

## Perspectives of Deaf Students towards Sign Language Systems as used in the Classroom and their Implications on Academic Performance in English

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**Abstract:** Students with Hearing Impairment (HI) face various implications in the process of learning as a result of the hearing loss. The academic performance of these students who have hearing loss or have ability to only perceive slight sound is affected greatly. These students with HI have continued to perform below average in Kenya Certificate of Secondary Education (KCSE). For instance, in the year 2017, 2018, 2019, 2020 and 2021, out of the possible mean score of 12, these students scored an average of 2.4, 2.3, 2.3, 2.8 and 2.7 respectively all of which indicated a “D-” (D Minus) Grade. In Kenyan grading system and considering the affirmative Action for those with visual and hearing impaired, which is grade C- these scores are below average and also below the minimum pass-mark for entry into higher institutions of learning like teachers’ training colleges. Explanations regarding the poor performance have pointed to perspectives of the learners with HI towards the sign systems that are used. The objective of this study was to establish the influence of deaf students’ proficiency in Sign systems on Academic performance in English. The study adopted multiple case study design within a qualitative approach. The study was conducted in the four special secondary schools for the deaf in Nyanza region of Kenya with a sample size of 48 participants. The sample size comprised 33 form 3 students, 7 teachers of English, 4 Curriculum Support Officers and 4 Principals of Secondary Schools for the Deaf. Purposive sampling technique was used to select the four schools while saturated sampling technique was used to select 7 teachers of English. Stratified sampling was used to select 33 Form 3 students. The study employed In-depth interview schedules, focus group discussion guides, Classroom Observation Checklists and the document analysis guide as the research tools for data collection. Thematic analysis was employed for data analysis based on the themes that emerged from the study. The findings indicated that there are three sign systems which are Signed Exact English (SEE), Signed English (SE) and Kenyan Sign Language (KSL) are used during English lesson. There is no specific sign system that must be used during English lessons. Every school and teachers of English (ToE) decides which system to use based on what they are to teach. There is no policy for sign language systems. Sign system used during instruction has a direct impact on the performance of learners in English. The study also established that majority of ToE prefer using SEE during English lessons. Students with HI on the other side, prefer KSL to SEE to be used. It was also established that Students with HI are proficient in KSL than SEE and that they comprehend content faster when taught in KSL than in SEE. However, KSL affects them in writing English exams.

**Keywords:** Students with Hearing Impairment, Sign Language Systems, Perspectives, Academic Performance, Implications.

### INTRODUCTION

The role that language plays in the society is very important. One scholar, Malinowski (reiterates the importance of language in communication by espousing the responsibility language plays in creating the ties, hence facilitating the unified social actions. This cannot take place without language (Diamond, 2014). There are various functions that language is endowed with, the basic function is usually communication. Fafunwa (1990), asserts that language is a product that is integrated in the community and it develops as the needs of the community and culture increases.

The United Nations Convention on the Rights of the Child (UNCRC) espouses the rights of children with hearing impairment as all other children despite their communication barriers. This document is a legally-binding international agreement setting out the civil, political, economic, social cultural rights of every child, regardless of their race, religion or abilities. These rights include the right to access all basic necessities of which education is one of them. It is however noted that lack of effective communication hinders them

from being able to express their views and receive the same attention that children without hearing impairment receive. This is an experience they encounter at home, in school and in the wider community at large (MacCracken & Sutherland, 2013)

Moores, (2001) fronts early indicator of hearing as when a child expresses inability to hear and discriminate sound sensations and is therefore unable to respond to sound cues. Furthermore, this would exert a number of challenges on their learning. At this stage, names like: hard of hearing, deaf or hearing-impaired are used to describe a child with a hearing loss (Moores, 2001). Generally, the society sees more challenges that they are likely to face than achievements even when they sent to school. According to Martin, (2001) most parents sacrifice sending learners with hearing loss to boarding schools as a relief so that they are out of their sight. Generally, most homes have a predominantly speaking environment. There is no proper communication at home. Because of this situation, many deaf children dread

going back home during school holidays. The situation sharply contrasts with that in schools for the hearing students where children always look forward to closing school and going back home. The apparently unusual behaviour of the deaf children is attributable to the fear of going back home where there is a communication vacuum, making the school environment, where they sign with other deaf children, much better for them (Okwaro & Bakari, 2003). This attitude of the society to children with hearing impairment makes such children grow up with minimal exposure that further makes them exhibit peculiar developmental patterns like inattention, failure to complete given tasks and other memory related issues. However, it can be roughly estimated that members of the community subject majority of children with hearing loss to underperformance in terms of academic achievements (Moore, 2001).

According to Kirk, (2007) loss of hearing can be mild, moderate, severe and profound depending on the cause, seriousness and the age of onset. The skill of hearing is very important in the concepts of abstractions and mental representations which inform reasoning skills that directly affect academic performance. Children with hearing impairment do not have the capacity to associate sound and object. This greatly affects them since is an important cognitive process that leads to limitation in the way they process their learning. Learning, for learners with hearing Impairment do not take place holistically since they do not have all elements of communication. While the other learners have the elements of sound, learners with HI depend majorly on the use of sight which poses constraints to their academic progression.

Children with hearing impairment usually prefer being referred to as deaf to hearing impaired. In a situation where a child who may be having some ability to use oral language and embraces it, the deaf peers may reject them. The justification being on them perceiving this as a rejection of their own culture where they are supposed to use sign language (Kirk, 2007). The effects of this will automatically be felt in the academic of the learner with HI since the learner needs to interact and socialize with the peers adequately (Vygotsky, 1978).

Spoken language is predominant mode of communication. In this case, other forms of communication, including sign language is a marginal since the majority do not use it, neither do they know it. One main reason that makes sign

language is that it is a visual gestural system and mainly used by the deaf who are a minority group. A deaf person therefore cannot make use of the vocal - auditory channel used by the majority for communication. Sign Language, thus, offers the deaf a communication alternative to the verbal-auditory channel that is inaccessible to them. Based on this, Article 21 of the Salamanca Framework for Action (1994), states that; "Owing to the particular communication needs of learners with hearing impairments, their education may be more suitably provided in special schools or classes and units in mainstream schools. Sign language is the mode of communication that is used in these institutions". However, this was not adopted at the same time in all countries. In addition, lack of universality of signs is also an issue in education of the deaf.

Sign language originated from France by Abbe Charles de L'Eppe who is regarded as the father of sign language. Charles started the initiative of using sign language in 16<sup>th</sup> century. This came as a result of his interaction with deaf people who were using sign to communicate. Charles took an initiative of refining these signs and adopted them to become sign language. The sign language that was used in France was then formalized and spread to United States of America and Europe as well. Since then, there has been many myths and misconceptions regarding sign language but the deaf community across the world embrace it to the core (Padden & Carol, 2003). In the field of education, sign language dates back to when deaf people started using it to communicate among themselves. However, the documented use of sign language is traced to Greece when Socrates who lived in 469-359 BC, in his book, Levinson shows how important Greeks thought of the value of Sign language. St. Augustine also made a reference to Sign Language as a mode of communication used to reach deaf people for Christ.

Natural sign languages are clearly very similar to natural spoken languages in many significant ways. Sign languages are conventional communication systems that arise spontaneously in all deaf communities. They are acquired during childhood through normal exposure without instruction." (Okwaro & Bakari, 2003 P. 7). Every country has its own sign language. This is due to the fact that signs are generated from the community and therefore the difference in the cultures lead to variations in signs. As a result, each country has its own sign language. Okombo and Akach, (1997) assert that people within a

country share more or less the same experiences and thus the process of abstraction (i.e. giving meanings to signs) among them tends to be similar. This leads to the situation where there exist national sign languages such as Kenyan Sign Language (KSL), British Sign Language (BSL), Ugandan Sign Language (USL), American Sign Language (ASL) among others. This leads to creation of a deaf culture within the dominant hearing culture and like all co-cultures, they form a community (within their respective nations) partly by exclusion (from the hearing culture) and partly by congregating together. They thus form a community of signers (users of SL) who are also members of the Deaf culture.

