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# ACCESSIBILITY OF CURRICULUM BY LEARNERS WITH HEARING IMPAIRMENT IN SCHOOLS: A CASE STUDY OF BULAWAYO SECONDARY SCHOOLS IN ZIMBABWE

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## Abstract

The study sought to find out the challenges and opportunities of including deaf students in mainstream secondary schools in Bulawayo area in Zimbabwe. Fifteen participants (1 school head, 4 mainstream teachers, and 10 deaf students) were purposively selected. All participants were interviewed individually. Theme identification methods were used to analyse data. All the deaf students had hearing aids and were mostly taught by regular class teachers in the mainstream but with constant withdrawal to the resource rooms for specialised services such as auditory training. Despite wearing hearing aids most deaf students could not hear the spoken languages used by teachers. All mainstream teachers were not conversant with Sign Language. There was occasional Sign Language 'interpretation' in the mainstream classes whenever the specialist teachers were available. Deaf students participated in most out-of-class activities with hearing peers. It was concluded that the deaf students were socially included but were academically excluded because of lack of linguistic access to the academic curriculum in the secondary schools.

**Key words:** curriculum, sign language, hearing impairment, the deaf,

## 1. INTRODUCTION AND BACKGROUND TO THE STUDY

The aim of this study is to find out the level of curriculum accessibility by learners who are deaf in secondary schools in Bulawayo. Zimbabwe like many countries of the world adopted an inclusive approach to education. This development has brought about a shift in educating learners who are deaf. Many students who are deaf learn together with their non-disabled peers. As more students who are deaf join the mainstream secondary schools there is need for curriculum adaptation to meet their needs. Students who are deaf or hard of hearing at secondary level may find it difficult to access the curriculum.

The United Nations emerged as a major player in assisting nations to develop inclusive settings by passing a number of declarations. Among these are the Convention of the Rights of the Child (1989) and the Salamanca Statement (1994). The adoption of UNESCO's Salamanca statement and framework for action on special needs education (UNESCO 1994) has resulted in inclusion of children with



special educational needs in educational settings becoming a primary service option. Each of the above declarations had implications to inclusion. In Zimbabwe, issues concerning the education of children who are Deaf or hard of hearing were put into perspective. The developments implied that learners who are Deaf or hard of hearing were to learn together with their non-disabled peers. The curriculum in the mainstream secondary schools had to be streamlined to meet the needs of students who are Deaf or hard of hearing. Since signing the 1994 Salamanca statement and framework for action, performance of students who are Deaf or hard of hearing has not been encouraging in Zimbabwean secondary schools.

The pass rate at 'O' level of learners who are hearing impaired in Zimbabwean secondary schools is low. Students who are hearing impaired seem to experience perpetual failure in most subjects offered at secondary level. Gaining access to the full curriculum by deaf and hard of hearing students in mainstream secondary schools seems complicated in the absence of teachers with sign language knowledge. Most teachers in the Zimbabwean secondary schools seem to have little or no knowledge of sign language. This study sought to investigate curriculum accessibility by learners who are hearing impaired. Curriculum accessibility by learners who are deaf can also be successful through teacher collaboration. Antia and Stinson (1999) postulate that education is better for the deaf and hard of hearing students when there is greater collaboration between special education staff and the regular classroom teacher.

At secondary level, the curriculum includes coverage of more than eight subjects that will be examinable towards the end of the four year programme. Mastery of such subjects demands receptive and expressive skills which most children who are deaf and hard of hearing do not possess. It therefore seems that accessibility of the secondary school curriculum is rather complicated for students who are deaf and hard of hearing. Different teachers use different approaches and their sensitivity to the needs of a learner who is deaf or hard of hearing may also differ. This might have negative implications towards curriculum accessibility by students who are deaf or hard of hearing.

It is thought that this inadequate level of performance has persisted over such a long time that it has come to be accepted by a majority of educators. Students with hearing impairment in the regular secondary schools seem to find it difficult to adjust to the oral communication demands. This is supported by Antia and Stinson (1993:3) who point out that the most basic problem faced when deaf and hard of hearing and the hearing are educated together is mutual access to communication. The oral methods of communication followed in the regular secondary settings make it difficult for students with hearing impairment to access the regular curriculum. Whilst the resource unit specialist may be there to modify the content for students with hearing impairment that service may not be enough to ensure they master the concepts in the different subjects holistically.

