

# Children with Hearing Impairment and Their Difficulties in Learning in School and Community Environments: The Case of Buea-South West Region Cameroon

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## ABSTRACT

This study assessed some challenges faced by children with hearing impairment in acquiring the knowledge needed to make progress in school and community environments. It had as objectives; to investigate the influence of family knowledge of sign language on academic assistance before and after enrolment in school, the history of hearing impairment in the family and its influence on the acquisition of the sign language skill by learners with hearing impairment before enrolment in school, check the perception of the learners about the pedagogic approaches used to teach and the challenges faced in class. The study was both a survey and qualitative and made use of questionnaires and single group quasi-experimental designs respectively.

A sample of 17 students from *Buea School for the Deaf* constituted the population of the study. A 7 cluster-34 items questionnaire was used to collect some data while some data was collected experimentally. Data was analyzed with the use of descriptive statistics (percentages and means) and inferential statistics (Chi-Square test). The results from analysis indicated that, there was a significant difference in performance between the students with background knowledge in sign language at home and who also received academic assistance at home and those who did not have some background knowledge of sign language before enrolment in school. The students approved the learning approaches used by their teachers and were comfortable in class hence faced minimal challenges in class. There was also a significant improvement between those in the experimental group who received the treatment and those in the control group who did not. This was indicative that with proper training and education, these learners with hearing impairment could achieve significantly in their academics.

**KEYWORDS:** *Hearing Impairment, Knowledge, School Environment, Community*

## Background

Hearing impairment (IH) is a broad term that refers to hearing inabilities of varying degrees from hard-of-hearing to total deafness. The major challenge facing students with hearing impairments is communication. Hearing-impaired students vary widely in their communication skills. Among the conditions that affect the development of communication skills of persons with hearing impairment are personality, intelligence, nature and degree of impairment, degree and type of residual hearing, family, environment, and age of onset. Persons with pre-lingual hearing loss (present at birth or occurring before the acquisition of language and the development of speech patterns) are more functionally disabled than those who lose some degree of hearing after the development of language and speech (Mangine 2014). According to Child and Youth Health (2013), having a HI means that a child has lost some hearing in one or both ears and it is described according to how much hearing has been lost. Loss is usually explained as mild, moderate, severe or profound.

Hearing is a priceless asset to a person, particularly young children. It is the most important sense organ for the

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acquisition of language. When hearing is affected, it poses a serious problem to children. Grammatical skills will be hindered if children are unable to pick up information incidentally which is the case with hearing impaired learners (HIL). According to Doyle and Dye (2002), children with hearing impairment (CHI) miss out important information on a daily basis since it is tough for them to casually overhear what people say. According to Mangine (2014), since much learning is acquired aurally, many students with hearing problems have both experiential and language deficiencies, due to the fact that they do not hear environmental noises and day-to-day conversations, hearing-impaired children miss a great deal of crucial information usually learned incidentally by hearing children. Although students can overcome some of these problems to varying degrees through great investments of time, energy, and effort by parents and educators, such deficiencies continue to be fairly common within the hearing-impaired population.

Some major challenges which teachers and pupils face are lack of knowledge of Sign language, limited vocabulary of

Sign language and limited learning and teaching materials in Sign language (Mulonda 2013). Many children in Cameroon in particular and African societies at large with disabilities are left with little or no proper educational care. This group of children/learners are marginalized within families, education systems, and the society as a whole especially as ideas for inclusion do not yet have complete meaning in our community (Nsamenang, 2008). In the Cameroonian context, those actively involved in the education of children with hearing impairment are those from the mission/church schools and lay private institutions such as the Cameroon Baptist mission, the Presbyterian Church in Cameroon and the Catholic Mission. For example, the School for the Hearing Impaired in Akum is owned by the Catholic Church, "Buea School for the Deaf" in Buea and "Ephphatha Institute for the Deaf (EID)" located in Kumba are privately owned.