Historically, in terms of sign systems, it dates back in United States of America in the mid-20th century when some educators of the Hearing Impaired came up with an idea of making English visible by representing the spoken word in the sign form. This gave rise to Sign Systems. Richard Paget was one of the earliest educators who developed such a system. He called it the "Systematic Sign Language" and published an account of it in 1951. Paget first proposed that a sign is representation of English word and therefore signs should be ordered in the same way that English words are ordered. About a decade after the formal publication or a description of the Systematic Sign Language, another educator-David Antony, began work with individuals with Hearing Impaired in Michigan with the same ideas and goals. Antony, on his side devised a system called Seeing Essential English (SEE-I), which sought to represent the sound, spelling and meaning of parts of English words, more specifically, word roots, prefixes and suffixes. This was not so much different from what Paget, (1951) had developed. Disagreements concerning the rules of the system resulted in a second sign system named "Signing Exact English (SEE-II)." This system was developed by Gerilee Gustason, Pftzig and Zawalkov in 1972. SEE-II was best characterized as an attempt to limit SEE I, in order to prevent the system from becoming so distant from American Sign Language (ASL) that it was rendered unintelligible to ASL signers. In 1983 Harry Bornstein and Karen Saulnear developed another system, "Signed English (SE)" This system was specifically for use by and with pre-school and elementary level hearing impaired children in United States of America. In this system, gestures or signs are used to represent the meaning of words. There is an ongoing discussion

on the effectiveness of sign systems in the education of the deaf. Ruth (2018), posits that teachers of learners with hearing impairment should endeavor to expose learners to different sign systems of the tense for irregular verbs and use of continuous tense markers by use of Signed English (SE) and Signed Exact English (SEE) and plural and singular markers in written English by use of SE and SEE.

In the Kenyan Context, there are three sign systems which are in use by the various practicing stakeholders. These sign systems are not only used in special schools for learners with hearing impairment but also outside the institutions of learning. These systems include Signed Exact English (SEE), Signed English (SE) and Kenyan Sign Language (KSL). Fingerspelling is integrated in all the three systems. On considering SEE, just like all other sign languages, it is a manual communication. The vocabularies are in English and the word order used is same as that of English. The syntax (sentence structure) is in the form of English language. One unique thing with this sign system is that the signs are superimposed on words in English sentences but affixes such as "s" and "ing" are indicated by finger spelling. The second sign systems which is Signed English uses sign words and sign markers and in each case, each sign stand for an English word and the arrangement of the signs are in exact adherence to the English sentence order. SE uses fourteen markers. Majorly, the sign markers indicate plural or singular, tenses or show the possessiveness of an object. In this system, some words are left out. Word classes like articles, interjections and prepositions are not signed. The suffixes in English therefore are often dropped enabling the signer to speak easily while signing and to keep pace with spoken English (KIE, 2002). It is based upon signs drawn from sign language, for example KSL and expanded with words, affixes, tense markings and endings to give a clear and complete visual representation of English for educational purpose. Fingerspelling or manual alphabet, on the other hand represents letters of the alphabet using the fingers. This is integrated in all the three sign systems, especially in a case where there is no known sign for a given word. In fingerspelling, each letter of the alphabet is represented by its own sign. There are two types of manual alphabets; One handed manual alphabet and Two-handed manual alphabet (Okwaro & Bakari, 2003). Some countries like England, Australia and New Zealand uses two-handed manual

alphabet while the one-handed system is used in Kenya, United States, Ireland, Singapore, the Philippines among others. In South Africa both one- and two-handed alphabets are used. The last sign system is Kenyan Sign Language. KSL is a language used by the hearing impaired in Kenya (Adoyo, 2004). KIE, (200) defines KSL as a visual-gestural language used by deaf persons in Kenya. K S L is a language that uses manual symbols to represent ideas and concepts and is independent of any spoken language (KIE, 2004). Its sentence features and grammatical rules are different from any other language. Information in KSL is written by glossing in any form that is understood and is acceptable to a given deaf community. In most cases KSL is glossed in English, this is simply because English is the official medium of instruction from upper primary to higher level of education system in Kenya.

Kenyan Sign Language is not random. According to KNAD, (2001), there are certain orders that can be used while others cannot. The most used being: SVO, SOV and OSV (S= SUBJECT, V= VERB O=OBJECT). The OSV sign order seem to be the most preferred in KSL. According to Zambian National Association of the Deaf -ZNAD (2001), sign language largely follows the sentence structure of object subject verb (OSV). For example, "The girl is kicking the ball" maybe written as BALL/GIRL KICK. Glossing in KSL is the writing of spoken words in capital letters. Glossed sentences are punctuated by using a slash (/) for a comma and double slash (//) to denote a full stop (KIE, 2004)

Example: KSL: IF INTERPRETER THERE / ME GO //

English: I will go if there is an interpreter. (KIE, 2004)

A glossed sentence has its meaning enhanced by using non-manual features and facial expressions. These are critical aspects in sentence formation because they give more meaning by showing mood of the speaker. English grammar is divided into morphology, which describes the formation of words, and syntax, which describes the construction of meaningful phrases, clauses, and sentences out of words.

According to the KIE, (2014) KSL is the sign language regarded as the mother tongue to the deaf community in Kenya. Martin, (2001) further asserts that the same applies in all other countries, such that the national sign language of the each of

the respective countries will form the mother tongue of the deaf in each of the country. The development of KSL was heavily based on the grammatical structure of size, shape and position of things. This was also connected to objects in space (Gargiulo, 2006). As most of the African countries sign languages,, the grammar of KSL was borrowed from ASL. The adoption of KSL to be the medium of instruction, in the schools for the deaf, and later on as an examinable subject was hoped to enhance academic performance of students with deafness at secondary school level (KIE, 2008). However, there is a debate as to whether this system is serving the purpose on which it was introduced.

Sign languages that are used in English-speaking countries are not uniform (Gravel & O'Gara, 2003). However, in the Arab Countries, Arab Federation of the Deaf, which promotes the understanding of Arabic sign language developed a uniform sign language for Arabic countries. In 2001, the Federation approved the Unified Sign Language Dictionary to enable the entire Arabic deaf community to use Arabic sign language (Alamri, 2017).

Documentations regarding deaf people started in the year 1958 when the Kenya Society for Deaf children was established (Ndurumo, 1986). By then, the official language of instruction that was being used was oral language. However, the students had the audacity to use sign language outside classroom. As time went by, there arose need to use sign language in schools for the deaf and by 1981, the MoE proposed a program that saw the separation of schools for the deaf into two groups to cater for oral/aural (oralists) and sign language (manualists). A proposal by Dr. Ndurumo, (1986) to the Hearing-Impaired Subject Panel of Kenya Institute of Education (now Kenya Institute of Curriculum Development) saw the acknowledgement of the need to have a specific sign system for instruction in special schools for the deaf, which led to official adoption and acceptance of sign language as a method of instruction in 1988. However, this came along with its own challenges on how to have the same implemented in schools. A number of concerns were raised which included lack or shortage of KSL books, too basic vocabulary used by the deaf people which was inadequate for instructional purposes. The vocabulary was consisting of numbers, pronouns, towns and other concrete based signs (Ndurumo, 2008).

There has been a record number of effort and measures that have been undertaken by various stakeholders to promote Kenyan Sign language. However, a number of Special Needs Educators within schools for the deaf have had contrary opinions on the use of KSL. While some schools have had instructions given to the teachers and students with hearing Impairment to strictly use Signed Exact English during teaching and learning, some hold that KSL is better placed to be used as a system (Adoyo, 2004). There is an ongoing debate among various scholars on the sign system that should be used in classroom for learners with Hearing Impairment for instruction. Adoyo, (2004) maintains that KSL is the most easily understood sign system by the deaf while those who hold on SEE critique KSL indicating that it is mother tongue hence cannot be used for instruction in other learning areas especially for academic competency and performance. They also say that using KSL will deny the Learners with hearing Impairment competition in the job market since they will be seen as having done a completely different examination (Hallowell & Silverman, 2008).

