



Challenges teachers face in using the new breakthrough to literacy course to teach reading to grade one learners with hearing impairments

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Abstract

This study aimed at finding out the challenges that teachers encountered in using the New Breakthrough to Literacy course to teach reading to Grade One learners with hearing impairments. The study was guided by the following objectives: To find out the challenges Grade One teachers of the hearing impaired face in using the New Breakthrough to Literacy course kit to teach reading, to find out whether learners with hearing impairments break through to literacy in Grade One; and to find out Grade One teachers' views on the suitability of the NBTL course methodology for teaching reading to Grade One learners with hearing impairments.

In order to achieve the above stated objectives, respondents were purposively sampled and were drawn from selected schools and units for the hearing impaired. The sample consisted of fifteen (15) special education teachers for the learners with hearing impairments picked from Southern, Lusaka and Copperbelt provinces. Primary information was gathered using questionnaires for teachers of the hearing impaired.

The study was both qualitative and quantitative in nature as it captured views and experiences of respondents from which numerical figures were derived. The content analysis method was used to analyze the data.

The study found that the major challenges that teachers faced in using the NBTL course to teach reading were that local signs that the children came with to school when they were being introduced to reading were not similar such that teachers did not understand them, which made it difficult for them to apply the NBTL methodology. They also did not complete the sets in all the stages like the non-disabled since they learnt at a slower pace. The study also showed that there weren't adequate instructions and teaching resources to sufficiently teach reading to these learners. This included specialized guidelines from the Curriculum Development specialists. The study also showed that the vocabulary in the NBTL course had limitations in sign language for some Zambian Language words. This made it difficult for teachers to teach.

Arising from the findings of this study, various recommendations have been made, among which is that teachers in schools and units for the learners with hearing impairments should hold regular training workshops to discuss on how some aspects such as NBTL can best be taught.

Keywords: deaf, hard of hearing, hearing impaired, local signs, sign language

Introduction

In 1998 the Ministry of Education introduced the Primary Reading Programme (PRP) which aimed at improving literacy levels among the Zambian learners. One of the strategies the programme used was the New Breakthrough to Literacy (NBTL) course. At Grade One the course was aimed at introducing initial literacy through a familiar local Zambian language. Each Grade One class had an hour per day of reading and writing in the local language. The course was followed in all basic schools as well as schools and units for the hearing impaired. The schools and units were expected to use a local sign (equivalent to a local language) and move on to using a universal sign language (equivalent to English) in Grade Two onwards. This study focused on the hearing impaired who are deaf, who can neither hear nor talk.

Although the deaf also learnt using the NBTL course, they are different from their mainstream school peers in terms of language of communication. They have no spoken language. The only means of communication that they use are signs. In the Zambian situation the deaf use local signs and universal signs. The local signs are signs used in the home

for the purpose of communication with parents, siblings and local community. Therefore, deaf children may use different local signs. When they start Grade One they carry with them the different home signs. The signs may not be easily understood by their hearing impaired classmates and teachers. In one classroom there may be as many local signs as there are learners.

The mode of instruction that is used to access the curriculum is sign language. Reading is the key to learning the content of the school curriculum. Failure to access the curriculum through reading disadvantages a child.

Overview of the new breakthrough to literacy course

Ministry of Education (2006) stated that NBTL was a course through which children spent an hour each day to learn to read and write easily and accurately in their local language in Grade One. In the NBTL course right from the start, children saw in printed form, words that they used in everyday talk in their local languages. They realized that what they read was something which they already knew about but in a different form. New Breakthrough used the Language Experience Approach. This meant that it started

with what children knew, that is, their spoken language. An NBTL class was set very carefully. The classroom had learners' desks and benches divided into four separate groups with Group Sentence Makers for each group. There was a distinct corner, known as a Teaching Corner (TC) meant for carrying out focused work with individual groups. A Reading Corner was established to display the readers. A collection of reading materials in local language was placed on the shelf or table. There was also the New Breakthrough Kit which consisted of resources that together supported the learners in their task of learning to read and write, and the teacher's task of teaching them. They included the Sentence Maker and Word Cards, Phonic Flip Chart and the Conversation Posters, which were similar to language posters. There were also Learners Activity Book (LAB), the Teacher's Activity Book (TAB) and 20 Learner's Activity Books in a kit. This course had a set of story books, Rainbow Readers consisting of 26 books with 5 copies of each title. The last item was the slate. This was a small chalkboard in the NBTL kit used to set group activities such as handwriting practice.

