



Research Paper

Teachers' Instructional Strategies And Academic Performance Of Student With Hearing Impairment In Inclusive Classroom In Akwa Ibom State

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ABSTRACT

This study investigated the influence of teachers' instructional strategies on academic performance of students with hearing impairment in inclusive classroom in AkwaIbom State. Two purposes were postulated to guide the study and two null hypotheses were postulated to guide the study. Descriptive survey research design was employed and used for this study. The population of the study was 72students' with hearing impairment. A sample size of 72students' with hearing impairment selected through purposive sampling technique. Teachers' Instructional Strategies Questionnaire` (TISQ) was used to elicit Academic Performance in core two subjects (English Language and Mathematics). The instrument validity and reliability was determined. Dependent t-test was used to test the null hypotheses at 0.05 level of significance. The findings showed that there is a significant influence of teachers' instructional strategies on academic performance of student with hearing impairment in inclusive classroom in AkwaIbom State. Based on the findings of the study, it was recommended among others that seminars and conferences should be organized by teacher educators for teachers from time to time to keep them abreast of different teaching strategies which they would use in implementing school curriculum.

Key Word; Instructional Strategies, Academic Performance, Student with Hearing Impairment and Inclusive Classroom.

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I. INTRODUCTION

Creating inclusive schools remains a major challenge that faces the education systems worldwide (Mitchell, 2015). An all-embracing education remains a multi-layered and challenging issue as the development of inclusive practices in schools is not well understood (Anastasiou and Kauffman, 2012; Winzer and Mazurek, 2017). Inclusive education affects not just in principle and the nature of education provided for students with disabilities, but it calls into cross-examining the broader aims of education, the purpose of schools, the nature of the curriculum, methods of assessment, and schools' accommodation to diversity. The way in which regular schools respond to students with disability can be a measure of quality education for all students (UNESCO, 2015). Weber and Ruch (2012) maintain that a good school is good to all students and labours for the success of all learners. This calls for a need to modify school strategies and the environment to meet learners' diversity (Agarwal and Chakravarti, 2014).

According to the Individuals with Disabilities Education Act (IDEA), the definition of a hearing impairment is "an impairment in hearing, whether permanent or fluctuating, that adversely affects a child's education performance but is not included under the definition of 'deafness'" (Bernadette and Barbara, 1998). The severity of hearing impairments varies from case to case, but any hearing impairment can affect a student's educational performance. Hearing impairments can be diagnosed during the infant stage of development or

throughout an individual's life. Likewise, the cause of a hearing impairment can be from developmental damage or cochlear damage from exposure to excessively loud noise. Most students who have hearing impairments will be pre-diagnosed and may have a hearing aid or cochlear implant. If a student seems hard of hearing in the classroom, it is advised that the teacher recommend the student seek a medical professional to determine if a hearing impairment exists.

According to WHO (2001) in CBM (2016) There are an estimated 250 million people with hearing loss in the world, of whom approximately 30 million are hearing impaired. Based on available figures, less than 1% of hearing impaired children in developing countries has access to any form of education. The education of hearing impaired children is affected by controversies of philosophical and methodological nature. Hearing impaired generally does not have access to appropriate services and tend to be neglected within available structures. Hearing impaired students are recognized as linguistic and cultural minorities that use a gestural or visual language as their basic learning form and that they need trained and experienced professionals (Baldwin, 1994).

Bodner-Johnson (1996) described it as a communication philosophy where signs, speech, gestures, speech-reading, amplification and/or finger-spelling may be used to provide linguistic input to deaf children. Children taught using this approach are allowed to express themselves in the mode of their choice. The philosophy of Total Communication assumes that different children benefit from using different modalities in various situations. Thus, one description of Total Communication could be the simultaneous use of speech and signs to represent English. In this instance, manual systems used with Total Communication in the past include invented systems such as Signed English, Signing Exact English, Seeing Essential English and Linguistics of Visual English, amongst others. Another description could be the choice of sign or speech and the use of speech-reading and residual hearing for communication purposes.

Total Communication techniques are modalities that are used to educate learners with HI (Ayieba, 2012). Techniques such as finger spelling (the Sign Language alphabet), mime, writing, pictures, lip-reading, gestures and oral speech may be used. The use of residual hearing via amplification such as hearing cues, cochlea implants, and FM systems may be encouraged. Different approaches have been applied in the world over an effort to develop the language of learners with hearing impairment. Manually coded sign systems have been in use to represent speech in form of gestures, signs that follow the grammar of a language. These signs are a combination of signs from 'natural' sign languages and invented signs to represent grammatical aspects of the spoken language (Stredler-brown, 2010). The signs are commonly referred to as Total Communication which uses variety of communication patterns and different strategies in teaching learners with HI (Moores, 2001; Stredler-brown, 2010). The signs are a combined use of the learner's own gestures, sign language, speech, finger spelling, manually coded sign systems, drawing, imitating, and lip reading (Werner, 2007).