Kenya has experienced a record number of special schools which have been started all over the country to cater for learners with disabilities. The hearing-impaired learner is a beneficiary of this and has seen Kenyan Sign Language (KSL) gain legal recognition (Constitution of Kenya, 2010). The curriculum body in Kenya in the year 2004 (KIE) currently KICD in concurrence with Adoyo, (2004) suggested that teachers of English should consider using KSL while teaching English to learners with HI. Adoyo, (2004) argues that KSL is easier for learners with HI as it enables them to understand and recall concepts. Wamae, (2002) further asserts that it is logical to use KSL as a language of instruction in the classes for learners with HI. However, the questions on whether and how KSL is helping learners with HI to comprehend concepts and to write competently and undertake fluent and complex composition in Standard English in class are still glaring (Wamae, 2002).

A number of scholars content that the language used during classroom instruction will always influence the eventual performance of students (Guloba, Wokadala & Bategeka, 2010). In the case of the learners with hearing impairment, the sign system (which is the language of instruction) used in classroom instruction also plays a role in determining the comprehension level. Sign

language systems in the education of the learners with HI facilitate interaction among the students themselves, the teachers as well as other members of the school community where learning takes place. Adoyo, (2004) and Irokaba, (2006) contend that learners with HI perform below average as a result of the sign systems that are used during classroom instruction.

The use of sign systems has received little or no attention among the commissions formed in Kenya yet it is among the issues on the table when it comes to the special schools for the HI. There is therefore no known clear-cut policy on the use of KSL as the MT of the deaf in Kenya. The only document is The Kenya Sign Language Bill of 2021 which was published in the Kenya Gazette Supplement number 25 of 8<sup>th</sup> March, 2021 and passed by the Senate of Kenya with amendments on 11<sup>th</sup> January, 2022. The Bill was received in the National Assembly on 2<sup>nd</sup> February, 2022, but is yet to be ascended to. In the Kenya Sign Language Bill of 2021, there is no clear information on which sign language systems should be used during classroom instruction.

Spoken language and sign language are different. While the policy in place gives clear and distinct guidelines regarding the spoken language of instruction to be used schools, it is very silent on the part of the sign system that should be used during instruction in special schools for the deaf, especially for English lessons, considering that KSL uses English words and the learners with HI do not take Kiswahili as a learning subject.

Very few hearing people (including the policy makers) are aware of the differences that exist between English and KSL and the impacts that KSL has on the English as a subject and on comprehension of other subjects which are examined in English. In the language policy, the statement which directs that “language used in the catchment area is used as a language of instruction in the lower grades and English takes over as a medium of instruction from Grade 4” emanate from people who are in the era where language was seen as equivalent to speech. This does not necessarily apply to learners with HI. Majority of deaf learners are born in an environment where the language of the catchment area is spoken. That is, the parents and immediate family members are hearing people hence they use speech in communication. What happens to them when they reach Grade 4, where again a spoken language is supposed to take over? These are some of the

issues that no known policy has addressed in as far as the education of the deaf is concerned.

Students with HI always experience a lot of challenges in learning English. Lucas, (2001) states that learners with HI whose first language is sign language experiences challenges in writing English composition since sign languages are not written languages. According to Moses and Mohamad (2019) English language writing has always been a challenge for second language students to master. Moreover, writing has always been a major difficulty faced by students in English language learning. Furthermore, teachers of English in most schools are faced with the challenge of developing students' ability in writing. Misbah, Mohamad, Yunus and Ya'acob, (2017) in agreement posit that lack of vocabulary has caused the students to face challenges in acquiring writing skills. Afrin, (2016) also adds that students have the habit of spelling according to their pronunciation and this will lead to wrong spelling. The results from some studies also point at low level of awareness by the deaf students on their capability to undertake reading comprehension than hearing peers (Marschark, Sapere, Convertino, Seewagen & Maltzen, 2004).

The sign systems that special needs educators use for their students are determined by their beliefs, perspectives and decisions (Woolfolk Hoy, Hoy & Davis, 2009). Dada and Atlanta, (2002) adds that the sign systems used by the special needs educators is not only associated with teaching practices but also with the features displayed by students such as special educational needs. A study

conducted by Siima, (2011) indicated special needs Educators supposed learners with HI as slow learners and this prejudiced their acquaintance and of use of approaches in teaching reading and writing. Another study by Ludago, (2014) indicated that most special needs educators for learners with HI in Ethiopia were not spirited and psychologically ready to do their duties as expected. The current study employed self-reports and observations to compare teachers' perspectives towards sign systems and their actual classroom practices.

The four basic skills in English, namely listening, reading, writing and speaking are taught through an integrated approach. An integrated approach is adopted in the teaching of English where four skills are taught namely listening, speaking, reading and writing. Bunyasi, (2010) points out the efforts that have been put in place to improve the academic standards of the students with HI. However, this has not been realized as performance is still depressing. In the article report of Kenya National Examinations Council (KNEC, 2009), Lewis, (2009) discloses some language divergences used in the educational activities of students with HI.

In Kenya Certificate Secondary Education examinations, students with hearing Impairment perform below average. (KNEC; 2021, 2020, 2019, 2018 and 2017). This can be confirmed in Table 1.1 which shows the mean scores in English versus KSL for A, B, C, D, E and F secondary schools for the deaf in Kenya for the 5 years, that is, 2017 to 2021.

**Table 1.1:** Kenyan Secondary Schools for the deaf K.C.S.E. English and KSL Mean Scores for the Years 2021, 2020, 2019, 2018 and 2017

Year	2017		2018		2019		2020		2021	
	ENG	KSL	ENG	KSL	ENG	KSL	ENG	KSL	ENG	KSL
A	3.0	8.0	2.4	8.6	2.9	9.7	4.1	9.6	3.8	10.8
B	-	-	2.1	8.7	2.0	6.4	2.2	5.6	2.6	8.9
C	2.4	9.7	2.3	8.7	2.4	6.8	3.0	8.9	2.3	8.2
D	1.7	7.93	2.2	8.7	1.8	5.8	2.1	5.6	2.8	8.9
E	-	-	-	-	-	-	2.5	7.5	2.0	7.6
F	1.41	7.9	1.67	8.6	1.47	4.37	1.49	7.6	2.42	6.5
MEAN SCORE	2.4	8.5	2.3	8.7	2.3	7.2	2.8	7.4	2.7	8.9

**Source:** County Directors of Education (Siaya, Busia, Migori, Bomet, Vihiga, Nandi)- 2022

**NB:** *School B had not registered KCSE candidates before the year 2018*

*School E had not registered KCSE candidates before the year 2020*

**KEY:**

ENG- English, KSL- Kenyan Signed Language,

Special secondary schools for the deaf have been posting a below average record in the results of English in Kenya Certificate Secondary Education examinations. This is depicted in table 1.1. In the years 2017, 2018, 2019, 2020 and 2021 out of the mean of 12, students registered mean scores of

2.4, 2.3, 2.3, 2.8 and 2.7 respectively. All these grades are D Minus (D-) (K.N.E.C. results, 2017-2021). In the Kenyan grading system, these results are regarded below average and may not enable the students to enter courses that are regarded as competitive and marketable. Even if the affirmative action is considered, learners with HI who score such grades may not enter higher institutions of learning like teachers' training colleges. The reason for this low performance is suspected to be associated with the sign system used in classroom.

