

## CLASSROOM ENVIRONMENT AND ITS SUPPORT TO EFFECTIVE CLASSROOM COMMUNICATION FOR DEAF LEARNERS

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**ABSTRACT:** The purpose of the study was to determine the impact of classroom communication on academic performance of learners with hearing impairment. A case of Kambui School for the Deaf, Kiambu County-Kenya. The specific objective was to establish whether the classroom environment was supportive to effective classroom communication for learners with hearing impairment. The study was guided by the Holcomb's 1967 Total Communication Theory. It adopted descriptive case study design. The respondents were the head teacher, ten teachers and sixty learners, giving a total sample of 71 participants ( $n = 71$ ). Data was collected by the use of interviews, questionnaires and observations. A combination of content analysis and thematic approach was used to analyze qualitative data. Research findings indicated that, classroom environment was not supportive to effective classroom communication. To support improved academic outcomes of learners with hearing impairment, it is important that their direct experiences in the classroom is understood. The school had large class sizes which affected teacher learner interaction. It was noted that, there was inadequate teaching and learning materials. In order to improve academic performance accommodations such as small class sizes, spacious classroom, well ventilation, a good lighting and noise management need to be observed.

**KEYWORDS:** Classroom, communication modes, learning, academic performance, environment.

### BACKGROUND TO THE STUDY

The classroom environment and activities are what learners experience directly and they are the mechanism through which educational interventions are most likely to produce desired improvements in learner's performance. Peters (2004) in a study titled inclusive education, and education for all strategy for all children; revealed that, environment played a significant role in disabling majority learners. Ademokoya (2008) in a study titled classroom communication and placement of learners with hearing impairment in an inclusive class carried out in Nigeria found that, to support improved outcomes of learners with hearing impairment, it was important that, their direct experiences in the classroom were understood.

A study carried out in Zambia by Malunga (2007) titled an investigation on the use of sign language and language by regular teachers teaching learners with hearing impairment showed that in relation to the learning environment, the best possible conditions were a quiet place and good lightening. This allowed learners with hearing impairment to concentrate and follow what was being lip-read. A study by Liwakala (2003) carried out in Mpika, Zambia, reported that, learners with hearing impairment were visual learners. As a result, an attractive classroom with talking walls such as interesting notice boards and charts around the room, visual teaching aids such as pictures, diagrams and word maps assisted the learners to learn. In relation to seating arrangement, Liwakala (2003) found that it was very cardinal that learners with hearing impairment sat on chairs so that they could see both the teachers and their peers as much as possible. This was attributed to the fact that, the learners are able to see the various signs, lip-read and interpret body language as they were in full view of all participants in the classroom.

A study carried out by Ekwama (2003) in Nigeria, found that, in order to accommodate learners with hearing impairment who used hearing aids, it was vital to minimize noise. If there was noise from outside, doors needed to be shut and in certain instances, windows were shut. These measures were put in place in order to reduce background noise. It was highlighted

that background noise, reverberation and distance from the speaker were real issues for learners with hearing impairment, even those with mild or unilateral hearing loss who were able to hear in the classroom.

#### **PURPOSE OF THE STUDY**

The study sought to establish whether classroom environment was supportive to effective classroom communication for learners with hearing impairment.

#### **STATEMENT OF THE PROBLEM**

Classroom environment and activities are what learners experience directly and they are the mechanism through which educational interventions are most likely to produce desired improvements in learner's academic performance. Environment can disable learner's performance; therefore their direct experiences in the classroom should be understood. If classroom environment is to play a positive role in the academic performance of learners with hearing impairment, certain accommodations need to be made in the classroom. Accommodations such as, small class sizes, spacious classroom, well ventilation, a good lighting, attractive classrooms with talking walls and well managed background noise.

#### **OBJECTIVE OF THE STUDY**

The study sought to establish whether classroom environment was supportive to effective classroom communication for deaf learners.