Statement of the Problem

Grade One learners with hearing impairments used the NBTL course. According to the NBTL course, the learners were expected to use a familiar local language in learning to read in Grade One. There is no research that has been carried out to determine the impact of the NBTL course to the hearing impaired learners. The learners did not share similar local sign language. They used different local signs that they came with from their homes. The use of different local signs by learners made it difficult for teachers to teach reading to the learners. The study came about because there was no research that had been done on this important course in Zambia.

Purpose of the Study

The study made an attempt to find out the challenges teachers face in using the New Breakthrough to Literacy course to teach reading to Grade One hearing impaired learners.

Objectives of the Study

The objectives of the study were to

- Determine challenges Grade One teachers of the hearing impaired face in using the New Breakthrough to Literacy course kit for teaching reading.
- Establish whether learners with hearing impairments break through to literacy at the end of Grade One.
- Assess teachers' views on the suitability of NBTL course methodology for teaching reading to Grade One learners with hearing impairments.

Research Questions

The following questions directed the study

- Do Grade One teachers of the hearing impaired face any challenges in using the New Breakthrough to Literacy course kit for teaching Grade One learners with hearing impairments?
- Do Grade One learners with hearing impairments break through to literacy at the end of Grade One?
- What are the Grade One teachers' views on the suitability of NBTL course methodology for teaching reading to Grade One learners with hearing impairments?

Significance of the Study

The findings of this study may be important for the Ministry of Education policy makers and implementers. The findings may help them evaluate the effectiveness of using the NBTL course on teaching reading to Grade One learners with hearing impairments. The findings may also be important for Curriculum Development Centre subject specialists to collaborate with teachers for the hearing impaired to work out appropriate curriculum materials for the hearing impaired children at Grade One level and other higher levels.

For the Zambia Institute of Special Education (ZAMISE) and other colleges that train special education teachers the findings of this study may guide their practice so that they prepare adequately teachers for the challenges which have been highlighted in this study.

For the classroom teachers in special schools and units for the hearing impaired, the findings may guide them as they share their experiences at school and zone levels. The findings may also be useful to parents of learners with hearing impairments in that they may use the suitable language (signs) at home which may also be used at school. In this way, the learners' language skills may develop at a faster rate. This may enhance the learners' academic performance.

Literature review

How learners with hearing impairments learn to read

Conrad (1979) ^[2] studied how the deaf recognize printed words. In the study on teaching literacy to the deaf, Conrad found out that for the deaf, having never heard sound makes it much harder for them to learn to speak or read English. In order for the child to learn to read, the child must learn the mapping between the spoken language and the printed words. For the deaf child this is not easy. The deaf child does not have access to phonological code and many do not know any language well. Tharp and Gallimore (1991) explain literacy as patterns of language and cognitive development that can develop through teaching and schooling. To them a literate person is one who is capable of reading, writing, speaking, computing, reasoning, and manipulation visual as well as verbal symbols and concepts. This means that speech is not the only way to language. Language can be learned through the eye rather than the ear. Deaf children can learn signs rather than spoken language. Erting (1992) ^[3] states that the deaf child should be as whole as a competent learner but one who requires a visual environment in order to thrive and that the problem does not reside in the child but in the environment.

A study carried out by Moats (1995) ^[7] on teaching spellings concluded that it was important to know the alphabetic principle which is that individual letters with individual sounds are blended to make words. The study established that this is the key step in learning to read. Using the relationship between letters and their sounds is the most efficient way to read printed text.

In a study by Clark (2003) ^[1] on how deaf learn to read, the findings revealed that reading requires two related capabilities. First one must be familiar with a language and second, one must understand the mapping between that language and the printed word. The findings indicate clearly that deaf learners are disadvantaged on both counts, but some deaf learners do read fluently. The findings also show that individuals with good signing skills are not worse

readers than individuals with poor signing skills. From this study, it is evident that the skill in signing does not guarantee the skill in reading.

Mayberry & Eichen (1991) ^[6] show that children who are exposed to sign language late in childhood turn out to be less proficient and may never catch up in adulthood than the children who are exposed in early childhood. The findings suggest that deaf children read by using a code that is not based on sound and that deaf children of deaf parents are better readers than deaf children of hearing parents. One reason for this is that deaf children of deaf parents are more likely to have their hearing loss identified earlier and get the appropriate educational needs. In this way they become fluent in ASL or other sign language. This study showed that knowing ASL does not interfere with learning to read in fact it may help to learn to read. Knowing a language is better for learning to read than not knowing one at all. Similarly, the deaf children should know a sign language like ASL in order for them to be able to read. Padden and Ramsey (2000) call this technique "chaining". In the technique the teacher fingerspells a word, then points to the word written on the blackboard. Finally, the teacher uses an initialized sign for the word.