In Kenya, English final national examination at secondary school consists of three papers. English Paper One (101/1) which is marked out of 60, tests on functional skills, cloze test and oral skills. Paper Two (101/2) which is marked out of 80, tests on comprehension, literary appreciation and grammar. Paper Three (101/3) which is marked out of 60, tests creative and imaginative writing and essays based on set texts. In relation to the total marks from the three papers, reading comprehension accounts for 105 marks, which represents 52.5%, writing accounts for 40 marks, which represents 20%, grammar accounts for 25

marks which represents 12.5% and finally, receptive and expressive skills together with oral skills accounts for 30 marks which represents 15%". It is clear that reading comprehension carries the highest percentage, but this does not lower the value of the other sections tested. Given that reading and comprehension are also needed in other subject areas where the deaf too are examined, then this may have an influence on deaf students' academic performance in English. For the first three highest skills in English, that is, Reading Comprehension, writing and receptive and expressive skills being important skills in English, they are also service skills in other subjects written in English. There is no doubt therefore, English as a subject has an influence on the overall academic performance of deaf students.

A check on the performance in the specific areas also showed that the learners with hearing impairment face challenges across the sections that are examined in the English paper. This is evident in Table 1.2 and 1.3 which show English results of Form 4 and Form 3 sub county joint examinations that were conducted in the year 2022.

**Table 1.2:** Performance of Form 4 learners with hearing impairment in various sections of the English Paper in various Sub County Joint Evaluation Tests, in the year 2022

Skill Area/ School	Reading comprehension			Grammar		Writing		Expressive, Receptive and Oral Skills
	Comprehension	Literary Appreciation	Essays from Set Texts (2)	Grammar	Cloze Test	Functional Writing	Imaginative Writing	
<b>Section</b>	Comprehension	Literary Appreciation	Essays from Set Texts (2)	Grammar	Cloze Test	Functional Writing	Imaginative Writing	
<b>Maximum Score</b>	25	40	40	15	10	20	20	30
<b>A</b>	6.17	3.5	2.3	7.17	5.0	6.83	3.5	5.0
<b>B</b>	2.5	1.83	1.73	2.67	1.83	2.83	2.67	1.83
<b>C</b>	3.83	3.17	3.17	2.33	2.5	2.8	3.1	2.5
<b>D</b>	3.33	0.5	2.33	2.67	0.33	5.33	3.33	3.67
<b>E</b>	5.8	3.25	1.7	1.2	2.2	4.2	2.8	8.4
<b>F</b>	4.0	1.145	1.36	0.00	1.43	4.0	2.0	3.72
<b>Average</b>	4.405	2.233	2.098	2.67	2.215	4.332	2.9	4.187

**Source:** County Directors of Education (Siaya, Busia, Migori, Bomet, Vihiga, Nandi)- 2022

**Table 1.3:** Performance of Form 3 learners with hearing impairment in various sections of the English Paper in Sub County Joint Evaluation Tests, in the year 2022

Skill Area/ School	Reading comprehension			Grammar		Writing		Expressive, Receptive and Oral Skills
	Comprehension	Literary Appreciation	Essays from Set Texts (2)	Grammar	Cloze Test	Functional Writing	Imaginative Writing	
<b>Section</b>	Comprehension	Literary Appreciation	Essays from Set Texts (2)	Grammar	Cloze Test	Functional Writing	Imaginative Writing	
<b>Maximum Score</b>	25	40	40	15	10	20	20	30
<b>A</b>	3.5	2.0	1.92	5.3	1.2	3.33	3.3	2.0
<b>B</b>	6.17	3.5	5.0	7.1	2.1	6.83	3.5	5.1
<b>C</b>	6.1	2.67	5.2	8.4	2.6	4.2	2.8	8.4
<b>D</b>	4.0	1.15	1.36	0.00	1.43	4.0	2.0	3.72
<b>E</b>	6.3	3.3	3.1	8.1	2.2	4.5	4.4	6.8
<b>Average</b>	5.214	2.523	3.316	5.78	1.906	4.572	3.2	5.204

**Source:** County Directors of Education (Siaya, Busia, Migori, Bomet, Vihiga, Nandi)- 2022



From tables 1.2 and 1.3, it can be clearly seen that learners with HI perform below average in all English skill areas. In reading comprehension which accounts for 52.2% of all marks in English paper, form 4 students with HI have an average of 2.912 out of the possible 105 while form 3 have an average of 3.684. In writing skill too, the learners with HI have below average performance with form 4 having 3.616 while Form 3 having 3.886. The low performance across the skill areas in the sub county joint examinations may not be so much

different from what may be witnessed in the National Examinations as shown in Table 1.1.

While learners with HI seem to be grappling with below average performance in English, learners with visual impairment seem to be performing averagely in the same subject. This raises further questions on the cause of the low performance among the learners with HI. Table 1.4 shows the performance of three schools for learners with visual impairment for the KCSE examinations administered in 2021, 2020 and 2019.

**Table 1.4:** English Results of 3 schools of learners with Visual Impairment for the KCSE examinations administered in 2021, 2020 and 2019

School/Year	2019	2020	2021
A	3.00	5.12	6.15
B	3.00	3.750	4.278
C	5.05	6.38	6.738
<b>AVERAGE</b>	<b>3.68</b>	<b>5.083</b>	<b>5.722</b>

**Source:** County Directors of Education (Siaya, Bungoma and Kisumu)- 2022

From Table 1.1 and 1.4, it can be seen that in the year 2021, the schools for the HI in the lake region had an average mean score of 2.7 in English while the schools for learners with Visual Impairment had average of 5.722. In the year 2020, learners with HI had average of 2.8 while learners with Visual Impairment had an average of 5.083 and in 2019, the learners with HI had 2.3 while the ones with visual Impairment had 3.68. This leaves many questions on what could be the cause of the major difference in performance between the two categories of learners with disabilities. It is noted that the while learners with visual impairment are taught using speech, leaners with HI are taught in sign language. However, given that they are both examined in English, it was in the interest of the researcher to find out whether the sign systems used have any impact on the performance of learners with HI in English. There are no known studies which have been undertaken on the sign systems used in the teaching and learning of English and the specific sections being tested among deaf students in Kenya.

### Statement of the Problem

Students with hearing impairment are confronted with various challenges in handling their academic work as a result of their state of having hearing loss. This usually hinders their academic performance hence leading to their underperformance. Reading comprehension, writing, receptive and expressive skills and grammar all account to a high percentage of marks in English. Given that the students with HI have a

below average results in these areas yet they account for a high percentage of marks in general, then this may affect their overall performance given that English as a subject, presents service skills that facilitates understanding of all subjects written in English. There are no known studies that have been undertaken regarding perspectives of learners with HI towards sign language systems used in special secondary schools for the deaf. If any, it is not known how it influences their performance in English. This study was therefore necessary to investigate how the perspective of learners with HI towards sign language systems used in special secondary schools for the deaf affects their performance.

### Objectives of the Study

The objective of the study was to Establish the perspectives of deaf students towards Sign Systems as used in the classroom and their implications on academic performance in English

### LITERATURE REVIEW

In a study conducted by Kannapell (2011), which examined Deaf college students' attitudes towards ASL and English using self-reports on their linguistic/communication skills when being interviewed. Their teachers were also examined for their language attitude with some modifications using the matched-guise techniques. The purpose was to find out if teachers were covert/overt in their usage of ASL and SEE. The issue of such attitudes was raised because of the two assumptions that Deaf people are monolingual in

English and is expected to be adaptive of mainstream American culture and society. The enculturation process was to happen in the education where Deaf children are placed so that they can be “trained” to be appropriate citizens in society. The teacher who acted as an agent of change in the education system is often the one that the students will meet on a daily basis. The attitude expected is often implemented in the classroom therefore students are expected to be good and loyal American citizens. Such attitudes have such influence on the students’ choice of the preferred language and identity.