Marshark, Spencer, Adams and Sapere (2011) cited in the National Council for Special Education Policy Paper (2011:45) note that teacher variables are likely to account for at least half of the variance in outcomes between deaf and hard of hearing pupils and hearing pupils. They further suggest that there are differences emerging between teachers with and without experience in teaching deaf and hard of hearing students. Most if not all teachers in the mainstream secondary schools do not possess any relevant experience in teaching the deaf and hard of hearing students. It is against the above view that this study investigated the challenges faced by learners who are deaf or hard of hearing in accessing the curriculum in secondary schools. It seems students who are hearing impaired find it difficult to access the secondary school curriculum in the manner their non-disabled peers do.

The physical environment of the classroom is an important factor in facilitating access to education for deaf and hard of hearing children. Lack of acoustically treated classrooms in most mainstream secondary schools could be a factor that makes it difficult for students who are hearing impaired from accessing the curriculum. The effect of ambient noises in the classroom distorts their learning thereby rendering their inclusion ineffective.

## **2. Theoretical Framework**

The theoretical framework of this research is grounded on John Locke's essay concerning human understanding. John Locke's argument centres on the theory that ideas are acquired from without and imprinted by external forces. Children are said to absorb simple ideas about particular things via their senses. Similarly, children who are deaf by virtue of their inability to perceive human speech subsequently rely on their residual senses to gain knowledge and understand the environment. John Locke (1634-1704) emphasized that ideas which people have in their minds are the product of their experiences. Experience in this regard is gained through the working senses. Deaf and hard of hearing pupils benefit most through their sense of sight. Experts in deaf education say that the deaf learners hear with their eyes. For deaf learners to access to the curriculum at secondary level there is need to utilise



practical approaches to learning. The regular school system should be versatile in sign language to increase communication with learners who are deaf.

The curriculum in its entirety should be adapted in order to satisfy the needs of all. The school ethos should be inclusive and allow for mutual interaction among the deaf and their speaking peers. Deaf students require special services which must be offered by qualified and skilled teachers in order to respond to their unique needs (Beveridge, 1999). The process of educating students who are deaf and hard of hearing are affected by factors like attitudes, quality of services offered to schools and families, acoustic environment, type and degree of hearing loss, language and speech abilities (El Zraigat, 2009). In support of John Locke's theory, Bassano (1982) suggests that teachers must employ activities that involve many if not all the senses in order to teach students to communicate. In the same vein, Kalvoda (1978) points out those multisensory learning techniques have also proven to be helpful in the development of language.

### **3. STATEMENT OF THE PROBLEM**

This research sought to answer the following major question: 'How would learners with hearing impairment adapt to the curriculum offered in mainstream secondary schools? Regular secondary school teachers might be failing to adapt the curriculum to meet the needs of learners who are hearing impaired.

#### **3.1 Research Questions**

- What are the challenges that inhibit the deaf or hard of hearing students from accessing the secondary school curriculum?
- How can the secondary school curriculum be adapted to accommodate learners who Deaf or hard of hearing?

### **4. METHODOLOGY**

#### **4.1 Design**

This was a case study designed to find out the level of curriculum accessibility by learners who are deaf in secondary schools in Bulawayo. The researcher used King George VI Memorial secondary school as the participating inclusive school. Since the researcher was interested in finding out themes revolving around the challenges and opportunities situated in the systems, the level of curriculum accessibility by learners who are deaf, he used qualitative methods to facilitate the collection of data as a whole

#### **4.2 Sample**

The sample for this study comprised all the 10 deaf students (4 boys and 6 girls) who are doing O level at King George VI Memorial Secondary School. The school was purposefully selected because it has an inclusive system that caters for the deaf, the visually impaired and the non-disabled learners. Five mainstream teachers (5 females) into whose classes the deaf learners were included were conveniently selected into this study. The teacher participants were selected on the assumption that they were aware of the challenges and opportunities of curriculum accessibility by learners who are deaf in inclusive education while deaf learners were selected to represent their own views on curriculum accessibility by learners who are deaf in the school systems. The participants were assured of confidentiality and anonymity in reporting the case study in order to maintain the integrity of the institution concerned. Informed consent was then sought and given by the parents, school-head, teachers and students. Participants were advised that they were free to withdraw from the study at any time and were promised access to the final research results.

