

Rigid Assessment Methods and Lack of ICT Use Preventing Inclusion of Hearing-Impaired Learners in Mainstream Schools

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ABSTRACT

Aim of the Study: Children with hearing impairment are finding no place in mainstream schools in Pakistan. One of the major reasons identified is the fixed assessment procedure to assess their learning in the schools. The lack of alternative assessment methods and adaptations in examination by the teachers is preventing their inclusion, resulting in their repetitive failures and high drop-out rates. The study was designed to identify the causes of failure of learners with hearing impairment in the examination in mainstream schools. The study also tried to find out the challenges faced by the students with hearing impairment in the assessment tests in the mainstream schools from parents' perspectives.

Methodology: The study was qualitative in nature. Parents of children with hearing impairment (n=7) were purposively selected from the inclusive primary schools of the province Punjab. Semi-structured interviews were conducted for data collection. Thematic analysis was employed for data analysis.

Findings: Findings revealed that the absence of assistive technology and ICT; insufficient adaptations in the assessment test formats; and ignoring of the communication preferences of the students due to untrained teaching staff have caused stress among hearing-impaired learners. All these factors result in repeated failures, high dropout rates and exclusion of children with hearing impairment in general education settings.

Conclusion: It has been recommended that assistive technology, in particular, the use of ICT may be made mandatory for these visual learners in the schools. In-service teachers should be sufficiently trained to make adaptations in assessment procedures and how to use alternative assessment practices in accordance with the convenient communication styles of hearing-impaired learners for positive academic outcomes.

Keywords: Assessment Methods, Hearing Impaired, ICT, Inclusion, Mainstream, Schools.

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Introduction

A key element of the curriculum is the assessment procedure. It has been reported through research work that effective inclusion is only possible if assessment tests are adapted according to the requirements of students with hearing impairment in mainstream schools (Price, 2018). Adaptation in assessment is where the assessment task remains the same for all students but the conditions and materials to assess learning are adapted to accommodate diversity. One aspect must be kept in mind that curriculum content should not be reduced for struggling learners. (Kurth, 2013). Hearing-impaired students are mostly visual learners, therefore classroom arrangement, class instructions, and procedural changes on the board are to be adjusted according to the requirements of the students (Fulcher, 2021; Hidayat: 2017). Lack of teachers' training in making modifications to the examination papers of hearing-impaired learners is also considered a hurdle in their positive academic outcomes. Adaptations provide a better learning platform for the inclusion of students at the primary level (Ringlaben, 2002).

In developed countries, the use of ICT has advanced the cause of inclusive learning, particularly for students with hearing impairment (Tanner, Dixon & Verenikina, 2010). For instance, the United States Department of Education (2013) stated that it is crucial for all educational institutions to recognize the value of technology, particularly when it comes to teaching students with hearing impairment. However, there are still significant challenges in implementing inclusive education, particularly for students with disabilities, in some places, such as Eastern Europe, Asia, and Africa (Ribeiro & Moreira, 2010). Ireland has implemented the Technology Integration Initiative, the Teaching Skills Initiative, and the Schools Support Initiative to support the use of ICT in the instruction of students with HI. The Teaching Abilities Initiative makes sure that instructors of students with HI are properly trained and have the necessary abilities to instruct their students using ICT (Haider, 2016).

Children with hearing impairments are compelled to attend separate special schools in Pakistan. There are several causes for this exclusion, but an important one is that instructors lack the training necessary to modify the curriculum, teaching, and evaluation processes to meet the requirements of HIC (Ehsan, 2018). The goal of the current study is to identify rigid standards for assessing hearing-impaired children's learning.

Research Gap

Less research is conducted in the country on the practice of rigid assessment methods by the teachers for hearing-impaired students that force them to leave schools as a result of repetitive failures in the examination. It is a huge point of concern as Pakistan has ratified SDG-4 which advocates inclusive and quality education for all by 2030. The situation is quite alarming as 95% of children with disabilities are out of school, which includes a high percentage of children with hearing loss. The researchers wanted to explore the loopholes in assessing the learning of hearing-impaired learners to make the school education department aware of the reasons for exclusion, failure, and high drop-out rate of these struggling learners.