Chong V.Y, (2014) analyzed the view of the deaf towards Malaysian Sign Language, and attitude towards Malaysia’s Deaf community. This study utilized a mixed method study design by describing the participants’ past cultural experience and their contemporary language perspective, especially the ones who attended Malaysian schools in the latter half of the 20<sup>th</sup> century. This study used purposive sampling technique. Thirty respondents were selected to participate in the study. Participants were recruited in the Deaf community through personal connections. Diversity, gender and ethnicity were taken into consideration to ensure equality and fairness. The findings indicated that students with HI in Malaysia prefer Malay and English than Malaysian Sign language. The students with HI

rarely showed affinity for BIM. Often, they saw Malaysian Sign language as a system to communicate in Malay through signs and fingerspelling and a tool to help them learn Malay. Results also indicated that for English, American Sign Language (ASL) or Sign Exactly English (SEE) would be used. While Chong (2014) focused on deaf Malaysians, the current study got its participants from learning institutions, that is, students with HI, Teachers of English, Curriculum Support Officers for Special Needs as well as principals of secondary schools for learners with HI. The difference in the participants would lead to more data hence difference in results and generation of new body of knowledge. The current study also employed pure qualitative approach unlike Chong, (2014) who used mixed methods approach. This enabled the current study to have an individual personal interaction with all the participants hence detailed data could have been collected. Malaysia is an upper middle income economy while Kenya is a lower middle income economy. Malaysia may have different policies and investment in education which could lead to different perception by different stakeholders hence different results.

Chong, (2014) analyzed the view of the deaf towards Malaysian Sign Language, and attitude towards Malaysia’s Deaf community. Their views are presented as in Table 2.2

**Table 2.2:** Possible Indications in Attitudes Shown by Respondents Toward Malaysian Sign Language and Deaf People

Emerging themes	Frequency
Attitude towards Malaysian Sign Language	
▪ Believe Malaysian Sign Language will be the right choice for Education	12
▪ In favor of using Malaysian Sign Language for Communication	16
▪ In favor of using Signed Malay	1
▪ Attitude towards Deaf people	0
▪ Like meeting Deaf people	8

Source: Chong (2014)

Chong, (2014) indicated that there were no any signs of resistance shown by Deaf Malaysians toward Malaysian Sign Language or Malaysia’s Deaf community. It is further illustrated that 12, 89% of respondents showed their desire to preserve Malaysian Sign Language despite the respondents’ uncertainty about the status of Malaysian Sign Language in Malaysia. Generally, the respondents appeared to hold some good attitude towards Malaysian Sign Language that they consider it to be of good use in all forms of education. Sixteen respondents agreed that instead

of Total Communication, Malaysian Sign Language is more effective in social interactions indicating a high 70% positive response.

Biricik and Ozkan, (2012) wrote a descriptive paper on “identifying learners’ attitude in terms of motivation through three aspects: the teacher’s attitude towards the students, the suitability of the activities and the classroom atmosphere”. In their study, the researchers observed the demotivation and motivation the language learner has displayed in class and recorded their observation on

appropriate strategies used to keep the children motivated. The study which was done in Turkey, took place in two classrooms with about 22 students each. The study focused on English being taught as a second language to Turkish students. The data were collected from their observation notes, video recordings, interviews and questionnaires. The findings showed that the teaching techniques for developing motivation are significantly important for language acquisition, which includes creative use of the learner's native language in order to make them understand what is being taught. The current study used qualitative approach which could have provided an a more in-depth analysis of the sign systems used in classroom teaching during English lessons. The current also engaged teachers, curriculum support officers as well as principals of special schools for learners with HI. This could have led to collection of additional and more detailed data hence could different results. Turkey is an upper middle economy country unlike Kenya which is a lower middle economy country. The two states may have different level of investment in education sector and policies regarding education systems hence may lead to different results.

A study undertaken by Borjian and Padilla, (2010) that involved the eighteen teachers of English in Guanajuato, Mexico". "The questionnaire was used to collect the responses regarding their attitude towards the educational system in the US, i.e., how effective American teachers were in supporting immigrant students, providing advice for American teachers, and the motivation of Mexican students in learning English. Interviews were conducted in order to extract more detailed information. The responses to the questionnaire and the interview were not only based on their professional opinions but also on their experiences as English students. More than half the teachers have experienced, some time or another, how it was as students of English in a school in the United States. Findings disclosed that there is a need for teachers in the US to help more their students becoming proficient in English in order to succeed in academics. While Borjian and Padilla, (2010) engaged only the teachers, the current study involved students with HI, the curriculum support Officers for SNE, principals as well as teachers of English. More participants involved could have provided more data hence a variation in the results. The current study also involved documents analysis, focus group discussions and lesson observations which led to an individual interaction

with the participants hence more robust data was collected. The current study The results from the current study would fill the gap in a country-Kenya which do not necessarily experience migrants. The current study would also breach gap in the special schools for the deaf".

In Viet Nam, Thu, (2019) conducted a study on using metaphor in EFL classroom to enhance writing skills. The study involved 30 English major students at Hanoi Law University who were put in a control and experimental groups to observe the effectiveness of using metaphor in writing. The study used two questions that were put in a Likert – scale to measure the attitude of the students towards using metaphor in writing. The results revealed that "learners who had done metaphors through songs scored higher than those who had not received any instruction on metaphors. Thu, (2019) focused on university students only while the current study engaged students with HI in special secondary schools. The current study also involved a sample from CSOs for SNE, Principals, Teachers of English and form three students. The current study utilized focus group discussions, in-depth interview schedules, document analysis guide and observation checklist for collection of primary data. These instruments could have led to collection of more robust data, hence different results. Viet Nam is an upper middle income economy while Kenya is a lower middle income economy. These could lead different levels of investment in the education sector and policies regarding educational practices. The stakeholders' interpretation could be varied hence varied results.

Andrews and Rusher, (2010) studied the barriers that have impeded bilingualism from being placed in effect for Deaf children. The study established that bilingual education is not an option for Deaf children, but a necessity. In reality, Deaf children could not live with just signing skill. They will need to acquire at least two languages at school, which is sign language and spoken language, which allows them to survive in the Deaf community and mainstream society. According to the study, many teachers are obsessed about the myth that Deaf children will never learn English if they are allowed to use sign language in class. The second prejudice is that Deaf children will be not able to be fluent in two languages, which is not always true as there are many societies where there are children fluent in at least two languages, depending on how efficient the education is. Thirdly, the terminology used in bilingual

education for Deaf children has been obstructed because the terminologies used in linguistics and bilingualism are not clearly understood. Lastly, language assessment on Deaf bilinguals has not been appropriately evaluated, especially when language assessments should be measured based on the two languages the children acquired instead of one language alone. The study further assumed that “Deaf children, as emerging bimodal-bilingual users, are not as fluent as the Deaf adults who are in pursuit of higher education. Ninety per cent of Deaf children are born to hearing parents who have forced their children to acquire two languages at the same time at school where sign and spoken languages are available for them. In most cases, these parents know little or nothing about sign language”. Andrews and Rusher (2010) have extended the evidence with four case studies “to examine the effect of purpose-driven instructional techniques in which the teacher strategically changes from ASL to English print for purposes of teaching vocabulary, comprehension and reading”. The results suggested that “certain codeswitching strategies support English vocabulary learning and reading comprehension. They have emphasized that the teacher of the Deaf does not necessarily need to be fluent in sign language and spoken language as long as they understand how to employ code-switching techniques in the classroom”.

## METHODOLOGY

### Research Design

This study adopted multiple case study design. The characteristics of a multiple case study design suited this study to better understand the sign systems. In this study, there were four cases, which are represented by the four special secondary schools for the deaf in Nyanza. Multiple case study was the preferred design since this study focused on sign language systems used in special secondary schools for the HI. It allowed the researcher to collect detailed data from the source(s) devoid of contamination and interference. In this study, the researcher endeavored to collect detailed data from the teachers of English, Principals, Form Three Students and Curriculum Support Officers.

### Target Population

The target population consisted of 4 Principals of secondary schools for the deaf in Nyanza region, 4 Curriculum Support Officers for SNE, 7 Teachers who are teaching English in secondary schools for

the HI and the 96 form three students in secondary schools for the deaf in Nyanza region

### Sampling Techniques and Sample Size

In this study, the sample was drawn from four special secondary schools for the deaf in Nyanza region. The researcher used saturated sampling to sample all the four secondary schools for the HI. All the four special secondary schools for the HI in Nyanza region were involved in the study. Saturated sampling technique was used since the four schools are the only special secondary schools for the hearing impaired in the region. Therefore, the schools were automatically selected for the study.