Sign Language (SL) is the first and natural language for persons with hearing impairment (PHI). In 1817, education of the hearing impaired was synonymous to sign language. The use of sign language has been ignored by teachers and staff. Sociolinguists insist that the natural language for interaction among PHI be given once again a central role in education (Strokoe, 2001). The increasing discontentment regarding the low performance of the average child with hearing impairment in school has turned attention to sign language and other forms of manual communication. Education for persons with hearing impairment is very necessary because they use their sight instead of hearing as the sense which conveys language symbols to them.

One of the major challenges faced by LHI apart from the disregard for sign language from staff and teachers is the development of their first language (sign language) and second language (English language). According to Cummins (2000), in his interdependence model, the linguistic skills already developed in the first language may influence the potential development of skills in the second language. That is to say, if first language skills are insufficiently developed, the development of second language skills is hampered. Thus, "low first language skills can exert a limiting effect on the development of the second language" (Martin, 2009). The insufficient development of first language skills may account for lowered levels of school performance Cummins (2000). Without extra help, CHI have problems learning the sign language; these children can then be at risk for other delays. Families who have children with hearing loss need to change their communication habits or learn special skills (such as sign language) to help their children learn the language. These skills can be used together with hearing aids, cochlear implants, and other devices that help children hear, the Centres for Disease Control and Prevention (CDC, 2014). The research of Martin (2009), reveals that one of the decisive factors potentially determining the upshot of the language learning process, be it first, second, or even third language learning, is the primary language environment. In the majority of cases, a hearing impaired child is born to hearing parents. Unless the parents are competent signers, the language input provided to the child is in the auditory-oral modality and thus largely inaccessible.

According to Matkin (1999), a delay in the development of all domains of oral language (syntax, semantics, pragmatics) at preschool level causes comprehension, expressive communication and learning problems. For school-aged

children, learning problems related to hearing loss typically manifest as poor performance in language-based subjects, class tests, class participation, and verbal interaction with peers and teachers. When summed, the impact of these difficulties lead to reduced academic achievement and often to school failure, especially in the lower grades. As stated by Berk (2011), the impact of profound hearing loss on language and cognitive development can best be understood by considering how it affects parents and other significant people in the child's life. Children with hearing impairments need access to language models, (adults who are hearing impaired and peers) to experience natural language learning. Their hearing parents need to benefit from social support along with training on how to interact sensitively with a non-hearing partner. Screening techniques can help identify hearing impaired babies at birth. The National Deaf Children's Society, (2013) state that, all children with hearing impairment have the potential to attain and achieve as much as any other child with the same cognitive ability, if they are given the right levels of support and access to the curriculum. However, because most teaching and learning take place through sight and hearing, children with hearing impairment may face particular challenges which need to be addressed. Hearing loss also has a major impact on the learning of spoken language and can delay language development. This can then impact more broadly on a hearing impaired child's life as language is essential for successful cognitive, emotional and social development.

The primary and obvious effect that hearing loss has on a child is its impact on spoken communication: The greater the impairment, the greater the difficulties with delayed language, syntax, speech intelligibility and voice quality. Another consequence of a hearing loss is its negative impact on vocabulary development, reading, and writing. Inadequate knowledge of vocabulary can result in CHI understanding only one meaning of multi-meaning words or can prevent them from deciphering subtle inferences or deductions. When language skills are deficient and vocabulary is limited, reading skills also are likely to be poor. Often these students are not even aware that they have limited comprehension. Moreover, hearing loss can have a major effect on a hearing impaired child's behaviour and self-esteem. A reduced ability to communicate may interfere with development of age appropriate social skills (they may appear "out of it," be socially immature, and miss important social cues). In addition, many children who have a hearing loss may be less attentive, easily frustrated and appear less confident in the classroom than their normal-hearing peers. Often these children feel more fatigued than their hearing peers because of the effort they put in to listen during the day. Increased fatigue levels put these students at risk for irritable behaviour in the classroom. These factors can have a further impact on their academic performance (Doyle and Dye, 2002). Gudyanga, Wadesango, Hove, and Gudyanga (2014) writing about the experience of students with hearing impairments in inclusive settings in Zimbabwe say that besides communication problems, students experienced feelings of anger, frustration and isolation depending on the dictates of the environment.