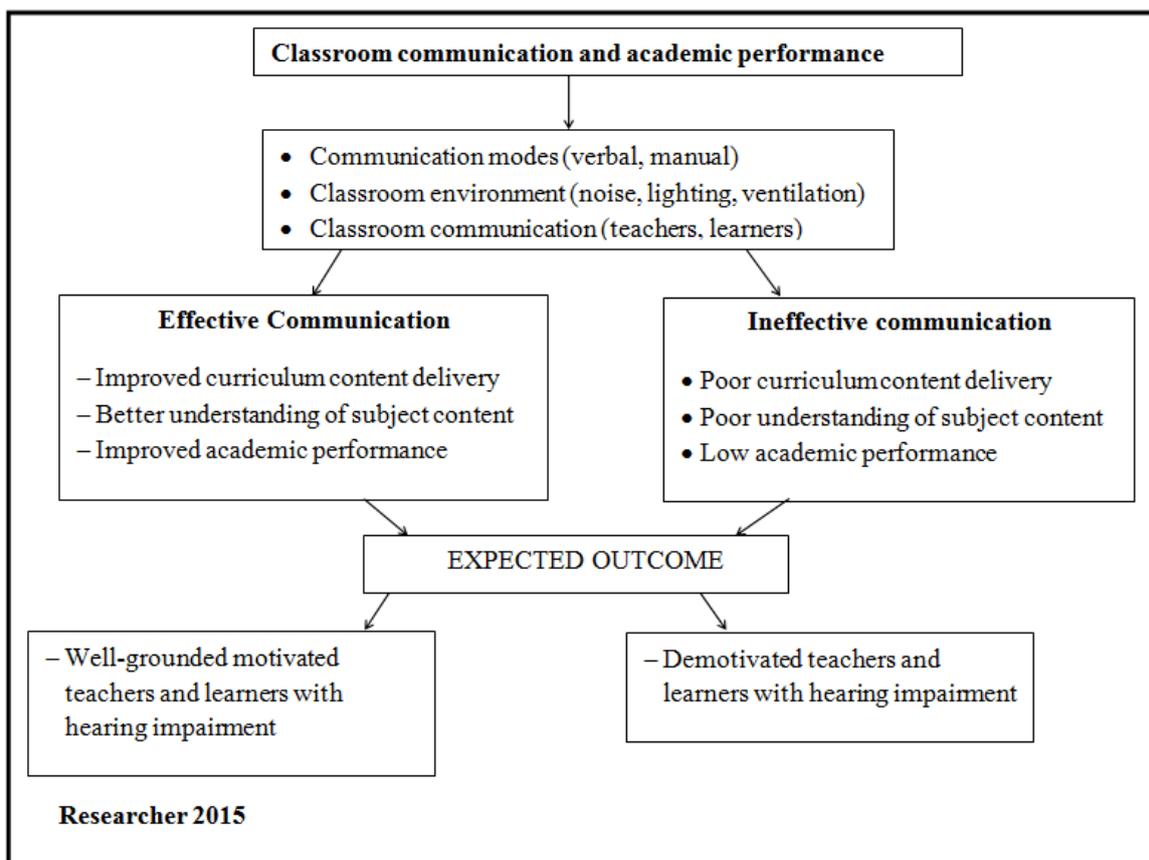
#### **THEORETICAL FRAMEWORK**

The study was guided by Holcomb's (1967), Total Communication Theory (Scouten, 1984). Total communication advocates the use of one or several communication mode(s) that is, manual, oral and writing. Teachers may use the communication mode(s) appropriate for a particular child at a particular stage of development (Reed, 2009). One limitation is that, while the Theory may be sound, it may not be put into practice accurately enough in some situations. Although the idea of individualization is at the heart of Total Communication, teachers are limited to how many different communication modes they can use at one time.

#### **CONCEPTUAL FRAMEWORK**

The major concepts undelaying the study were: classroom communication, communication modes and academic performance of learners with Hearing Impairment.

*Table 1: Classroom communication and academic performance*



**RESEARCH METHODOLOGY**

The study adopted descriptive case study design. A mixed method procedure was used in which observation; interview and questionnaires were employed throughout the study. The questionnaires were important to find out learners perceptions relating to classroom communication and its necessity and importance for academic performance. Classroom observations were necessary to investigate the classroom communication practices of teachers and learners with hearing Impairment.

**TARGET POPULATION**

The total target population comprised of 276 respondents (N-276). It consisted all the 251 learners (129boys and 122girls) (2013 enrolment) and twenty five teachers (12 male and 13female).

**SAMPLING TECHNIQUE AND SAMPLE SIZE**

The study used purposive sampling to select the school and the headteacher. Simple random sampling was used to select a sample size of ten teachers (5male and 5 female) and sixty learners (30boys and 30girls) giving a sample total of 71 respondents (n-71).

**RESEARCH INSTRUMENTS**

The study utilized both primary and secondary data. Primary data was generated using questionnaire interviews and observations. Secondary data was generated from institutions records such as school enrollment, academic records and teacher’s qualifications.

## PILOT STUDY

A pilot study was conducted at Kerugoya School for the Deaf which had similar characteristic as the actual study school. The study sample had a total of 27 respondents (n – 27) (seven teachers and 20 learners with Hearing Impairment).

## VALIDITY AND RELIABILITY

For the purpose of validity, opinions from expert were considered. The data collected was certified using triangulation. Reliability of the instruments was determined by test-retest method on the pilot study sample after two weeks.