Purposive sampling was used to select form three students since they have developed uniform signs in a given school, unlike those in form one and two. Most of learners with HI join secondary schools with variations in signs due to existence of variations in signs in different regions, which they amalgamate and agree on uniform signs as they continue learning in the given secondary schools. Form three students were purposely sampled since they are usually tested on all sections of the full English paper unlike form one and two. Form four students were not be involved since it is a candidates' class, the school administrations may not easily allow them to be involved in other activities.

Saturated sampling was used to sample all the 4 principals of the special secondary schools for the deaf and curriculum support officers from the sub counties where the schools are located. Principals were sampled since they place an important role in making decisions on which sign systems can be used in a give a school. Principals are usually at the Centre of exam results analysis and they are the official spokesperson for the schools. In addition, principals are the top management of the schools. Being pedagogical leaders, principals have influence on how teachers move to implement the same in the classrooms. Curriculum Support Officers were also involved due to their supervisory role in the special schools.

Teachers of English were purposively sampled as persons involved in the teaching and learning of English using various sign language systems. The information they provided was important to enable the researcher establish their opinions on the sign systems used and hence their recommendations and way forward.

The sampling techniques that were used in the study can be summarized as below:

- i) Purposive sampling: A sample of 4 Curriculum Support Officers for SNE; 4 Principals and 7 English language teachers were selected. Purposive sampling was applicable in case of a limited population with the information required.
- ii) Stratified random sampling: To avoid gender bias, the students were first grouped into two strata; boys and girls. Simple random sampling was then used in each subgroup. Every

student had an equal and independent chance of being selected as a member of the sample (Orodho, 2009). This was done by folding small pieces of paper with numbers written on them ones and twos. All number ones were selected.

In this study, the sample constituted the 4 Principals, 4 CSO SNE, 7 Teachers of English and 33 Form three students. Therefore, the sample size was 48 informants. Table 3.2 presents the summary of the sample size.

**Table 3.1:** Sample size for the study

County	School	Category	Principal	CSO SNE	English Teachers	Form Three students			Totals	
						Target	Sample			
							Boys	Girls	Total	
Siaya	A	Mixed	1	1	2	27	5	3	8	12
Migori	B	Mixed	1	1	2	29	5	4	9	13
Kisii	C	Mixed	1	1	2	24	3	5	8	12
Homabay	D	Mixed	1	1	1	16	4	4	8	11
Total	4		4	4	7	96	17	16	33	48

**Source:** Four Sub-County Directors of Education – 2022

Therefore, the sample size was made up of 100% of Principals, 100% of Curriculum Support Officers for Special Needs, 100% of the teachers of English and 34.4% of the form three students which meets the requirements as per the recommendations of Mugenda & Mugenda (2003) who posit that the effective sample ought to be at least 30% of the population.

### Research Instruments

Qualitative data collection methods vary using unstructured or semi-structured techniques. The study employed interview schedules, focus group discussion guide, Classroom Observation Checklists and the document analysis guide as the research tools for data collection. The interviews were used to get in-depth information from the principals and teachers of English about the application of sign language systems in classrooms for instructions and its implications on academic performance in English.

### Reliability of the Research Instruments

Reliability is a measure of the degree to which research instruments yield consistent results after repeated trials (Borg and Gall, 1996; Orodho, 2009 and Mugenda and Mugenda 2003). For qualitative data, the reliability of the research instruments is ascertained by ensuring trustworthiness of the instruments (Morse, 2015). Trustworthiness is ensured through credibility, transferability,

dependability and conformability of the instruments. (Lincoln and Guba, 2005).

## RESULTS AND DISCUSSIONS

This objective investigated the Perspectives of Students with Hearing Impairment regarding the application of Sign Systems used during classroom instruction and their Implications on Academic Performance in English. The themes that emerged from the objectives during the interviews, focus group discussions and classroom observations were but not limited to Sign system preferred by the students with hearing impairment during English lessons, Reading Habits of the deaf and their comprehension in English, Challenges that learners with HI face in class during English regarding sign systems and excitement of learners with HI to attend English Lessons.

Sign system preferred by the students with hearing impairment during English lessons.

The study intended to establish the perspectives of students with HI towards sign systems that are used during classroom instruction. The principals were asked to comment on the sign system that the students prefers. One of the principals said,

*...hmm.. according to my observation, they are KSL oriented, because you cannot find them using SEE (P.2)*

In FGD with form three students, when asked which is the best sign systems that they prefer, the following were their responses;

*KSL is the best, why? KSL possible to understand KSL best. Help understand well. Communication well, sign easy (FGD 1, FGD 2)*

*SEE best, because possible understand best. Time deaf use KSL always in English impossible to pass exams. They use broken English always. Now we have exams set in SEE before and new. Some examiners do not know KSL, so if one comes to marking and the deaf have written KSL, they end up failing the exam, therefore SEE is the best. All people know English but some people know KSL nothing, so English language (SEE) is the best . SEE, because it makes us write composition very well, that is from SEE. (FGD 1, FGD 2)*

*English is a little bit harder but we understand sign language better. So during English class, we just try to follow but it is harder even when we are writing, but we prefer sign language, because signing is simple. (FGD 3)*

*KSL is the best, why because it is easy for us to obtain the information. KSL words are easy (FGD 1)*

*SEE is best because it helps deaf improve English. All other subjects in school are taught using SEE SEE is best. Possible to read and understand then pass exams. Possible help us improve in oral skills same in grammar, same all different subjects but is different from English Best is SEE because it helps me to understand faster, it is the only language which is important in all the world and possible help in future. (FGD 4, FGD 6, FGD 2)*

Teachers of English were also asked which sign systems students prefer in class during English lessons. They reported;

*Hmmm.. they have not mentioned to me what which signs they prefer but when you use KSL, you see they are happy, motivated and they participate. But when you come to SEE, they are bored, they are not there with you. They will only wait you to ask if they have understood, because that is what they understand easily in SEE. They node that they have understood, but then give them a question, you will be shocked. (ToE 1)*

*In English, they prefer SEE though, there are those instances when they will tell you to put in KSL because KSL is just direct (ToE 2)*

*Definitely, they choose KSL (ToE 5)*

*In terms of how a teacher uses it in class, they would prefer a teacher to use KSL, because that what they will get quicker, faster and more clearly. When you explain using KSL, they understand faster as compared to when you use SEE However, when it comes to results, there is nothing correct they will write. (ToE 3)*

Form three students were also asked which sign system they think should be used to help them pass English examinations, they noted;

*SEE, because time you want to write notes, then you follow the notes using English (SEE), so when the notes are being copied using English, the time you will be writing English, then same you follow and understand and do same in exam (FGD 2)*

*English (SEE) possible help pass examinations. When the teacher uses English, the student understand and follows the rules of English and possible to pass examinations. (FGD 4)*

From the above interview excerpts, it can be concluded that majority of students with HI prefer KSL as the system of instruction during lessons. It was noted that they prefer KSL to SEE since they comprehend KSL faster compared to SEE. The understanding of KSL during content presentation, however, does not help them in English during writing of answers since all answers must be written in SEE.

During lesson observation, it was observed that the teachers had to switch to KSL at some point to explain certain concepts that appeared not clear when the teacher had explained in SEE alone.

It can also be concluded that students with HI are aware that KSL has a great negative impact on the way they will write their English sentences. Therefore, with this understanding, some student with HI prefer SEE to be used during instruction as they believe this would help them improve their writing during English lessons. During lesson observation, it was observed that teachers of English mixed the sign systems during English lessons.

Which signs system are used during the English Lesson? For example, SEE, KSL, SE	SEE   KSL
Do learners respond effectively when the teachers gives instructions in a given sign system?	Responded well but more on KSL and fingerspell
Does the teacher maintain one sign system throughout the lesson time? Is there coherence on what the teacher signs and what they speak?	No. - SEE / KSL
What is the extent of KSL/SEE use during the English lesson? / It is used throughout the lesson, to introduce the lesson, to conclude the lesson	KSL - used to supplement SEE

**Figure 4.19:** A Lesson Observation checklist on Sign Systems used by ToE

From figure of lesson observation, it can be concluded that a number of teachers used a mixture of both KSL, SE and SEE during the English lesson. This was to facilitate understanding of some concepts that the students had not gotten clear when the teacher use SEE alone.