To best serve the needs of a child with hearing impairment, all persons who provide services to the child should work as a team. This team includes the child's parents, primary care physicians, audiologists, educators, and speech-language

pathologists. After the members of an assessment team determine the impact of the child's hearing loss in various domains, the focus of intervention should be to provide optimal support services to the child. The team also should commit to long-term monitoring to assess the effects of the hearing impairment on academic achievement and the effectiveness of the intervention plan (Matkin 1999.) Parents can also be an essential source of information around their child's level of deafness and how it affects them, any difficulties they have experienced in getting their child to use hearing equipment and what strategies they have used to ensure the child uses them, their child's communication preferences and what works best, whether their child is over-sensitive to particular sounds. Here, teachers can help by: explaining any tasks that their child should practice, sharing any challenges their child might face and discussing how to respond, providing information on topics their child will be learning and how they can help support this at home (The National Deaf Children's Society, 2013)

Parents also value receiving regular, up-to-date and accessible information about their child's, progress against targets and the measures being taken to address any difficulties they may be experiencing, participation in school life, including developing social skills and friendships, development of communication and language skills, use of hearing technology, any challenges experienced or any enjoyable listening experiences. Teachers of children with hearing impairment – Pupils with hearing impairments should receive support from a teacher who is hearing impaired who has a mandatory qualification in deaf education. Teachers teaching children with hearing impairments can provide on-going support and advice, organise training and can be contacted should any concerns or difficulties arise.

### The Problem

Challenges faced by CHI have over the years, become a subject of debate. Due to the poor acquisition of grammatical skills which later affect their comprehension, vocabulary, spelling, conjugation the acquisition of knowledge within the classroom and the larger community is difficult. Pre-lingually HI children (Children born with hearing impairment or became hearing impaired before the age of two) often do not possess good grammatical skills in English or any other spoken language which they do not hear. SL has its unique grammatical characteristics which differs from those of English language, which all learners in Cameroon are compelled to correctly use especially in public examinations. As demonstrated in the following example; Sign Language structure: "Your name what?" English language structure: "What is your name?" English language not being the first language of learners with hearing impairment complicates proper knowledge acquisition. According to Martin (2009), their intra-mental activities are carried out in sign language, whereas the written code is based on another language. CHI, often use the structure of Sign Language when trying to write a sentence in English and this portrays their English as wrong. SL usage is often stigmatised as "broken English".

### The influence of family knowledge of sign language on academic assistance of learners with hearing impairment at home

This objective aimed at investigating the percentage of parents who had the knowledge of sign language and used this knowledge to assist their learners with hearing impairment at home. Results from field work indicate that 58.8% of family members had no knowledge of sign language. This was owed to the fact that a majority of their parents, siblings and relatives

When signing, every single word is not signed out. For instance, sometimes prepositions such as "is" and "to", are left out. Some words are signed the same but may have different meanings in different sentences. Learners therefore write the way they sign. CHI undoubtedly cannot pick up words to form a meaningful sentence through combinations like children their age without HI do. In this light, they rely on family members to help them acquire the sign language skill through communication at home before enrolment into school. Unfortunately, most family members are impotent in assisting these learners develop this skill due to their unfamiliarity with the skill, sometimes not even the correct basics. Some of these learners with hearing impairment who have parents, siblings and relatives with the same disablement, are either uninterested to teach these children the language due to their own limited knowledge or teach the wrong signs which cannot be understood when enrolled into school.