## DATA COLLECTION

The researcher obtained permission from relevant authorities such as Kenyatta University, the National Council for Science and Technology (NCST) Kiambu County Commissioner, Kiambu County Director of Education and lastly the head teacher of the school. Informal appointments were made with the respondents. The researcher visited the school for four days to create rapport, conduct interviews and then collect questionnaires. Two teachers from the school helped in organizing the learners and collecting the questionnaires. Kenyan sign language was used all through the data collection period.

## DATA ANALYSIS

The data collected was analyzed using the thematic framework. The study focused on identifying and describing both implicit and explicit ideas within the themes as stipulated in the research objectives. Coding was used to represent themes and linked to raw data for analysis. The results were in line with the obtained study themes.

## FINDINGS

The study sought to find out if classroom environment was supportive to classroom communication for learners with hearing impairment. The findings reviewed that, the model of the classrooms was made in such a way that it accommodate a maximum of twelve learners at any given time. This prescribed classroom enabled enough ventilation, good lighting and one-on-one teaching interaction with the learners. However, the classrooms were compromised by large class sizes of over twenty learners, therefore making it difficult for the teacher to communicate effectively. It was also difficult for the teachers to address individual needs of the learners.

Similarly any seating arrangement should not isolate the learner. Moreover some learners with hearing impairments also had visual impairments. These learners needed to have a very clear view of the teacher, peers and teaching and learning materials of which without the learners were more handicapped. This is supported by Liwakala, (2003), who found that, it was very cardinal that learners with hearing impairment sat on chairs so that they could see both the teachers and their peers as much as possible. This was attributed to the fact that, the learners are able to see the various signs, lip-read and interpret body language as they were in full view of all participants in the classroom.

Findings showed that background noise was not well managed. Ventilation and lighting was another problem for all classes, windows were covered with newspaper which prevented good lighting and ventilations. There were few old hanging charts in some classes. Most classrooms lacked attractive talking walls; I support findings by Malunga, (2007), in his study titled an investigation on the regular teachers teaching learners with hearing impairment in Zambia which revealed that the best possible learning environment for learners with hearing impairment would be a quiet place with good lighting. This would allow learners with hearing impairment to concentrate and follow what is being lip-read and signed. Since learners with hearing impairment are visual learners, they needed attractive interesting notice boards and charts around the room, visual teaching aids such as pictures and diagrams will assist the learners to learn. It was also revealed that background noise and reverberation were real issues for learners with mild hearing impairment. Ekwama, (2003), in his study in Nigeria found that, in order to accommodate learners with hearing impairment who used hearing aids, it was vital to minimize noise. He suggested that, if there was noise from outside doors needed to be shut and in certain instances, windows were shut. Those measures need to be put in place in order to reduce background noise. Findings showed that classroom environment was not supportive to effective classroom communication which could have contributed to the learner's dismal academic performance. Ainscow, (2007), highlighted that, without communication there would be no education, no matter how

qualified a teacher and relevant of the adaptation of content. In order to support improved outcomes of learners with hearing impairment, it is important that their direct experiences in the classroom are understood.

## **DISCUSSION**

The study focused on learners with hearing impairment, their communication, classroom environment and academic performance. The analysis of the study showed that, the classroom environment in the school was not supportive to effective classroom communication which could have contributed to learner's decimal academic performance. According to Heward, (2006), most learning occurs through interacting with other people, such learning is possible only when individuals are able to communicate with understanding. Likewise, the quality of the relationship between a learner with hearing impairment and his/her teachers is dependent on the quality of communication existing between them. Just like communication modes play vital role in enhancing academic performance, classroom environments is vital in enhancing classroom communication. If classroom environment is to play a positive role in the academic performance of learners with hearing impairment, accommodations such as, small class sizes, specious classrooms, good lighting and ventilation, noise management and provision of adequate teaching and learning materials need to be made in the classrooms.

## **RECOMMENDATIONS**

The study sought to determine the impact of classroom communication on academic performance of learners with hearing impairment of interest was whether classroom environment was supportive to effective classroom communication. Basing on the study findings the researcher recommends the following:

- The government of Kenya in conjunction with the Ministry of Education Science and Technology (Special Education Section) needs to provide more funds in Special Education Institutions to cater for the infrastructure. This will allow the school to accommodate more learners.
- The government of Kenya should to establish more schools for learners with hearing impairment in the counties. This would help to accommodate the growing number of such learners. The current environment in the school is too high and just to mention the waiting list for admission is equally long.
- The Government of Kenya to allocate more funds for purchasing teaching and learning materials, as learners with hearing impairment are visual learners.

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