From the studies cited in this section, it is apparent that the bottom line is that both the hearing and the deaf need to be taught to read. Learning to read is totally different than learning to speak. Children will learn the language of their community just by living there. Reading does not come naturally to all children or all individuals. The deaf and hearing must work together to understand how to instruct and turn signers into readers.

According to Schleper, (1996) ^[8], learning to read and write is part of the language acquisition process, and many of the difficulties deaf learners experience are related to their lack of a strong language base either in English or ASL. Learners who are deaf or hard of hearing face unique challenges when reading, particularly those youngsters who have been deaf since birth. There are three main challenges learners who are deaf or hard of hearing face. Firstly, deaf learners may lack some background knowledge that hearing students bring to reading. Secondly, deaf learners lack exposure to spoken language making teaching traditional sound-letter correspondence difficult, if not impossible. Thirdly, for those deaf learners whose first language is signing, learning to read and write in English constitutes learning a second language with a different grammar, lexicon, and syntax.

Schleper (1996) ^[8] in his study on the principles for reading to deaf children has also shown that a learner who is deaf and whose first language is ASL often learns to read by looking at English print while a teacher, parent, or other instructor interprets the story in ASL. In this way, the child is helped to relate the written word to the signed meaning. Deaf or hard of hearing children learning to read for the first time, like most learners, also use illustrations and pictures as an aid to construct meaning from text. Learning to read for these learners entails moving from signed elaboration toward direct translation of English print to ASL, followed by higher level comprehension, interpretive, and inference skills.

Findings from a research conducted by Goldin-Meadow and Mayberry (2001) suggest that individuals with good signing skills may be better readers than individuals with poor sign language skills. In a related study, Hafer & Wilson (1998) ^[4] suggest that ASL can improve reading and communication

skills for other groups of special needs students, such as those with learning disabilities, autism, or aphasia, when used as a supplementary way to communicate.

There is no consensus among researchers, educators, parents, or those who are deaf or hard of hearing about the best reading strategies for students who are deaf or hard of hearing. Some argue that ASL is the primary language of a vibrant deaf community in the United States, and that a deaf child is best prepared for a productive life when ASL is taught as the primary language of instruction. Others suggest that speech reading or manually coded English should play an important role in the educational program of a student who is deaf or hard of hearing.

Challenges in Teaching Reading to the Deaf

According to Milone, (2003) in his interview with Jennifer Herbold on A Teacher Takes on the Challenges of Deaf Literacy he said that she responded that it can be difficult to teach deaf children to read. The respondent also said she strongly believed, and that there's considerable research to support this opinion, that the difficulty is due to external as opposed to internal factors. The majority of students arrive with very little language. Most of them are not exposed to ASL or to any fully accessible language from an early age. She also said that our teachers are faced with the challenge of developing children's world-knowledge and general semantics (in both ASL and English) at the same time that they are teaching them to read. For example, many of the children arrive at school with no or very little understanding of "wordness"--the metalinguistic concept that "words" exist. Even at kindergarten, they are already a few years behind their peers.

Research (kenyadeafnet.org) in Kenya shows that people need to acquire a first language to be able to learn a second and third language. For deaf learners, the only language that is acquirable is Kenya Sign Language (KSL) and this is true only if KSL is constantly and consistently in the environment.

Methodology

Research Design

The survey research design was selected because it could provide the desired information about the extent to which teachers for the Grade One hearing impaired in schools and units use the NBTL course to teach reading. Decisions concerning the effectiveness of the course in the teaching of reading could be based on the responses that the questionnaires bring out.

Sidhu (2003:108) ^[9] describes the survey research design as "a method, which deals with clearly defined problems and has definite objectives. It requires an imaginative planning, a careful analysis and interpretation of the data and a logical and skillful reporting of the findings." White (2005:101) ^[10] further describes it as "usually collecting data by interviewing a sample of people selected to accurately represent the population under study.

Target Population

The population of the study consisted of all teachers for learners with hearing impairments from Southern, Lusaka and Copperbelt provinces.

Sample Size

The sample consisted of fifteen (15) teachers for the learners

with hearing impairments selected from Southern, Lusaka and Copperbelt Provinces. The teachers for the learners with hearing impairments were selected from two (2) special schools; St.Mulumba and St.Josephs Special School and one (1) unit, Lusaka Girls Basic School Unit.