The teachers who teach in hearing impairment inclusive classes should be competent in sign language so as to sign for the hearing impaired students to follow-up and understand what is going on in the lesson. Moreover, the interpreters can be used in the classroom to translate teacher's speech, voicing student sign language, mediating communication between hearing impaired students and their peers, and monitoring overall classroom behavior (Cawthon, 2001). Furthermore, some students may require lip reading to reach a normal level of comprehension and these will need preferential seating arrangements (Chimedza and Peterson, 2003) in Gudyanga et al. (2014). Also, a hearing impaired child in an inclusive class may lack attention from the teacher due to language barrier which may lead to isolation and loneliness on the part of the hearing impaired (Adoyo, 2004). Evidence from some of the literature suggests that one of the essential determinants of success or failure in education is the instructional strategies which a teacher adopts in the classroom teaching and learning. Therefore, the problem of this study posed as a question is: what is the influence of teacher's instructional strategies and academic performance of student with hearing impairment in inclusive classroom in AkwaIbom State?

Statement of the Problem

Many problems beset the inclusive education of student with hearing impairment in regular school nationwide, in general and immediate society in particular. In inclusive settings, many regular teachers teaching student with hearing impairment do not have the requisite teaching skills. In most cases such teachers are not certified to teach students with hearing impairment. Also, because such teachers are deficient in requisite skills for teaching students with hearing impairment, the teaching-learning process of students with hearing impairment is deficient as inadequate teaching method.

Over the years, so many strategies have been used and are been used in teaching learners with hearing impairment. Despite all these strategies, the performance of these learners is still nothing to write home about. Different strategies have come into play in this regard. The research sought to determine the effect of teacher's instructional strategies and academic performance of student with hearing impairment in inclusive classroom in AkwaIbom State.

The objectives of the study are to

1. Determine the influence of total communication on the academic performance of students with hearing impairment in inclusive classrooms in AkwaIbom State.
2. Determine the influence of sign language on the academic performance of students with hearing impairment in AkwaIbom State.

Hypotheses

The following null hypotheses were formulated to guide this study and tested at 0.05 level of significance:

- 1 There is no significant influence of total communication on the academic performance of students with hearing impairment in inclusive classrooms in AkwaIbom State.
- 2 There is no significant influence of sign language on the academic performance of students with hearing impairment in AkwaIbom State.

Scope of the Study

This research work is delimited to teacher's instructional strategies and academic performance of student with hearing impairment in inclusive classroom in AkwaIbom State. The study will further be delimited to two teacher's instructional strategies which are total communication, and sign language.

Research Design

Descriptive survey research design was adopted for the study. This involved a systematic and comprehensive collection of information about the opinions, attitude, feelings, and beliefs and behaviour of people through observation, interviewing, and administering of questionnaires to a relatively large and representative sample of the population of interest

Area of the Study

The study was carried out in AkwaIbom State. AkwaIbom is a state in Nigeria. It is located in the Coastal Southern part of the country, lying between latitude 4⁰32N and 5⁰33N, and longitude 7⁰25E and 8⁰22E. The state is bordered on the East by Cross River State, on the West by Rivers State and Abia State, and on the South by the Atlantic Ocean and the southernmost top of Cross River State and is currently the highest oil-and gas producing state in the country. The state capital is Uyo, with over 500,000 inhabitants. AkwaIbom has an airport (AkwaIbom International Airport) and standard stadium over 30,000 capacities and two major seaports on Atlantic Ocean with a proposed construction of a world-class seaport in Ibaka at Oron. The state has a predominantly civil service working populace, whilst other outside the public service sphere are mainly into informal sector business, farming, fishing and local crafts. Along with English, the main spoken languages are Ibibio, Annang, Eket and Oron language. AkwaIbom also occupies an outstanding position in provision of educational service in AkwaIbom State. At the tertiary level, three campuses of the University of Uyo and some private University and Polytechnics, there are many secondary, primary and secondary school. The state has three special school two are located in the state capital, there are Government Special Education Center, Mbiabong and St. Vincent Special School, Uyo as well as St. Louise Special School IkotEkpene Local Government Area.

Population of the Study

The population of the study comprised all the 72 students with hearing impairment in all the three Special Education Centres in AkwaIbom State. (AkwaIbom State Ministry of Education, 2021).

Sample and Sampling Technique

A sample size of 72 students with hearing impairment in Special Education Centre were used selected through purposive sampling technique for the study. Purposive sampling technique which is a non-probability sampling technique is adopted because it is aim at picking a characterized audience who are students with hearing impairment.