These findings disagree with findings by Chong, (2014) who indicated that students with HI in Malaysia prefer Malay and English than Malaysian Sign language. The students with HI rarely showed affinity for Malaysian Sign language. Often, they saw Malaysian Sign language as a system to communicate in Malay through signs and fingerspelling and a tool to help them learn Malay. When it came to English they preferred SEE or ASL. This contrasts the results from current study which show that students with HI prefer KSL to SEE, SE or any other language.

These findings further agree with findings by Biricik and Ozkan, (2012) who established that the teaching techniques for developing motivation are significantly important for language acquisition, which includes creative use of the learner’s native language in order to make them understand what is being taught.

**Reading Habits of the deaf and their comprehension in English**

Reading is an important skill in English. From the interviews with teachers regarding sign system, it was noted that reading contributes to how learners with HI comprehend the sign systems that are used during instruction as well as how they perform in English. Teachers of English were asked to comment on the reading habits of learners with hearing impairment, they noted,

*Their reading habits and culture is very poor, they don't like reading, and that is why in paper 3 where we have set books and even paper 2, it takes relatively longer period of time to get done with a book, and you know, we cannot just go to class and start reading all other time, you have to prompt them to start reading so they come with literature pace. So you find that you get to class, you had given them like 10 pages, they have only read 2. So it means that you will not move to the 11<sup>th</sup> page until you get them at par. (ToE 3)*

*They are very slow in reading, and actually you will give them a comprehension in class, like doing comprehension and only answer one question. When you give them time, they are already copying the question before reading. They like writing than reading. Wataandika kwanza then they get back to reading (they will write first, is when they start reading) so you are left wondering, what are you writing, then the student tells you, I am only writing question then I will read. So reading is tasking for them. (ToE 2)*

*It is a challenge when it comes to reading, especially areas like literature. The learners concentration span is short and the amount of work they are supposed to be reading is a lot. We have massive books, a book running for 280 pages and they do a minimum of 3, so it takes time. You try to do group work and a few are responsive because they are struggling. You know their concentration span is so short. By the time you move from chapter one to eighteen, they have forgotten everything here in the middle and from where you started. (ToE 5)*

*What I have observed is that they read by signing, only a few read without signing. They sign SEE*

and where they don't know, the sign, they fingerspell. (ToE 1)

*Now, I just want to be honest, their reading habit is very poor and they don't read at all. When reading, they tend to encounter obstacles on every word, they don't know what it means or don't know the sign or sign does not exist. So they keep on pausing, checking meaning in the dictionary and this becomes boring and they switch off.* (ToE 6)

Form three students were also asked about how they view English in regard to reading. They responded;

*I feel annoyed because teacher will come and explain and explain, but will not get anything. It is very difficult. I understand half. There is a lot of reading involved, reading is a lot and reading makes me tired.* (FGD 5)

The principals were also asked to comment on the reading habits of the students, they noted;

*...hmmm.. reading is of course terrible for them, but I know because it is a tall order for them to understand even simple English, for them to read is very difficult, they don't read much, because they simply don't understand most of the things they are reading, but if it is structured in that they are guided, they would understand this structure so well and be able to differentiate.* (P. 1)

*The magic trick here is that they need to differentiate between KSL and English as two different languages so that when they are approaching them, they are approaching them as 2 different languages. You don't read KSL actually, KSL you practice it, but now English you read, but they need to be encouraged to read it so that the structure sticks in their minds, so that they know normally after this, this follows and this, so that even if it is wrong, but there is that order seen.* (P. 2)

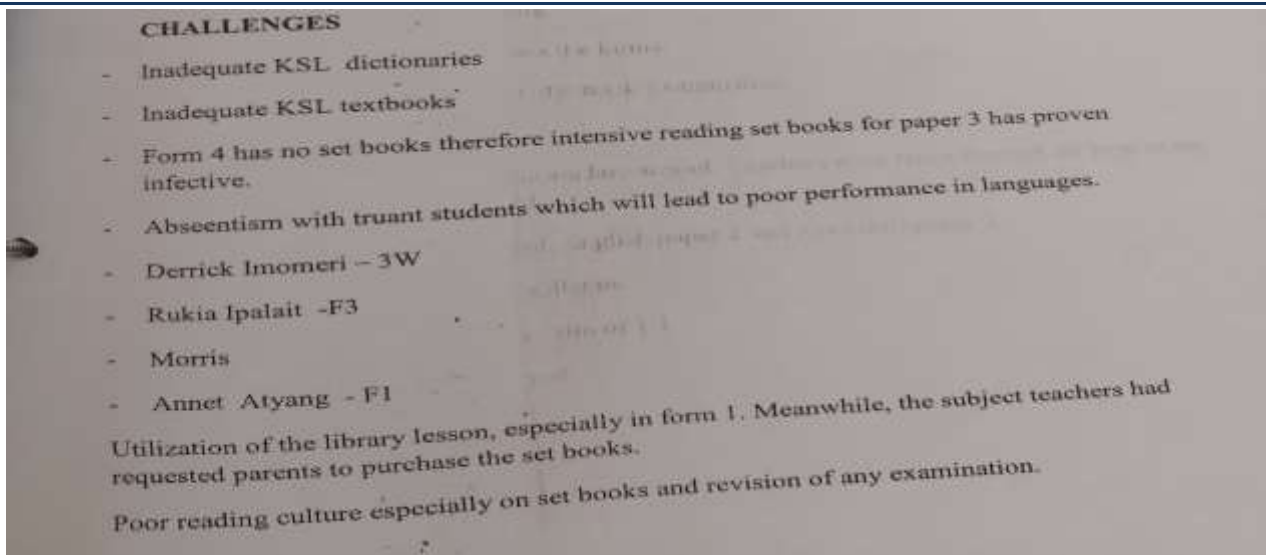
From the excerpts above, it can be concluded that reading is a serious challenge to students with HI. They have very poor reading habits because for them, they find SEE to be too long, too

cumbersome, too wordy and because the language that they use is KSL which is short. While they tend to have a short concentration span, English in secondary schools demands more time and focus for the student to be able to follow and understand. There are several areas that need focused reading including literature where students are expected to read set books and other genres including poetry and comprehension. The students with HI lose focus in the process of reading. For the case of set books where they are expected to read a minimum of three of them, and have a clear understanding of each of them since questions are asked from all the books, then they are confronted with a more serious challenge.

It can also be concluded that learners with HI read by signing. They cannot read without signing. This makes them use a lot of energy since signing needs energy. They then get tired easily and give up on the way. On the same, with the several set books, there are so many words and concepts that do not have signs. This means that students will either fingerspell or move around to ask for the meaning of the word(s). When a student does not know the sign of the word, or the sign does not exist, then there are high chances that the student does not know the meaning of that word. If there are many of such words, it will automatically affect the morale of the student to read. Reading won't be interesting any more to them and they may easily decide to stop and switch to something else as whatever they are reading is not making sense to them.

The difficulties in reading by learners with HI also emanates from the fact that KSL does not require them to read, instead they only practice through signing. Given that these students have been subjected to KSL all the way from primary schools, they have grown up without building the culture of reading, unlike in regular schools where students are subjected to reading as early as in primary schools. Through document analysis, it was noted that the teachers have raised the issues of reading as a challenge to student with HI.





**Figure 4.20:** A Section of Minutes of Languages Department Meeting

From figure 4.20, it can be noted that during the staff meeting, teachers raise the concern on the poor reading culture among the students. A more concern was placed on reading of set books since the set books needed extensive reading.

These findings agree with findings by Walter (2003) who established that hearing impairment impedes the understanding of students hence affecting their undertaking in assignments and examinations in English as a subject which leads to limited speech and reading skills.

