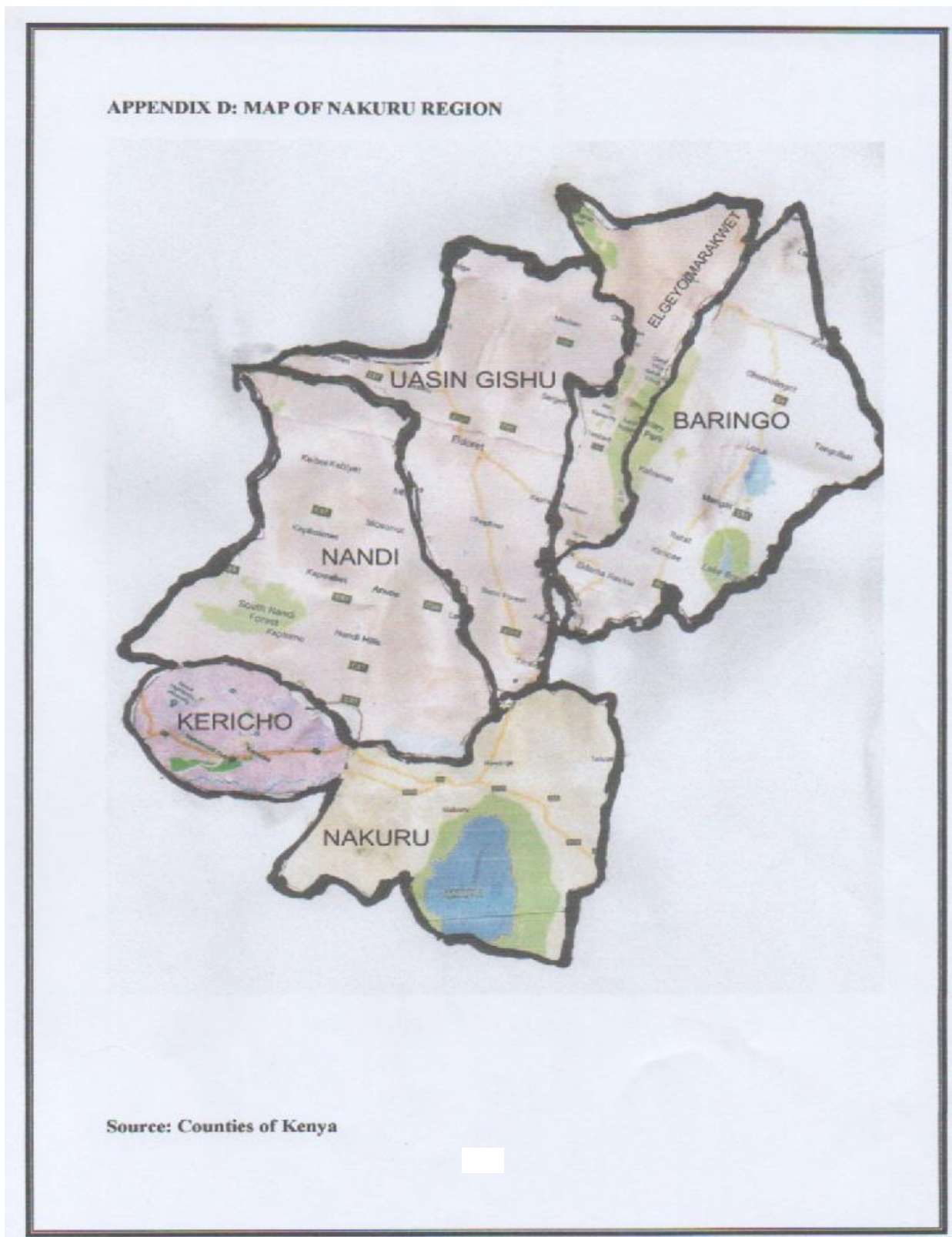
random  
Addition  
9 51

Mural  
Manual  
win  
Eater should  
beate

do Larr STO will enter area  
MASH hand Cow hem Three been following the  
box sid Loving my to see school in Times  
CLASS strd poor in to see husband in deating  
Time <sup>pp</sup> has me see home in Ane cook chirax  
eat in my cow Loving good in look hand in  
box in look cow in good see been good come  
holiday in poor eaches The dune poor cooking  
Loving following in home in Ane call Ther  
No 33



**APPENDIX D: MAP OF NAKURU REGION**



Source: Counties of Kenya

APPENDIX E



**MASENO UNIVERSITY ETHICS REVIEW COMMITTEE**

Tel: +254 057 351 622 Ext: 3050  
Fax: +254 057 351 221

Private Bag – 40105, Maseno, Kenya  
Email: muerc-secretariate@maseno.ac.ke

FROM: Secretary - MUERC

DATE: 6<sup>th</sup> September, 2018

TO: Ruth Chepkosgel Samoei  
PG/MED/07008/2011  
Department of Special Needs Education and Rehabilitation  
School of Education, Maseno University  
P.O. Private Bag, Maseno, Kenya

REF: MSU/DRPI/MUERC/00533/18

**RE: Effect of Kenya Sign Language on Written English Grammar among Learners who are Deaf in Primary Schools in Nakuru Region, Kenya. Proposal Reference Number MSU/DRPI/MUERC/00533/18.**

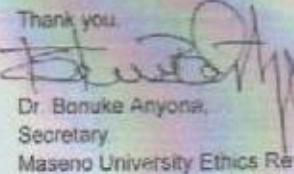
This is to inform you that the Maseno University Ethics Review Committee (MUERC) determined that the ethics issues raised at the initial review were adequately addressed in the revised proposal. Consequently, the study is granted approval for implementation effective this 6<sup>th</sup> day of September, 2018 for a period of one (1) year.

Please note that authorization to conduct this study will automatically expire on 5<sup>th</sup> September, 2019. If you plan to continue with the study beyond this date, please submit an application for continuation approval to the MUERC Secretariat by 15<sup>th</sup> August, 2019.

Approval for continuation of the study will be subject to successful submission of an annual progress report that is to reach the MUERC Secretariat by 15<sup>th</sup> August, 2019.

Please note that any unanticipated problems resulting from the conduct of this study must be reported to MUERC. You are required to submit any proposed changes to this study to MUERC for review and approval prior to initiation. Please advise MUERC when the study is completed or discontinued.

Thank you

  
Dr. Bonuke Anyona,  
Secretary  
Maseno University Ethics Review Committee



Cc: Chairman,  
Maseno University Ethics Review Committee.

MASENO UNIVERSITY IS ISO 9001:2008 CERTIFIED