Instrumentation

For the purpose of this study, a researcher designed instrument was used titled Teachers' Instructional Strategies Questionnaire` (TISQ) structured on 4-point type Liked Scale of strongly agree (4 points), Agree (3 points), Disagree (2 points) and strongly disagree (1 point).

Validation of the Instrument

Face and content validity were established for the instrument, as the instruments were given to three experts, one classroom teacher and two lecturers from Department of Early Childhood Education (ECE) Faculty of Education, University of Uyo, who independently assessed the various items to ascertain their relevance to

the research hypotheses and language used in developing the items. These experts were required to effect correction, check the contents and appropriateness of items and make useful suggestions that were incorporated into the final version of the instrument.

Reliability of the Instrument

The reliability of Teachers' Instructional Strategies Questionnaire` (TISQ) for teachers were trail tested on 20 students who were randomly selected form the study population but were not included in the study sample. However, the scores obtained from the validated instruments were used to compute the reliability coefficient using Cronbach's Alpha Statistics that yielded the reliability indices, total communication =0 .71, and sign language = 0.88. These high reliability coefficients confirmed that these instruments were suitable and reliable for the study.

Method of Data Collection

Prior to the commencement of the study, the researcher visited each of the sampled schools for the administration of the questionnaire. This was personally done by the researcher with the help of some teachers who serve as research assistants. Before the administration, permission was sought from each Head teacher and the researcher explained the purpose of the study and the contents of the questionnaire to the respondents. Teachers' Instructional strategies Questionnaire` (TISQ) and the raw scores of the last terms examination of the students on English Language and Mathematics, were obtained from the school authorities.

Method of Data Analysis

The data collected were coded using SPSS Version 20 Software; dependent t-test was used to test the hypotheses at 0.05 level of significance. In order to take decision as regards the hypotheses, whenever the associated probability value (p-value) is less than the significant level (.05), the null hypothesis was rejected and also whenever the associated probability value (p-value) is greater than the significant level (.05), the null hypothesis was accepted.

II. RESULTS

Hypothesis One

There is no significant influence of total communication on the academic performance of students with hearing impairment in inclusive classrooms in AkwaIbom State.

Table 1: Summary of t– test for influence of total communication on the academic performance of students with hearing impairment in inclusive classrooms

Variable	n	\bar{X}	SD	Df	t-cal.	t-crit.	Decision
Total communication	72	3.17	0.65	71	4.968	1.994	Reject
Academic performance		2.16	0.76				H ₀₁

Table 1 above presents the t-test analysis of significant influence of total communication on the academic performance of students with hearing impairment in inclusive classrooms. It is observable from the Table 1 that the calculated t-value is 4.968 at 71 degree of freedom and 0.05 level of significance. Since the calculated t-value of is 4.968 is greater than the critical table value of 1.994, this hypothesis is rejected. There is therefore a significant influence of total communication on the academic performance of students with hearing impairment in inclusive classrooms.

Hypothesis Two

There is no significant influence of sign language on the academic performance of students with hearing impairment in inclusive classrooms in AkwaIbom State.

Table 2: Summary of t– test for influence of sign language on the academic performance of students with hearing impairment

Variable	n	\bar{X}	SD	Df	t-cal.	t-crit.	Decision
Sign language	72	3.51	0.56	71	2.507	1.994	Reject
Academic performance		2.24	0.75				H ₀₃

Table 2 above presents the t-test analysis of significant influence of sign language on the academic performance of students with hearing impairment in inclusive classrooms. It is observable from the Table 2 that

the calculated t-value is 2.507 at 71 degree of freedom and 0.05 level of significance. Since the calculated t-value of is 2.507 is greater than the critical table value of 1.994, this hypothesis is rejected. There is therefore a significant influence of sign language on the academic performance of students with hearing impairment in inclusive classrooms.

Major findings of the study:

- i. There is a significant influence of total communication on the academic performance of students with hearing impairment in inclusive classrooms in Akwalbom State.
- ii. There is a significant influence of sign language on the academic performance of students with hearing impairment in inclusive classrooms in Akwa Ibom State.

III. CONCLUSION

The poor performances of students in schools in recent times have become a thing of worry to parents, educators, researchers and the government. This ugly incident of students' poor academic performance is lingering, despite all the efforts of the government in ensuring that qualitative education is provided at all levels of education, for instance school facilities and infrastructure has equally been improved as well as funding, such that free education has been provided to public primary and secondary schools. Despite these efforts, pupils' performance continues to decline.