Excitement of learners with HI to attend English Lessons

Anticipation of students for English lessons was an important predictor of how they would perceive the whole lessons, including the sign system that would be used during the lesson. This would then tell their perspective of the sign system that are used in the given school. Form three students were asked if they are usually eager towards English lessons, they noted;

*Yes, we enjoy the English lessons, we enjoy because they help us understand English. We focus and the stories are interesting. It helps us to improve on functional skills. (FGD 1)*

*I feel free and happy, why the simple language use to teach (because of the simple language that is used to teach). I understand everything in English so I feel good so it develops my skills in writing (FGD 2)*

*I feel annoyed because teacher will come and explain and explain, but will not get anything. It is very difficult. I understand half. There is a lot of*

*reading involved, reading is a lot and reading makes me tired. (FGD 5)*

*English is better because you learn about many things, different things, so I enjoy English lesson, when other things come, there is a lot of explanations but for English lessons, there is a lot of jokes made when the teachers signs in KSL, so it is lively and I enjoy it (FGD 3)*

*I really feel bad and get bored because if you write your own English and give it to another person who is well educated, then your English is poor, so you start having negative attitude towards English, so I don't really enjoy English. Again, because of their comments to my English. There are a lot of explanations so when you understand the explanations you enjoy, but if you don't understand, then it is boring (FGD 3)*

*During English lesson, some of the deaf students with HI do not enjoy the lessons because SEE is difficult. Some of them who understand SEE will feel excited about the lessons. But if the student is not able to understand SEE. Then the lesson will be boring. (FGD 2)*

*Many students feel comfortable why because early morning best for teaching lesson English. It depends on the time when this lesson is being taught, e.g. early morning best since they are just starting the day but afternoon is not interesting because they are tired. (FGD 2)*

*I feel happy because there is sweet stories there and story books. Story nice. For example, the monkey and the crocodile, the lion and the hare, It has sweet stories, I read then I laugh ( there are good and nice stories in English). However,*

*grammar I don't enjoy because it has hard and difficult words, sometimes words are difficult during exams for example "endure" (FGD 5)*

From these excerpts, it can be concluded that the students with HI who anticipate for English lessons because of a number of factors. Students with HI who enjoy English lessons when a simple language is used during stories. The teachers of English who also make lessons lively by making jokes during the lessons also makes the students look forward to having the lessons. The roles that the teachers have of simplifying the content so that learners can understand also determines anticipation of learners to have the lessons. Oral literature and narratives also excites students with HI to attend English lessons. The time when English lesson is scheduled also makes the students to look forward to having English lessons. When English lessons are schedule in the morning hours, they tend to enjoy as compared when scheduled in the afternoon regardless of the sign system used.

However, some students do not look forward to English lessons. In fact, they get annoyed during the lessons. This is associated with detailed explanations during the lessons yet they are not understanding anything. The aspect of reading also puts off some of the students and makes them not anticipate for the English lessons. Majority of the students with HI do not like reading and any situations that makes them to read, they would not like it. The sign system SEE that is used during English lesson also makes the students with HI who are not good at SEE not to like English lessons. When students with HI compare themselves with the hearing, they have low self-esteem since they feel their English is not proper. While the hearing and students are regarded as having good English, the HI feel their English is not proper and therefore, they have a negative perception towards English language and English lessons as well.

Challenges that learners with HI face in class during English regarding sign systems  
Regarding the challenges that the leaners with HI face in class in terms of sign systems, teachers of English were asked to comment. One of them commented;

*Sometimes, they have challenge of communication. Then also, they have challenge where some don't know signs. They don't do research to get to know signs. They may want to express something and*

*you don't get it clearly until you tell them just express yourself using KSL, then you will get what they meant. (ToE 2)*

On the other hand, one of the principals noted;  
*There is a mess in ECDE and primary, sorry to say so. These learners are being messed up. When they come to secondary, now they are totally out of order. You try to explain to them something, they are limited. You know KSL lacks the vocabulary and terminologies and that is what they are taught right from ECDE and even the structure is very simple. So the learners is mature but their language is very simple, it is rudimentary. So they can't express themselves, for the age which they are in secondary, then there is a problem. (P. 1)*

From these excerpts, it can be concluded that some learners with HI cannot express themselves in SEE. In cases where the teacher is firm and insists on SEE when they are signing, such learners will struggle to communicate what they have. However, when given opportunity to express themselves in KSL, then they communicate well. Another challenge that the learners with HI encounter is the way they are introduced to content during classroom instruction all the way from early grades. Teachers tend to limit the vocabulary of the learners hence they end up growing up knowing very limited content as far as academics is concerned.

These findings agrees with Ndurumo, (1993) who argued that one of the major difficulties experienced by hearing impaired children is language development. Ndurumo added that hearing impaired children performed at a level far below that of hearing children in understanding printed English words. It can also be concluded that KSL impact on the learners use of vocabulary negatively. The findings of the study agree with Nyang'au, (2014) who reported that inadequate content mastery, incorrect use of grammar, first language interference, limited vocabulary and inadequate teaching and learning resources were the major challenges students face in learning essay writing skills. The findings further agree with a study by Solano, *et al.*, (2014) who argued that English grammar and vocabulary were the linguistic areas that suffered the highest level of first language interference. From the document analysis guide, figure 12 indicates learners writing.

The findings also agrees with Da Costa and Arias, (2021) who reported that common spelling errors among students included substitution, omission,

insertion and transposition. These errors were attributed to transfer from native language that is L1 and inability to separate rules that governed L1 and L2. Limited recognition of words was also attributed to poor spellings where by the learners are not able to recognize a variety of words, hence inability to spell them correctly. The findings also agree with Fender, (2008) who reported that spelling difficulty involved multi-syllabic words that included spelling patterns across syllables such as customer, bottle, success and derivational spellings like decision, knowledge, responsible

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### Summary of Findings

Children with HI are poor in reading. They take long to read and they have very short concentration span. This makes them not to love reading. They therefore take long to read and generally teachers tend to take long to clear set books and comprehension passages with them. Students with HI look forward to having English lesson based on when the lesson is scheduled. They prefer KSL as the system of instruction during lessons since they comprehend KSL faster compared to SEE. The understanding of KSL during content presentation, however, does not help them in English during writing of answers since all answers must be written in SEE. Therefore, with this understanding, some student with HI prefer SEE to be used during English lessons.

Learners with HI read by signing. They cannot read without signing. This makes them use a lot of energy since signing needs energy. They then gets tired easily and give up on the way. On the same, with the several set books, there are so many words and concepts that do not have signs.

The difficulties in reading by learners with HI also emanates from the fact that KSL does not require them to read, instead they only practice through signing. Given that these students have been subjected to KSL all the way from primary schools, they have grown up without building the culture of reading, unlike in regular schools where students are subjected to reading as early as in primary schools.

Students with HI who anticipate for English lessons because of a number of factors. The roles that the teachers have of simplifying the content so that learners can understand also determines anticipation of learners to have the lessons. Oral

literature and narratives also excites students with HI to attend English lessons. The time when English lesson is scheduled also makes the students to look forward to having English lessons. When English lessons are schedule in the morning hours, they tend to enjoy as compared when scheduled in the afternoon regardless of the sign system used.

### CONCLUSION OF THE FINDINGS:

Students with HI prefer KSL as the system of instruction during lessons since they comprehend KSL faster compared to SEE. They are poor in reading. They take long to read and they have very short concentration span. This makes them not to love reading. Learners with HI read by signing. Students with HI anticipate for English lessons because of Oral literature and narratives excites them.

### RECOMMENDATION

- English lessons should always be scheduled in the morning hours
- Teachers of English to introduce strategies that encourage and promote reading culture among learners with HI. Reading should be introduced to students at an early age. Pace setters books should be availed to students with HI in primary schools so that they are introduced to reading at an early age.
- Sign Language to be introduced in all schools including regular schools so as to enhance communication between the HI and the hearing community

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