Regrettably, most of the elderly hearing impaired are uneducated and cannot help the younger ones with their academic work at home. The absence of training colleges to train teachers particularly in handling these children and develop the skill creates a big hindrance to the total academic achievement for these children. Teachers scarcely follow the rubrics of sign language since they too are novices and learning in the course of teaching the children. This has seen the HI learners registering poor performances in class and public examinations. It is in this regards that, this research work aimed at investigating the challenges faced by children with hearing impairment in acquiring knowledge in the school and community environment

### Research method for the study

The research was both a survey and an experimental type and the design used in this study was a single group quasi-experimental design. Students were exposed to a pre-test and post-test. Students who were already exposed to over 10 years minimum to American Sign Language, sampled from Buea School for the Deaf in Buea constituted the sample. The target population was 49 but the accessible population stood at 17. Participants were students of form 4 and 5 and formed the experimental and control groups respectively. Open and closed ended questionnaires were also used for data collection. Data analysis was done using SPSS 21.0 (IBM, 2012) for descriptive (frequency of occurrence) and comparative analysis. Reliability analysis was computed using Cronbach's Alpha and contrasted with Guttman Split-Half. Statistics were discussed at the 95%, CL (Alpha=0.05) and presented using statistical tables and graphs. The findings were presented following the research objectives of the study.

### Results of the study

Observations and findings from the field revealed a series of challenges which these learners with hearing impairment faced. These challenges resulted from a number of factors within the family and the community at large as seen in the following paragraphs.

who were hearing impaired (as indicated in table 3) had no formal education and the few signs they used to communicate within their communities were unconventional and did not follow the rubrics of sign language. With this reality, 56.3% of the learners did not benefit from academic assistance at home, and this constituted the majority against 43.7% who did. This provided explanations to the poor development of their first and second language skills development and low academic performances at in class and at national examinations. Although appropriate measures are not always put in place to accommodate these learners with hearing impairment, the lapses from the field are indicative of the primary problem stemming from the family’s inability to assist these learners at home academically.

**Table 1: Influence of family knowledge of sign language on academic assistance at home**

		Do you have any academic assistance when at home		Total	
		Yes	No		
Does any member of your family know sign language	Yes	Form 4	4 40.0%	6 60.0%	10 100.0%
	No	Form 5	3 50.0%	3 50.0%	6 100.0%
Total			7 43.7%	9* 56.3%	16 100.0%

Field work 2014

\* Actually, 10 (58.8%) family members of 10 students had no knowledge of sign language but this table indicated 9 because 1 student did not respond to the question “Does any member of your family know sign language?”  $\chi^2$ -test:  $\chi^2=0.152$ ;  $df=1$ ;  $P=0.696$

**Influence of family knowledge of sign language before enrolment in school.**

It is no doubt that families are first educators of their children. For children with hearing impairment, their first language is sign language. It is therefore imperative for the families of these learners to provide an enabling environment where learners with hearing impairment can at least have an understanding of the sign language before enrolment into school. This is to enable them communicate effectively. Learners with hearing impairment face more challenges with acquiring their first language especially when they are born by parents without hearing problems. With these challenges, 68.8% of the learners with hearing impairment, enrolled without possessing the basics in sign language while 31.2% possessed the skill. From the results obtained, a majority of the parents did not possess the skill in sign language and as such could not teach their children the basic of the language. This was reflective in their children’s performances who relied completely on the teachers and school at large to acquire the skill which is of utmost importance to their academic achievement and success.