From the findings of this study it can be concluded that instructional strategies which a teacher adopts in an inclusive classroom for teaching is an essential determinant of success or failure in education. When the teachers know and adopt good measures, it is hoped that meaningful results are definite to be achieved in terms of better students' academic performance. It was also concluded from the findings of this study, that teachers' instructional strategies; mode of instruction, total communication, visual cues and sign language significantly influence academic performance of student with hearing impairment in inclusive classroom in Akwa Ibom State.

IV. RECOMMENDATIONS

On the basis of the findings of this study, the researcher therefore makes the following recommendations:

- i. Seminars and conferences should be organized by teacher educators for teachers from time to time to keep them abreast of different teaching strategies which they would use in implementing school curriculum.
- ii. Teachers should be trained on the rudiments of total communication. This will make them avoid the use of one way communication.
- iii. Teachers on their own should strive to be conversant with sign language with the view of getting them acquainted with learners with hearing impairment in their classrooms.

REFERENCES

- [1]. Adoyo, P. O. (2004). Kenyan Sign Language and Simultaneous Communication: Differential Effects on Memory and Comprehension in deaf children in Kenya. Kisumu: Lake Publishers and Enterprise Ltd, 251p.
- [2]. Agarwal, A. and Chakravarti, D. (2014). Universal Accessibility Guidelines for Pedestrian, non-motorized Vehicles and Public Transport Infrastructure. New Delhi: Available at: <https://shaktifoundation.in/wpcontent/uploads/2014/02/Universal-accessibility-guidelines.pdf>. Accessed 14 August, 2021
- [3]. Anastasiou, D. and Kauffman, J. (2012). Disability as cultural difference: Implications for special education. *In remedial and special education*. 33(3):139-149
- [4]. Ayiela, O. J. (2012). Factors affecting KCPE performance of learners with hearing impairments in special schools in selected counties. Nairobi: Kenyatta University, 410p.
- [5]. Baldwin, S. (1994). Full inclusion: reality vs. idealism, language policy. *American Annals of the Deaf*, 139 (2); 164-165.
- [6]. Bernadette, K., and Barbara, S. (1998). *IDEA's Definition of Disabilities*. *ERIC Digest E560*. Available at: <http://files.eric.ed.gov/fulltext/ED429396.pdf>. Accessed 12 August, 2021
- [7]. Cawthon, S.W. (2001). Teaching strategies in inclusive classrooms with deaf students. Oxford University Press, 425p.
- [8]. Chataika T, Mckenzie J, Swart E, Lyner-Cleophas M (2012). 'Access to Education in Africa: responding to the United Nations Convention on the Rights of Persons with disabilities. *Disability and Society*, 27(3):385-398.
- [9]. Gudyanga, E., Wadesango, N., Eliphanos, H. and Gudyanga, A. (2014). Challenges faced by students with hearing impairment in Bulawayo urban regular schools. *Mediterranean Journal of Social Sciences*, 5 (9): 35-45.
- [10]. Igbokwe, U., Mezieobi, D. and Eke, C. (2014). "Teachers Attitude to Curriculum Change: Implications for Inclusive Education in Nigeria." *Research on Humanities and social sciences*. 4(11):92-99
- [11]. Mitchell, D. (2014). Inclusive education is a multi-faceted concept. *Center for educational policy studies journal* 5(1):9-30
- [12]. Mohanty, J. (2001). Educational Technology, Publish by Rajouri garden. New Delhi, 247p.
- [13]. Moores, D. (2001). Educating the deaf: Psychology principles and practices (5th ed.). Boston: Houghton, Mifflin, 504p.
- [14]. Stredler-Brown, A. (2010). Communication choices and outcomes during the early years: An assessment and evidence-based approach. In M. Marschark and P. Spencer (Eds.), *The Oxford handbook of deaf studies, language, and education*, 492p.
- [15]. UN (2016). General comment No. 4 – Article 24: Right to inclusive education. Available at: <https://www.ohchr.org/en/hrbodies/crpd/pages/gc.aspx>. Accessed 8 August, 2021
- [16]. United Nations Educational, Scientific and Cultural Organization (UNESCO) (2015). A guide for ensuring inclusion and equity in education. Paris, France open access repository, 265p.
- [17]. Weber, M. and Ruch, W. (2012). The role of a good character in 12-year-old school children: do character strengths matter in the classroom? *Child indicators research* 5(2):317-334.

- [18]. Werner, D. (2007). *Disabled Village Children: A Guide for community health workers, rehabilitation workers and families*. Hesperian Foundation. Available at: http://www.dinf.ne.jp/doc/english/global/david/dwe002/dwe00208.html#part1c_hap6. Accessed 20 July, 2021.
- [19]. Winzer, M. and Mazurek, K. (2017). The Convention on the Rights of Persons with Disabilities: Reconstructing disability. *The Wiley Handbook of diversity in special education*, 230p.