Table 1: Teachers’ responses on their teaching experience

Initial Training	Male	Female
Secondary School Teacher	0	0
Primary School Teacher	10	5
Pre-School Teacher	0	0
Other	0	0

In this study all the teachers who responded to the questionnaire indicated that they had trained first as primary school teachers with a special education certificate, diploma or degree qualification therefore selected because they had an experience having taught Grade One.

Table 2: Teachers’ responses on experience and training in teaching reading

Respondents	No. of Respondents	Percentage
Experience in teaching Grade One	15	100
Training in teaching reading to HI	15	100

Table 2 shows that among the teachers for the learners with hearing impairments, 100% of them had at one time taught Grade One learners with hearing impairments and received training on teaching reading.

Gender and age of Respondents

Respondents were asked to indicate their gender and age as shown in Table 3.

Table 3: Teachers’ responses on their gender and age

Age Group	Male	Female	Total
20-29	0	0	0
30-39	6	3	9
40-49	3	2	5
50/over	0	1	1
Totals	9	6	15

The distribution by gender and age shows that more males took part in the study as compared to females. It also shows that teachers for learners with hearing impairments ranged from 30-50 years of age.

Academic and Professional Qualifications of the respondents

The distribution by qualification in Table 4 below shows that the sample consisted of Form V or Grade Twelve (12) certificate holders from which there was one (1) degree holder, nine (9) diploma holders and five (5) primary teachers’ certificate holders.

Table 4: Teachers’ responses on their academic and professional qualifications

Qualification	Male	Female	Total
Degree	1	0	1
Diploma	4	7	11
Certificate	1	2	3
Grade 12/Form 5	9	6	15

The table shows that all the special education teachers in the study had an academic qualification of either Form 5 or Grade 12 certificate. In case of professional qualifications one (1) had a first degree, eleven (11) had diplomas, and three (3) had certificates in special education.

Sampling Procedure

The researcher purposively selected the teachers who were teaching Grade One learners with hearing impairments and those who at one time taught Grade One.

Purposive sampling is a non-probability sampling procedure in which the respondents or units are selected purposely. This sampling procedure has an advantage in that the purpose of the study can be fulfilled even with a small sample which is picked purposely and carefully.

Research Instruments

In order to get views from the teachers of learners with hearing impairments and head teachers, questionnaires and interviews were used. Questionnaires were administered on teachers for learners with hearing impairments. The questionnaires were more economical in terms of resources and time and allowed the respondents to express their views freely. Questionnaires for teachers consisted of close-ended questions except for a few, which were open-ended and intended to seek opinions of the respondents.

Data Collection Procedure

The researcher obtained an introductory letter from the Assistant Dean Post-graduate Studies at the University of Zambia, School of Education. The introductory letter was further used to seek and obtain permission from the head teachers at each of the schools where data was collected.

The questionnaires were administered to special education teachers for learners with hearing impairments in the third term in September. This was considered to be an appropriate time as pupils had been in school for more than eight months.

The questionnaire for teachers for the deaf and hard of hearing learners was administered to fifteen randomly selected teachers. In all the schools questionnaires were completed while the researcher waited and was received by the researcher.

Data Analysis

The data for this study was analyzed both qualitatively and quantitatively. The qualitative data was analyzed by coding and grouping the emerging themes. The qualitative data was analyzed using the statistical package for social sciences (SPSS) computer software to generate table of frequencies and percentages which were used in describing distribution of variables.

Presentation of results

Challenges teachers face when teaching learners with hearing impairments to read using the NBTL kit

The figure below shows responses from teachers when asked about similarities of local signs learners with hearing impairments come with to school the first time they enter school.

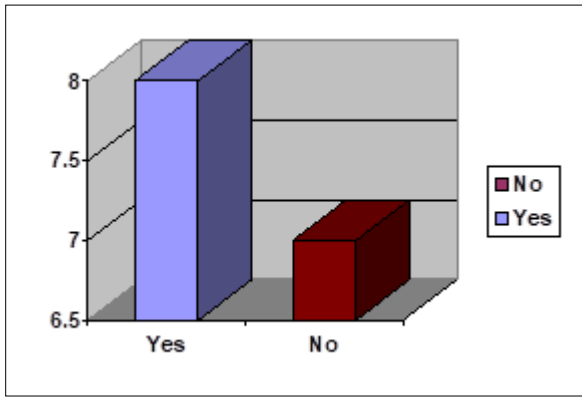


Fig 1: Teachers' responses on similarities of local signs

Figure 1 above indicates that 53% of the teachers responded that learners with hearing impairments do not use similar signs when they first come to school and that the signs learners they bring to school were usually different as the learners come from different places where different signs were used.