#### **4.3 Instruments**

Interviews and focus group discussions were employed. The interviews for the deaf learners were meant to ascertain whether the learners felt that they had equal opportunity for curriculum accessibility with the non-disabled learners in the same class. The focus group discussions enabled the researcher to find information from the teachers on the levels of curriculum accessibility by the deaf learners in their classes. The deaf learners' interviews were designed to get information on learners' opinions and perceptions on the



levels of curriculum accessibility by the deaf learners in inclusive classes. The teachers' focus group interviews sought to understand the extent to which the deaf participated in class and in out-of-class activities.

#### 4.4 Data Collection Procedure

Permission to collect data from the schools was sought and obtained from the government through the Ministry of Primary and Secondary Education. An assistant researcher, with knowledge of sign language was used to conduct the interviews and focus group discussions.

#### 4.5 Data Analysis

The data were analysed using theme identification methods. Themes are umbrella constructs which are can be identified before, during and after data collection. This means that data analysis and data collection were done simultaneously as advocated by Marshall and Rossman (1989) in Creswell (2009). After reading through all the data to get a general sense of the information and reflecting on its overall meaning, detailed analysis involving coding was done. Theme identification entailed comparing and contrasting material. This method allowed the researcher to examine the teachers', and deaf pupils' points of views.

### 5. FINDINGS AND DISCUSSION

#### 5.1 What are the challenges that inhibit the deaf or hard of hearing students from accessing the secondary school curriculum?

From the data collected, the deaf learners felt that one of the challenges in accessing the curriculum by Deaf and hard of hearing students is based on the language for communication. It is believed that for a deaf child learning in mainstream environment languages for communication and instruction will be more than one. Establishment of the language which is classified as first language can be difficult. It is therefore a big challenge for Deaf and hard of hearing learners to access the curriculum at secondary level in Zimbabwean schools. English is the official language of communication and instruction. One of the deaf learners had this to say:

*For deaf learners, sign language may be their first language. Because of the prominence given to English in the mainstream schools, the deaf are commonly delayed in exposure to their first language. Accessibility to the secondary school curriculum becomes difficult.*

Communication is the pivot of everything that human beings endeavour to do. Deaf and hard of hearing students fail to directly communicate with their non-disabled peers in the mainstream schools. Lack of additional support in the mainstream like sign language interpreters and hearing aids make it difficult for the Deaf and hard of hearing learners to access the curriculum. Doyle and Dye(2002:1)observed that most teachers in the mainstream feel ill prepared to meet the unique needs of Deaf learners. Curriculum accessibility is a challenge to learners who are deaf because most mainstream classes do not have a peer buddy to assist on track and gaining clues to missed information(Doyle and Dye 2002:18).Ambient noises are amplified in mainstream classes making them discomfort zones for hearing aid users. One of the teachers pointed out that: *the noisy mainstream environment makes it difficult for Deaf learners to access the curriculum.* This is supported by Doyle and Dye(2002:34) who stated that inappropriate acoustics in a classroom can compromise speech perception. This scenario has implications to poor curriculum accessibility thereby putting Deaf and hard of hearing learners at risk of failure.

Reverberation is the remainder of the sound that exists in a room after the source has stopped (often referred to as echo).This echoing effect occurs in classrooms that do not have enough sound absorbing surfaces. Deaf learners who are mainstreamed usually learn in such environments. This echoing effect also contributes to background noise levels which in turn cover up for the spoken word from the teacher. From the focus group discussion, a teacher raised the point that: *deaf and hard of hearing students come into and leave the mainstream classroom with less content knowledge than their hearing peers.* Furthermore, it is thought that instruction via sign language generally does not translate to better performance than the same information via text. This automatically has implications to difficulties in accessing the regular curriculum by Deaf and hard of hearing learners. One of the deaf learners pointed out that:

*'Most teachers in the mainstream feel ill prepared to meet the unique needs of learners who are Deaf and hard of hearing and most of themainstream teachers rarely attend to individual differences of learners. They ignore deaf children in class because of their inability to communicate in sign language.*



Negative attitudes of regular teachers because of limited knowledge in assisting learners who are deaf are quite rampant in the mainstream schools. Adaptation of the broad secondary school curriculum is not an easy task considering the demand for good results by education authorities in Zimbabwe.