Literature Review

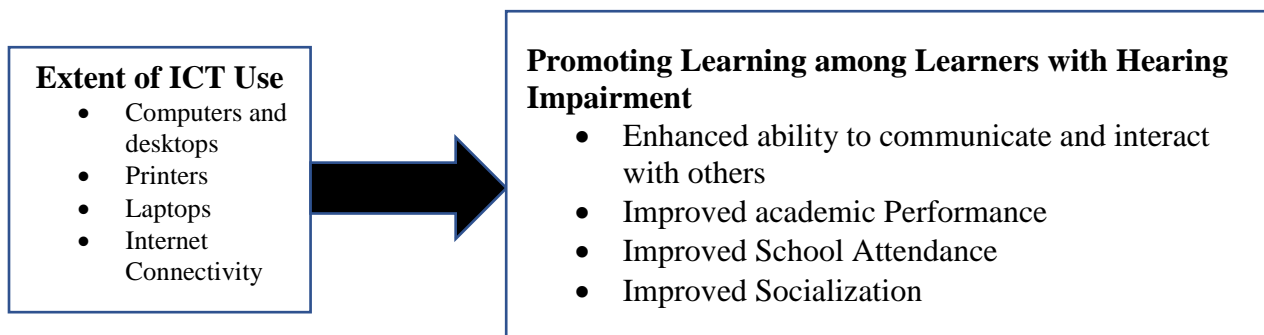
Children with hearing loss (HL) are at risk for lower educational achievement due to fixed and traditional methods to assess learning practiced in mainstream education settings (Straaten, Briare, Dirks, Soede, Rieffe, & Frijns, 2021). Hearing-impaired learners and their parents are under stress as the children are not coping with the examination system of the mainstream schools (Hussain, 2015). There is hardly any adaptation in the assessment methods visible for hearing-impaired learners in general schools. Westwood (2018), states that adaptation in the curriculum is incomplete without adapting assessment practices for children with hearing impairment. Watkins (2007), argues that removing all examination barriers with the help of diverse accommodations is the duty of the educators.

Marschark, Spencer, Adams, & Sapere (2011), found that adaptations in assessment procedures of hearing-impaired children may include focusing on the strengths of hearing-impaired learners, designing assessment tasks, and oral and written tests accordingly. Rudelic (2012), stated that adaptations also

include modification of vocabulary, use of ICT, projects, models, role play to replace tests, group assessment tasks, oral tests, provision of extra time and additional support, and breaking of tasks into pieces (Evans, 2020b). Alternative forms of the same test to the students in the form of Fill in blanks, multiple-choice questions, True/False, etc. may be given. Extra time may also help them to complete their tasks during assessment effectively (Pottas, 2006; Skrebneva, 2015). Hearing-impaired learners are taught test-taking skills before taking tests, which help educators to identify the learner's need so they can appropriately adapt the content, pedagogy, and learning activities (Cawthon, 2001).

Studies have reported that the use of ICT has a very positive impact on enhancing learning among hearing-impaired learners. Using communication and information technologies (ICT) increases the learning capacities of deaf and hard-of-hearing students (Ntinda, 2019). Teachers' perspective showed that computers help the deaf students to become creative and innovative in their academics and is quite beneficial while assessing their learning.

The following diagram illustrates the use of ICT in improving various abilities of hearing-impaired learners in the teaching-learning process:



Source: (Mwatsakal, Awori, & Karugu, 2020)

According to the study by Ishrat, Iqbal and Khan (2022), majority of the teachers are not trained in the required adaptive skills for adaptation in lesson planning/preparation, instructional delivery, and developing question papers along with its conduction requirements for hearing-impaired learners. Hearing-impaired learners are mostly absent or under stress during examination time in the schools. They avoid attending school which results in their academic failure (Mundi, 2011). Effective alternative assessment procedure and flexible examination system can only lead to positive academic outcomes from diverse learners, including learners with hearing impairment (Malik, 2011).