**Table 2: Influence of family knowledge of sign language before enrolment in school**

		Before enrolling in this school, did you have basic knowledge of sign language?		Total
		Yes	No	
Before enrolling in this school, did you have basic knowledge of sign language?	Form 4	3 30.0%	7 70.0%	10 100.0%
	Form 5	2 66.7%	4 66.7%	6 100.0%
Total		N 5	11* 68.8%	16 100.0%
		%	31.2%	68.8%

Field work, 2014

\* Normally 11 (68.8.6%) of the students had no basic knowledge of sign language before enrolling. 1 student did not respond to the question ‘before enrolling in this school, did you have basic knowledge of sign language?’  $\chi^2$ -test:  $\chi^2=0.019$ ;  $df=1$ ;  $P=0.889$

**Family history of learners with hearing impairment**

It was realized that 7 (41.29%) students had parents who were hearing impaired, 10 (58.8%) had siblings who were hearing impaired and 10 (58.8%) had a family member who was hearing impaired. These percentages indicated that, most of these learners’ impairment came from natural and genetic causes rather than environmental causes. This information on the family history enabled us to investigate further if students benefitted from any academic assistance at home from their parents, siblings or family members who were hearing impaired (table 4).

**Table 3: family history of learners with hearing impairment**

Objective	Question	Response	
		N <sup>o</sup>	Percent
Family history	Are your parents hearing impaired?	7	41.29%
	Do you have any sibling who is hearing impaired?	10	58.8%
	Do you have a family member who is hearing impaired?	10	58.8%
Total		27	100.0%

Field work, 2014

Percentages and totals are based on respondents.

- A. Dichotomy group tabulated at value 1.
- B. School = Buea School for the Deaf.

**Family history on hearing impairment and academic assistance from hearing impaired relatives**

This question sort to investigate if there was any relationship between the family histories of the hearing impaired learners and their academic gains. That is, if the elderly impaired made use of their disability in assisting the younger hearing impaired in their academics. From the responses, 47.05% of the learners, received no academic assistance while 41.2% did. Two respondents failed to respond to the question. From the findings those students whose parents had this impairment did not necessarily receive more help at home, and those who had sibling or a family member who was hearing impaired had less assistance at home However, they received enormous help in sign language from their hearing impaired relatives which was their major means of communication. Results indicated in table 4 show that;

**Table 4: Family history on hearing impairment and academic assistance**

Class	Do you have any academic assistance when at home		Total
	Yes	No	
Form 5	3	3	6
	50.0%	50.0%	
Form 4	4	5	9
	44.4%	55.6%	
Total	7 (46.7%)	8(53.3%)	15

Field work, 2014

\*Actually, 17 students participated in the study but 2 students from both classes did not respond to the question.

**Family history and knowledge in sign language before enrolment**

As the adage goes “there is always an opportunity in anything considered a misfortune”. In line with this, learners who had parents, siblings and family members with hearing impairment had the advantage of understanding sign language which is their first language of communication before enrolling into school. This made socialization and academic comprehension easy in class. This is observed in the results obtained from the field. 70.6% of the learners with hearing impairment who had parents and relatives with hearing impairment had acquired the sign language skill at home before school enrolment against 29.4% who did not have the skill. However, acquisition of this skill was made easy for all since the greater number of learners were in possession of the skill. All of these summed up, made interaction and learning easy as the lesser majority benefitted from the greater majority. All these are explained in table 4.

**Table 4: Family history and knowledge in sign language before enrolment**

	Before enrolling in this school, did you have basic knowledge of sign language		Total
	Yes	No	
Form 5	5	2	7
	71.4%	28.6%	
Form 4	7	3	10
	70.0%	30.0%	
Total Count	12 (70.6%)	5 (29.4%)	17