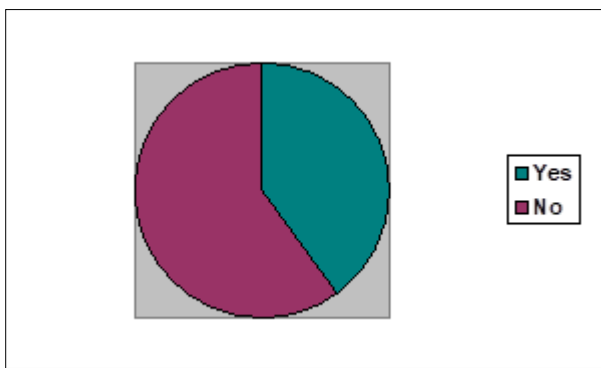


Fig 2: Teacher's responses on understanding and utilization of local signs

Figure 2 shows that 60% of the teachers do not understand the local signs that the learners with hearing impairments come with from their homes. However, 40% of the teachers indicated that they understood some of them. They said that they used experience (after handling many learners using different signs) to understand some of the signs.

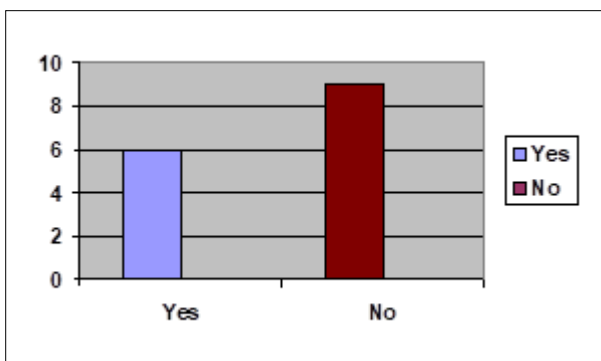


Fig 3: Teachers' responses on their understanding and use of local signs

The study as shown from Figure 3 indicated that 40% of the teachers used local signs to teach reading using the NBTL course. This was only in isolated cases where the school had taken an initiative to discuss how this could be done in the INSET as well as group meetings at school level. However,

60% of the teachers reported not having used the local signs; instead they used the American Sign Language which is taught as a universal language in all the schools and units for the hearing impaired in all the schools.

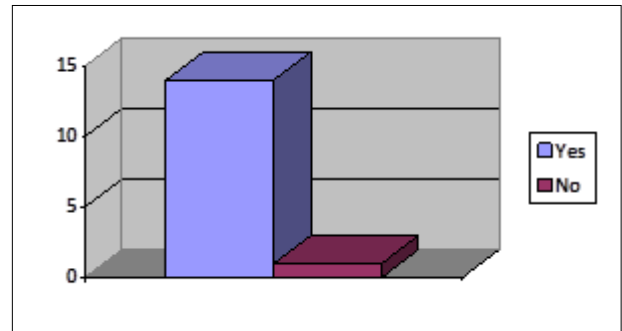


Fig 4: Teachers' responses on the effectiveness of NBTL course in teaching reading

The study showed that more than 93.3% of respondents indicated that the improved reading levels of the Grade One hearing impaired were not as a result of the approach using local signs, but that the pupils learnt to read using the American Sign Language that is taught in schools and units for the hearing impaired.

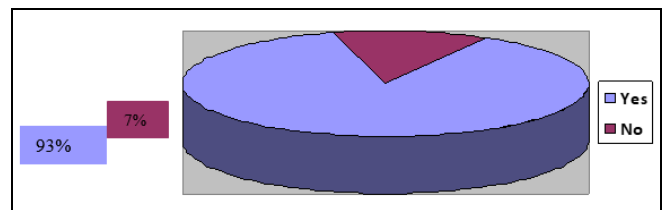


Fig 5: Teachers' responses on their skills in teaching reading

Figure 5 shows that 93% of the teachers had adequate skills in ASL to teach the hearing impaired learners reading but had found difficulties to teach reading to hearing impaired using the NBTL course. Of these teachers 7% stated that they did not have the skills. When head teachers were interviewed, they explained that the teachers did not express problems in teaching reading using sign language because the training in American Sign Language was adequate for the teachers.