Significance of the Study

The study has a significant value as it highlights the assessment barriers impeding the process of inclusion of children with hearing impairment in mainstream education settings. The study would likely to aware the stake holders, in particular, teachers and head teachers to revisit the component of assessment in the curriculum and to redesign it, making necessary adaptations, according to the functional requirements of the learners. Findings of the study would likely to motivate the School Education Department training wing to conduct regular trainings of in-service teachers highlighting the importance and application of adaptations in the assessment procedures aligned with the communication preferences of hearing-impaired learners in the primary education.

The results of the study can be an eye-opener for the policy makers and government as it reveals the reasons for exclusion, failure, and high drop-out rate of hearing-impaired learners in general schools. It is likely to motivate them to allocate funds for the availability of assistive technology, ICT, and other

supportive learning resources for positive academic outcome and successful inclusion of children with hearing impairment.

Research Questions

1. What are the causes of failure of learners with hearing-impairment in the examination in mainstream primary schools?
2. What are the challenges faced by learners with hearing impairment during assessment tests in mainstream primary schools?

Methodology

The research design was qualitative. Seven parents of children with hearing impairment of inclusive primary schools were selected through purposive sampling technique from Lahore district. Semi structured interview was developed based on the literature review and framework of the study. An interview guide was formed by the researcher validated by the experts of the field. All questions were translated into Urdu language for data collection. The instrument was pilot tested. Face-to-face semi structured interview was conducted and audio-recorded in the local language Urdu keeping in view the convenience and clarity of the parents of the hearing impairment and to extract clear data. Interviews were transcribed and coded. Thematic analysis was employed.

Following themes were derived from the analysis.

Theme 1: Use of assistive technology including ICT

Theme 2: Teachers training for adaptations

Theme 3: Communication preferences

Theme 4: Frustration during examination/assessment tests

Findings

Summary of the findings is provided in this portion followed by proper quotations from the participants. Participants' responses were classified into four wider themes that are as follows:

Theme 1: Use of Assistive Technology including ICT

The following information was given by the parents regarding the use and availability of assistive technology and ICT in the class and assessment tests. Majority of the participants reported that unavailability and shortage of assistive technology, including computers, during assessments in the schools are passive that need to be addressed on the priority basis.

Participant 2 informed,

“No assistive technology is present in the school to facilitate my hearing-impaired child in the assessment tests. He is just being taught with the traditional method that is inflexible.” Participant 4 reported, *“Computer and assistive technology are not provided for paper solving.”* Participant 5 said, *“My child is very good at using technology, if he is given a chance to solve paper on the computer, he will perform better.”* Participant 7 informed, *“There are computers available in the school, however students are not allowed to use them to perform tasks during teaching-learning process, and in particular, during examination”.* Participant 3 stated, *“My child is a keen learner and handles technology very well. He wants to give paper on computer, but it is not allowed in the school. His class teacher makes him write and he is unable to finish the paper in time despite of the provision of extra time.”*

Theme 2: Teachers' Training for Adaptations

Majority of the participants informed that teachers lack training of making adaptations in the examination papers in accordance with the needs and requirements of their children with hearing-impairment, and they

do not give additional time to format or simplify the written assessment task according to the requirement of hearing-impaired learners. Participant 6 reported, *“The teacher is not co-operative at all during examination period, due to which my hearing-impaired child fails every time.”* Participant 5 stated, *“Teachers lack training how to deal with the hearing-impaired child and how to adapt the paper format and to teach him/her paper taking skills prior the conduction of paper.”* Participant 3 informed, *“It is my request to the head of the school to kindly train the teachers how to take examination of hearing-impaired child and to arrange for the required resources in the examination.”* Participant 1 said, *“I don’t understand why the school have enrolled my child with hearing-impairment once the teachers are not equipped properly. They neither adapt the assessment tests nor the learning environment.”*