Field work, 2014

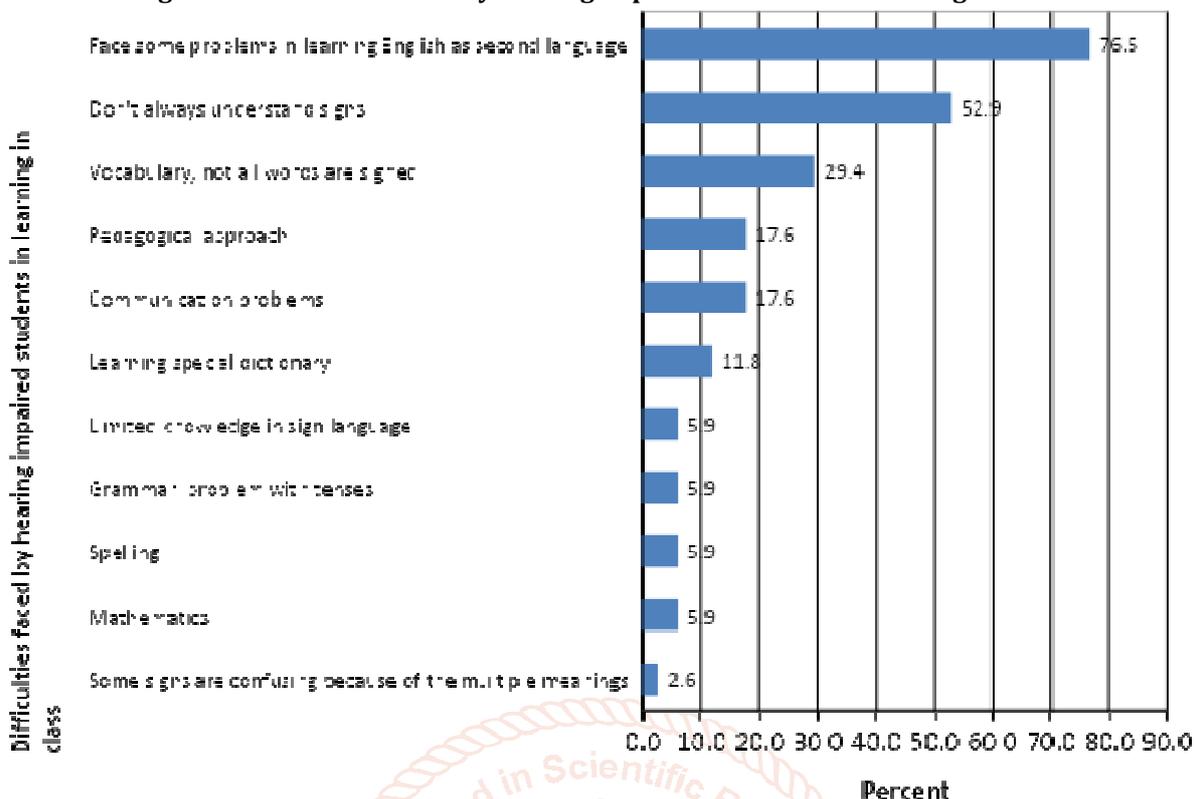
Percentages and totals are based on respondents.

- A. Dichotomy group tabulated at value 1.
- B. School = Buea School for the Deaf

**Difficulties faced by hearing impaired students in learning in class**

Though their environmental learning conditions were favourable they listed some difficulties encountered while learning in class in terms of delivery, pedagogy and comprehension of content (figure 2). Using an 11 item table to check the challenges these learners faced in the classroom, the following results were obtained. Greater problems were faced in the areas of learning English as a second language (76.5%) and the inability to understand signs from teachers (52.9%), mild difficulties were encountered with the vocabulary (29.4%) as the learners complained that not all words were signed, pedagogic approach and communication problems were scaled on the same rank (17.6%). The least problems were encountered with learning their special dictionary(11.8%), limited knowledge in sign language, problem with tenses and spelling limited knowledge in sign language, problem in learning special dictionary, confusing signs in some words because of their multiple meanings, problem with tenses, spelling and mathematics which all had a percentage of 5.9. learners also complained about some words having multiple meanings thereby causing them to give different meanings to different sentences based on their understanding of the words which are sometimes wrong. This was extracted from the complaints of these students “some words do not have corresponding sign in sign language’ the way some words are signed is sometimes confusing’ ‘when signing it is difficult to know if it is in the presents tense, past tense etc.