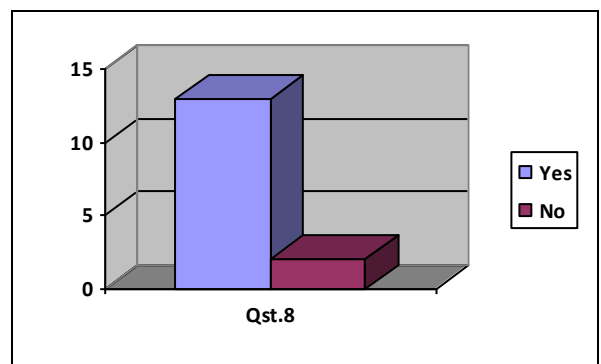


Fig 6: Teachers' responses on the use of the New Breakthrough Kit

Figure 6 shows that thirteen out of fifteen teachers (87%) who had taught Grade One before and those that are currently teaching this grade level have/had problems in teaching hearing impaired learners reading using some of the New Breakthrough Kit which has been highlighted below.

Teachers’ use of sentence makers and word cards

The study revealed that thirteen teachers indicated that they used Sentence Makers and Word Cards. This represents 87% of the total number of respondents while the other two said they did not use the Sentence Cards and Word Cards.

Teachers’ use of the Conversation Chart

The study showed that on the use of the Conversation Chart, nine respondents indicated that they used the Conversation Chart. This represents 60% of the teachers. On the other hand six responses were to the contrary. The percentage for those who did not use the Conversation Chart stood at 40%.

Teachers’ use of the Phonic Flip Chart

When teachers were asked as to whether they use the Phonic Flip Chart, three stated that they used it to teach different phonemes found in a language. The percentage for these stands at 20% while those who did not use the Phonic Flip Chart are 12, representing 80%.

Teachers’ use of Phonemes to teach Reading

When teachers were asked as to whether they used phonemes in teaching reading to the Grade One learners with hearing impairments two responses affirmed that phonemes are used and that they were effective. This represented 13% while thirteen responses showed that phonemes were not used. This represented 87% of the total responses given.

Learners with hearing impairments breaking through to literacy in Grade One

Teachers’ responses to whether learners break through

When asked as to whether learners with hearing impairments break through to literacy at the end of Grade One, all the fifteen teachers (100%) indicated that many Grade One learners with hearing impairments failed to break through to literacy. Among the reasons which they gave were that most of the learners learnt at a slow pace and that they found it difficult to cope with academic work. In addition they also found it difficult to cope with NBTL methodology because they still used local signs which they used at home and which the teacher may not understand. Therefore, teachers took time to teach them the new signs to use at school.

Teachers’ views on the suitability of NBTL course to teach reading to the hearing impaired

Teachers were asked the following questions on suitability of the NBTL course; difficulties they faced when using the course and on whether the course should continue being used.

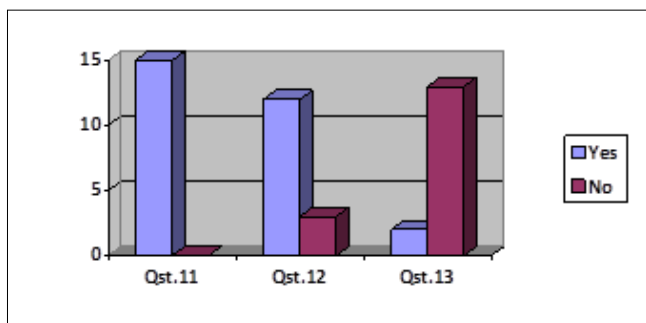


Fig 7: Teachers’ responses on the suitability of the NBTL Course

When asked whether they as teachers for the hearing impaired had found difficulties in teaching the hearing impaired using the NBTL course, all the teachers (100%) stated that they had difficulties.

When teachers were asked whether they had difficulties teaching reading using the NBTL course, three teachers indicated that they did not have difficulties teaching reading using the NBTL course for the Grade One learners with hearing impairments. This represents 20% of the teachers as compared to 12 (80%) who indicated that they found difficulties in using the NBTL course to teach reading to Grade One learners with hearing impairments.

When teachers were asked whether the NBTL methodology should continue, two teachers stated that the NBTL methodology should continue to be used for the Grade One learners with hearing impairments while thirteen teachers (87%) disapproved the continued use of the methodology.

More than 96% of the teachers were of the view that they should under undergo in-service training on the newly introduced Zambian Signs so that common signs could be used in schools and that this training could be extended to parents and guardians of the hearing impaired. They added that they were eager to implement government policies but were hampered by little orientation from curriculum specialists who initiated the programmes at both pre-service and in-service levels.