Theme 3: Communication Preferences

Almost all respondents pointed out that the teachers do not care about the communication preferences of the children in assessing learning. Teachers are stuck on one rigid traditional method of taking examination and are not willing and prepared to make alternative adjustments in accordance with the students’ needs in the mainstream setting. Participant 2 informed, *“Actually the teachers are neither trained nor interested to know about the communication preference of the hearing-impaired child to apply in the examination.”* Participant 7 stated, *“Teachers feel overburdened to use any alternative method like fill in the blanks, MCQs, models and any other modes to assess the learning of the child because extra time is required to prepare material and that they are not willing for it.”* Participant 5 reported, *“I am going to admit my child back to the segregated special school as he is not performing in the mainstream school because of the tough examination system without any adaptation and modification in the papers for the hearing-impaired learner”.* Participant 4 stated, *“My child is happy in the mainstream school and he is enjoying with his hearing peers, except for the examination period. If the mainstream school has enrolled him, it is the school’s responsibility to train teachers how to use multiple ways to assess their learning. Teachers just ignore the communication preference of the child, that results in his failure.”*

Theme 4: Frustration/Absenteeism during Assessment

Majority of the participants informed that their children with hearing impairment show a lot of frustration during assessments. Most of them are reluctant to attend the school during examination time and get sick or make lame excuses not to go to the school during assessments. Participant 1 revealed, *“Tough examination system makes my child with hearing loss upset during assessment tests. He does not want to go to the school because of the fear of failure and rejection”.* Participant 6 reported, *“Unfortunately, when it comes to assessment tests, my child with hearing loss try not to attend the school. What is the use of sending him to the mainstream school that he has to repeat every class twice?”.* Participant 2 informed, *“I get disturbed during assessments of my child with hearing impairment. He gets sick and his stress level increases as he is unable to perform satisfactory in the examination due to teachers’ negligence and rigid assessment method.”* Participant 3 said, *“My child with hearing loss is the most frustrated during the time of assessments. She makes lame excuses not to attend the school, and tries to miss the examination, otherwise she is so regular in routine days”.*

Discussion and Conclusion

Teachers lack training in making adaptations in the assessment tests according to the requirements of hearing-impaired learners. Ehsan, (2018) also reported a lack of teachers’ training to make adaptations in the content, instruction, and assessment procedures according to the needs of HIC to prevent their inclusion in the mainstream education setting (Ehsan, 2018). The use of technology, in particular, ICT is missing in the teaching-learning process which is very important and much required for visual learners like HIC. According to Ntinda, (2019); Spencer & Marschark (2010), unavailability and less use of computers and assistive technology to assess learning is also a key cause of academic failure in children with hearing impairment. Communication preferences of hearing-impaired learners are not taken into consideration during assessments by the teachers. It has been found by Ishrat, Iqbal & Khan, (2022) that

alternative assessment methods are not used by the teachers keeping in view the examination conduction requirement, and preferred style of communication and expression of hearing-impaired learners. Hearing-impaired learners are reluctant to attend school and feel frustrated during the examination period, ultimately resulting in their failure. Mundi, (2011) stated that hearing-impaired learners are mostly absent or under stress during examination time in the schools.

Recommendations

- Regular in-service teachers' training should be conducted targeting adaptations in the assessment for HIC that include test-taking skills, formatting of the worksheets, simplifying the tasks, and use of alternative methods to assess their learning.
- Tests and Examination papers may be designed and adapted in accordance with the comprehension requirements and communication preferences of the hearing-impaired learners.
- Teachers should utilize diverse assessment methods to assess the learning of HIC (model making, drawings, art projects, role play, figures, pictures, diagrams, hands-on activities, etc.) to demonstrate their understanding of different concepts taught in the class.
- Special funds may be allocated by the government to ensure the availability of ICT facilities for effective and uninterrupted learning of children with hearing impairment in the schools.

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Conflict of Interest


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