**Figure 2: Difficulties faced by hearing impaired students in learning in class**



**Pedagogic approach as perceived by learners with hearing impairment**

There were different approaches to teaching these children with hearing impairment by the different teachers who taught them. In this regard, the learners also faced problems with their respective teachers based on the diverse teaching methods adopted by the teachers. The greater majority of students (82.3%) acknowledged that their teachers explained and wrote on the board during lectures. 52.9% said their teachers signed and spoke at the same time which is against the ethics of sign language, 64.7% stated that their teachers only explained without writing. 76.5% complained that their teachers only signed without speaking and writing on the board and 70.6% maintained that their teachers used visual mode for elaboration. 94.1% of the hearing impaired learners were satisfied with the fact that the school had a sign language interpreter. Only one student did not face difficulty in learning in class. Students generally believed that finger spelling helped them in learning English better (76.5%), and had more benefits than non-hearing could imagine.

**Table 5: Pedagogic approach as perceived by learners with hearing impairment**

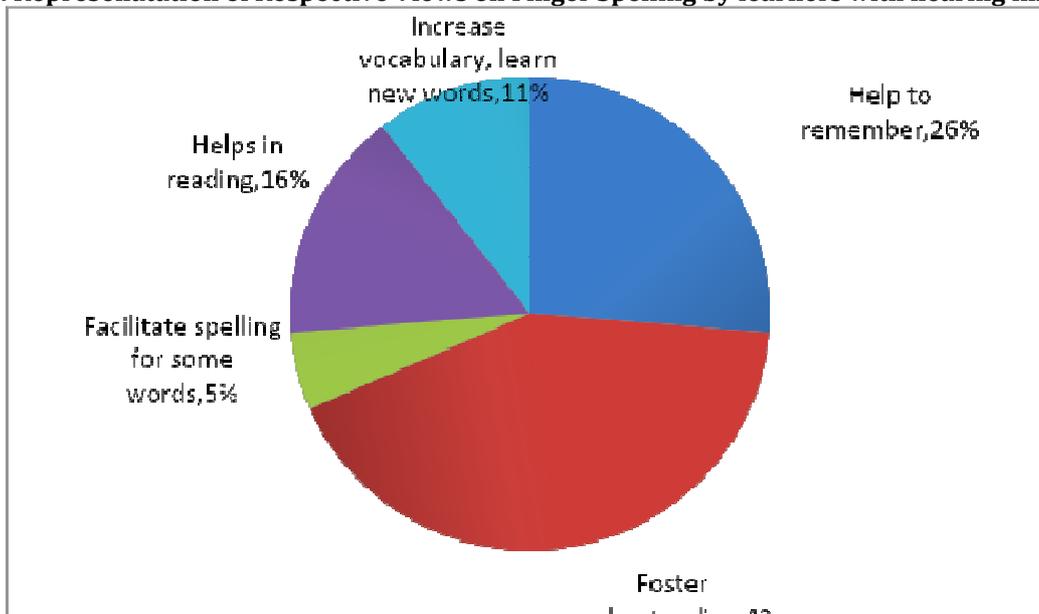
Pedagogical approach	Percentages
School has a sign language interpreter	16 (94.1%)
Finger spelling helps in learning English better	13 (76.5%)
Did not face any difficulty in hearing in class	1 (5.9%)
Sign only	13 (76.5%)
Signing and speaking at the same time	9 (52.9%)
The teacher explains only	11 (64.7%)
The teacher explains and write on the board	14 (82.3%)
Teacher uses visual mode	12 (70.6%)
MRS	89 (64.7%)

Field work, 2014

**Views about finger spelling by learners with HI**

Finger spelling in the course of field work was found to be a very cherished element of sign language which the learners with hearing impairment paid lots of interest and determination to acquire and practice. Learners laid much emphasis on the advantages of finger spelling to them. Based on the diversity of these importance to respective students questions were posed to get their views on the benefits of finger spelling to them. The following results were obtained; a greater proportion of the learners (42%) said finger spelling helped to foster their understanding, 26% felt it helped them to remember, 16% said it helped them in reading more. 11% of the students stated that finger spelling enabled them to increase their vocabulary and learn new words as well and 5% thought it facilitated the spelling of some words. The results therefore revealed that finger spelling had a broad range of advantages and meant differently for individual students.