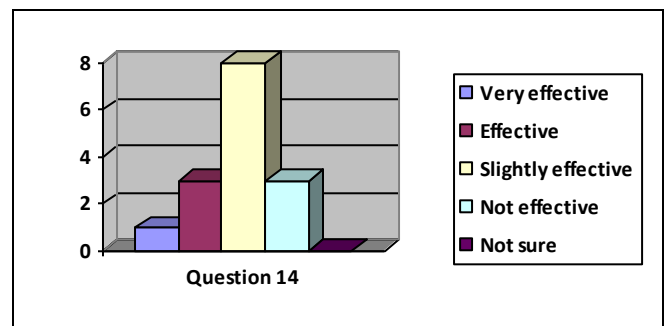


Fig 8: Teachers’ responses on their effectiveness in using the NBTL course

Among the teachers, the study showed that only one teacher indicated being very effective in using the NBTL course to teach reading to the Grade One learners with hearing impairment. For the same question three teachers indicated that they were effective. At the same time eight stated that they were slightly effective, whereas another three rated themselves as not effective and no one indicated not sure whether very effective, effective, slightly effective or not effective.

The study showed that eight of the teachers stated that American Sign Language was very effective in teaching reading whereas six indicated that it was effective and slightly effective. Only one indicated not effective.

The study showed that special education teachers from the three different schools faced challenges in using NBTL course. The teachers were asked to write down difficulties that they encountered when teaching reading to deaf and hearing impaired learners using the NBTL course. Six challenges were cited by both teachers and head teachers. They argued that the challenges posed serious bottlenecks in the smooth implementation of the NBTL course. The table below shows the challenges.

Table 5: Challenges teachers face in using NBTL to teach reading to learners with hearing impairments

Challenge	Percentage of teachers	Percentage of head teachers
Lack of understanding of local signs: learners come with different signs when they first come to school	95	78
Completing the sets in all stages in NBTL: Some sections of the daily routine require that the teacher teaches phonemes, meanwhile the hearing impaired have no experience of speech sounds.	80	78
Lack of adequate instructions and teaching resources: training institutions do not provide for methodology on how to teach NBTL using local signs.	96	66
Limitations in sign language of some Zambian Language words: some Zambian Language words do not have specific signs.	60	78
Little time spent on in-service: curriculum specialists had little time to spend on in-servicing them on instructional materials concerning new initiatives	86	78
Specialized guidelines: Curriculum specialists did not give specialized guidelines on implementation of NBTL	68	93

Discussion of the findings

Challenges Grade One teachers face in using the NBTL kit to teach reading to learners with hearing impairments

This research has shown that learners with hearing impairments have trouble understanding language, and that many have not mastered the grammar or syntax of the English language to the extent that much younger normal hearing learners have. This is supported by Kirk and Gallagher (1986) [5]. In addition, the study has revealed that the learners do not have uniform skills on the use of local signs. On the part of the teacher the study revealed that they needed adequate skills on the use of the existing local signs to enable them fulfill the requirements in implementing the new trends in teaching and move together with the other teachers in regular schools. The teachers for the hearing impaired who participated in this study indicated that they needed to be equipped with adequate methodology and instructional skills in order to effectively and efficiently handle curricular innovations by the Ministry of Education with confidence. They were concerned with lacking consultations from them who are on the ground when new trends in teaching are being brought in. They however, appreciated that not all that is brought in is irrelevant for them, but that some ideas that will work so well for the able-bodied learners may not easily be implemented and workable for the hearing impaired.

Teachers felt that they needed training in both technical skills and social skills which would help them as they handle pupils that are coming into school for the first time to communicate more easily. According to findings from teachers they stated that INSET activities were helpful because they enabled teachers to share ideas on how best to make modifications in their teaching so that they suit the learners with hearing impairments.

Another area where teachers felt challenged was that some words that are taught to children have no signs while others have similar signs, such as ‘have/has/had’ but written differently. This therefore, poses a big challenge to the teacher either to find a sign for it and in some cases teachers omitted those words making it difficult to construct a sentence using the Sentence Makers and Word Cards. It therefore, means that it will become difficult for the learners to construct the sentence because they have not found a sign for that particular word.

The other area of concern that teachers showed much concern was that they did not use the Phonic Chart. The teachers did not use this one because the hearing impaired had no speech sound at all to help them learn to read. They read using different hand shapes. The methodology did not provide for them from the curriculum developers on how to go about using the Phonic Chart. As a result of this the phonic kit becomes irrelevant for the learners with hearing impairments. Furthermore, the study showed that schools and units for the hearing impaired were not using local signs as recommended methodology on initial literacy because they were not common among the learners with hearing impairments. Even when there is a Zambian Sign Language Dictionary teachers had not yet started using the Zambian signs. One of the reasons teachers gave was that the Zambian Sign Language Dictionary had not yet been incorporated for use by the Ministry of Education.