The findings also indicate that most of the teachers in the secondary schools cannot communicate with students who are Deaf in sign language. This is confirmed by the deaf learners who pointed out that the teachers do not communicate with the learners who are Deaf in sign language and that there are no sign language interpreters to facilitate their communication with the students who are Deaf. It was also revealed that all the teachers indicated that the classrooms are not carpeted to trap noise. This confirms that the classroom environments are not conducive environments for the students who are Deaf.

## **5.2 How can the secondary school curriculum be adapted to accommodate learners who Deaf or hard of hearing?**

The teachers who participated in this research felt that collaboration in teaching the Deaf and hard of hearing is crucial in enabling access to the secondary school curriculum. Collaboration can broadly be defined as the interaction among two or more individuals encompassing a variety of behaviours, including communication, information sharing, coordination, cooperation, problem solving and negotiation. School based collaboration maybe defined as joint planning, decision-making and problem solving that may occur in variety of formal or informal group configurations for the purpose of accomplishing a common goal. The school Head had this to say, *'to fully benefit from education, students who are Deaf and hard of hearing need support from varying expertise who include audiologists, speech therapists, parents, general educators and specialist teachers.'* These varying experts should have specific training, knowledge and skills for Deaf or hard of hearing in assistive technology, classroom environment and communication methods.

One of the deaf learners pointed out that, parental involvement is also critical in determining positive outcomes for learners who are Deaf and hard of hearing in mainstream environments. According to the Alberta Education Standards for Special Education (2004:6) parents have access to information regarding all education programming and communication options as well as all educational and health services to their child. Learners who are Deaf and hard of hearing have a range of abilities that require different services and needs that may demand a variety of supports to meet their educational goals.

The teachers who participated in this study felt that the students who are Deaf and hard of hearing can benefit academically in inclusive environments when collaborative teaching is properly implemented. Pugach and Wesson(1995)in Antia and Stinson (1999:1)point out that students perceive the different roles of different teachers in collaborative teams and select whom to consult under different situations and for different purposes. For instance, a student who is Deaf and hard of hearing may want to consult the sign interpreter to elaborate what the general educator would have said orally. It is also thought that the incorporation of deaf teachers as part of the collaborative team enables students to access the curriculum. Antia and Stinson (1999:8) observed that teachers felt that having a partner with whom to communicate allows for better address of the needs of Deaf and hard of hearing students.

## **6. CONCLUSIONS**

From the findings of this study, it can be concluded that learners who are Deaf in mainstream secondary schools are taught by teachers who have no professional qualifications in special needs education thereby compromising the quality of education for these learners. The classroom environments are not conducive to the smooth learning of students who are Deaf and hard of hearing restricting them from benefitting from every day learning. The high teacher student ratio in mainstream secondary schools is not conducive for individualised teaching thereby limiting the deaf students from accessing the curriculum.

In addition the mainstream secondary school teachers cannot communicate with learners who are Deaf in sign language thereby restricting the flow of necessary information key to their learning. The parents of students who are Deaf are not actively involved in the education of their children thereby compromising their education. However it emerged that the secondary school teachers closely collaborate with the resource room teachers thereby benefitting students who are Deaf educationally.

This study also conclude that students who are Deaf or hard of hearing are not fully accessing the secondary school curriculum. Furthermore, the failure by secondary school teachers and hearing students to communicate in sign language leaves students who are Deaf at a serious disadvantage in terms of accessing the curriculum.



## 7. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made: There is need for continuous training of new teachers and in servicing of teachers to communicate in sign language and this will increase curriculum accessibility to the Deaf learners. In addition the Ministry of Primary and Secondary Education should make efforts to make environmental adaptations in secondary schools where students who are Deaf learn.

The study further recommends that secondary schools that enrol students who are Deaf should closely work with organisations for and of the Deaf in increasing the prominence of sign language acquisition. The secondary school curriculum should have a bias towards practical subjects that are enable students who deaf and hearing to acquire entrepreneurial skills that are crucial for independent living.

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