**Figure 1: Representation of Respective Views on Finger Spelling by learners with hearing impairment**



Scales	Pre-test			Post-test			Progression		χ <sup>2</sup> -test
	Experimental	Control	χ <sup>2</sup> -test	Experimental	Control	χ <sup>2</sup> -test	Experimental	Control	
Comparative	2(20.0%)	2(28.6%)	χ <sup>2</sup> =0.168 P=0.682	7(70.0%)	1(14.3%)	χ <sup>2</sup> =5.130 P=0.024	5(50.0%)	0(0.0%)	-
Comprehension	4(40.0%)	5(71.4%)	χ <sup>2</sup> =1.633 P=0.201	8(80.0%)	4(57.1%)	χ <sup>2</sup> =1.036 P=0.309	4(40.0%)	0(0.0%)	-
Spelling	3(30.0%)	4(57.1%)	χ <sup>2</sup> =1.252 P=0.263	9(90.0%)	5(71.4%)	χ <sup>2</sup> =0.977 P=0.323	6(60.0%)	1(14.3%)	-
Vocabulary	2(20.0%)	1(14.3%)	χ <sup>2</sup> =0.093 P=0.761	7(70.0%)	1(14.3%)	χ <sup>2</sup> =5.130 P=0.024	5(50.0%)	0(0.0%)	-
Synonyms	3(30.0%)	2(28.6%)	χ <sup>2</sup> =0.004 P=0.949	7(70.0%)	2(28.6%)	χ <sup>2</sup> =2.837 P=0.042	4(40.0%)	0(0.0%)	-
Conjugation	2(20.0%)	1(14.3%)	χ <sup>2</sup> =0.093 P=0.761	8(80.0%)	2(28.6%)	χ <sup>2</sup> =4.496 P=0.034	6(60.0%)	1(14.3%)	-
Total	16	15		46	15		30	2	

**Table 6: Performance in skills**

The findings from table 6 above indicated that, after the intervention, there was a progression in the experimental group in all the skills ranging from 40% for synonyms, 40% for comprehension, 50% for comparative and vocabulary skill and 60% for spelling. In the control group, a slight progression was observed only in spelling and conjugation (14.3%). It was also revealed from the results obtained that, students faced challenges in all the skills with greater challenges faced with comprehension 40% and 30% for spelling and synonymy in the experimental group, and 71.4% and 57.1% in the control group (table 6).

The test items; comparative, comprehension, spelling, vocabulary, synonyms and conjugation had a great significant difference in performance between the control and the experimental group. From the average calculated value, the difference between the control and the experimental group was significant ( $\chi^2=16.12$ ;  $df=1$ ;  $P<0.001$ ), indicating that the null hypothesis was rejected and the alternative retained.

Generally, students had more challenges in; Conjugation, followed by vocabulary, comparatives, spelling and comprehension. The intervention(drilling the students on aspect where they lacked as observed after the pre-test) had a positive effect on the performance of the students indicating that if some of their most recurrent problems are

identified and they are properly drilled on them, those difficulties will be significantly reduced. (Table 6).

**Proposed way forward**

After our study, we sight with Mpofu and Chimhenga (2013), who holds that in order to solve the challenges faced by CHI in schools, schools should appoint SL interpreters where CHI are enrolled. Teachers, who are not skilled in SL, should get staff development courses on sign language in order to equip themselves with vital skills to enable them teach CHI in their class. Teachers should develop empathy towards CHI, design activities and strategies that ensure that these students learn the subject under study. Teachers’ notes should be made available online so that parents can use them to help their children before they come to school.

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