The study also showed that the training package for the teachers of the hearing impaired did not address the aspect of New Breakthrough to Literacy, making it difficult to integrate the local signs with the American Sign Language when implementing the recommended course. This difficulty to integrate local signs with ASL has created a gap between what the teachers practice and what they were trained to teach in reading. The training of teachers for the hearing impaired is in American Sign Language and they go out to teach reading using the American Sign Language. The study indicated that hearing impaired children learn to read at Grade One in the American Sign Language and does not take into account the local signs that the hearing impaired learners use in their homes

This study has shown that when using the NBTL course the teachers did not use the child-centered approach. Instead, teachers in most cases provided for the sign that was needed for a particular word or sentence in order to go through the stage of word recognition and sentence building. This should not have been the case because the learners needed to recognise the word and build a sentence.

This study has also shown that in most cases teachers had a challenge of the availability of teaching resources for use, especially when certain programmes are being introduced. In this study teachers needed other resource materials to support the teaching of reading using the NBTL kit. Sometimes, even the orientation on how the teaching

resources should be used is inadequate. It therefore, showed that training for teachers of the hearing impaired should be recast in certain cases to meet relevance of methodology and should be based on a system of identified needs.

Whether Grade One learners with hearing impairments break through to literacy in year one.

The study had shown that most of the learners with hearing impairments fail to break through in reading at the end of the first year in school. Some of the reasons teachers gave were that they are slow in learning following the stages of the course. At times the teacher may not find the hand shape for a certain word.

In addition, there is also a combination of American Signs when the teachers teach. This is especially so when the teachers experience numerous challenges. This slows down the level of learning to read. Hearing impaired learners indicated that their successes in reading are not as a result of learning using the NBTL, but because of American Sign Language.

Teachers' views on suitability of the NBTL course for teaching reading to Grade One learners

In this study teachers showed that NBTL is not a suitable course to use in teaching reading to the hearing impaired learners. They stated that even if the methodology was very good for learners with normal hearing it did not work well in certain areas for learners with hearing impairments. The study also showed that the hearing impaired improved in reading not because of the new approaches to teaching of NBTL but because of the ordinary methodology from colleges of education based on the use of American Sign Language.

In addition, the teachers stated that they had very little time to spare other than in class where they teach children to effectively read. They indicated that outside teaching time they were involved in other extracurricular activities such as sports, production unit, clubs and other responsibilities that they were given by the school and should carry out effectively. In most cases they have more than one responsibility hence leaving very little time to meet pupils for remedial teaching.

Conclusion

The study found that the major challenges that teachers faced in using the NBTL course to teach reading were that local signs that the children come with to school when they are being introduced to reading were not similar such that teachers do not understand them and learners themselves, making it difficult for teachers to apply the NBTL methodology. The other challenge was that they do not complete the sets in all the stages like the so called normal since they learn at a slower pace. The study also revealed that there aren't adequate instructions and teaching resources that are needed to sufficiently teach reading to learners with hearing impairments to meet demands of new initiatives. This should also include specialized guidelines from the Curriculum Development specialists. It came out also that the vocabulary in the NBTL course has limitations in sign language of some Zambian Language words making it difficulties for teachers to teach.

Recommendations

Arising from the findings of this study, various

recommendations have been proposed

1. Teachers in schools and units for the learners with hearing impairments should hold regular training workshops to discuss on how some aspects such as NBTL can better be integrated in the existing curriculum;
 2. Head teachers should organise regular in-house workshops to train teachers for the learners with hearing impairments on the new and challenging techniques in teaching and learning.
 3. Institutions offering special education should link their courses to the school curriculum.
 4. The Ministry of Education should implement the recommended Zambian Sign Language in all schools and units for the hearing impaired so that the teaching of reading in local signs to Grade One hearing impaired can be a reality.
 5. The Curriculum Development Centre subject specialists should introduce the use of pictorial books with signs.
 6. Schools to explore the use of reading equipment, such as projectors when teaching the hearing impaired learners. This is where the teacher displays a sign that the learners need to learn representing a word.
 7. Curriculum Development Centre should make use of the Zambian Signs in schools and units for the hearing impaired introduced by the Zambia National Association for the Deaf (ZNAD) in implementing the NBTL course.
- Teachers expressed doubt on the sustainability and effectiveness of the NBTL course for teaching reading to Grade One learners with hearing impairments.

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