An Assessment Of Resource Accessibility And Utilization For Students With Hearing Impairment In Specialized Educational Institutions Of Bhadrak

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Abstract

In special schools of Bhadrak district, the availability and utilization of educational resources for students with hearing impairment are critical for reducing educational gaps. Effective, personalized, and visually engaging materials, alongside trained staff, enhance learning outcomes, through as highlighted in this study on special education, challenges often exist in consistent, expert-led application of these tools. The educational landscape in Bhadrak for hearing-impaired students is transitioning from basic welfare to a more structured, technology-driven approach. While the Odisha government's 2024 sign language initiative marks a significant step forward, the effectiveness of resource utilization remains dependent on overcoming the shortage of specialist teachers and improving the visual-acoustic environment of classrooms. More instructional learning devices needed for special schools. Moreover, standard of education must be developed so that it could help the special children to improve their work competency. More resources must be used with support services. Those who were actively participate in co- curricular activities and showed interest in these activities should give more opportunity. In integrated education students with special needs felt isolated and rejection. In Inclusive students with special needs didn't have any report on bullying or disrespect but learning is not that effective than special schools. The need of the study was that when we look at the education process as a whole, it emphasis on the holistic development of a student. The main purpose of this study is to investigate the available educational resources in Special schools and how to impact in teaching learning process. And impact on pupil's performance.

Key Words: Hearing Impairment, Specialized Educational Institutions

Introduction

Children with special needs, especially children with hearing impairment need special care both from school and environment. They have stronger personality and society should mold

them with care and much love. Rural special schools needed a good number of infrastructural facilities. Learning must be takes place happily for the special children. Special schools were having more good results than integrated and inclusive so it is needed to search for skilled teachers for inclusive education. Teacher plays an extremely important place in special children school life as well as for lifetime. Normal students need to socialize with special children. Students must be provided vocational education so that every student can be self- reliant and competency in work field. Parents also play a significant role in a special child life. Academic performance can be affected by parents' role. Findings emerged from the previous studies that problems faced by H.I learners include understanding, signing communication language and behaviour problems, the H.I teachers cope with these problems by: learning sign language, trying to understand signs practicing assign language and using different medias, methods used by H.I teachers like total communication~ lip reading and Kenyan sign language. Oliviah Shikanga Llikunda,(2008); females that teach hearing impaired learners slightly outnumber their male counterparts at 55(55%) and 45(45%) respectively, Fredrick Odhiambo Ojijo,(2012); more is needed to know about interventions and ways which are effective for improving developmental outcomes of children with hearing loss, Callow And Catherine,(2012); hearing-impaired students who have 55-69 db hearing loss were more affected by communication needs, audio logical rehabilitation needs, and learning style needs than hearing-impaired students who have 90db hearing loss and beyond hearing loss, Ibrahim A. El-Zraigat,(2012); hearing impairment children had strong personality. hearing impairment boys were found to have stronger personality than girls. they need much more special care and love from their parents, Saroj And Mishral(2013); majorities (58.33%) have low availability of assistive technology and 41.67% of the hearing impaired schools have high availability of assistive technology.100% of the government, private unaided and ngo managed schools were found to possessed ubi-due face to face communicator and 79% of the private aided schools were found to possessed this device, Shakunthala.N.D,(2017); various types of assistive technology are used in special education and the use of assistive technologies generally have a positive effect on the students with special education. within the framework of the use of assistive technologies in special education and model implementations with the aim of contributing to the current assistive technology implementations presented in the literature, Dr. Raziye Erdem,(2017); school cannot be assessed itself so it were assessed through its stakeholders i.e. principals, teachers and parents of children with hearing impairment, Amjad Hussain,(2018); learning for students with hearing impairments in inclusive class on sensor

motor development course needs to consider the following: (1) seating placement, (2) optimization of visual information, (3) modification of teaching, (4) volunteer support, and (5) teamwork, Febrita Ardianingsih,(2019); there was a shortage of information resources in alternative formats and services, and a lack of skilled and qualified teacher librarians to provide suitable library services to support the hearing-impaired students amongst others, Vincent C. Opara,(2020); no significant difference between pretest of control and experimental groups in the achievement in science of hearing-impaired students through multimedia package. The mean value of post-test–I experimental group is higher than the control group. There is a significant difference between the post-test-I of control and experimental groups in the achievement in science of hearing impaired students through multimedia package, V.K.Karpagam,(2020); unavailability of assistive technology devices and non-utilisation of assistive technology devices. The challenges that faced the respondents in utilizing the university libraries were attributed to unavailability of assistive technology devices, lack of librarian to attend to people with special needs among others, Wiche, Humphrey Igwechi, (2020); information resources in the libraries under studied were inadequate and under-utilized. Also, it was established that among other barriers, under-funding is a major barrier to making information resources available for the physically challenged. Isibhakhome Eleaena Asuata, (2021); the use of assistive technology, special teachers must have the requisite knowledge and skills to utilise assistive technology effectively and successfully for the adoption of assistive technology for differently able children, Ravi Kant and Amit Shankar, (2022); provisions for pick and drop facilities, monthly stipends, uniforms, books, and adequate furniture, contributing to an enhanced learning environment for these students. However, the study identified the lack of an adequate number of support staff and paraprofessionals, limited opportunities for in-service trainings, insufficiently equipped computer labs and libraries and exclusion of relevant curriculum content, Rukhsana Bashir, (2023);the availability and utilization of teaching and learning resources is among factors that influence performance in special school in Eldoret Municipality through descriptive survey research design and found The findings show that 2 out of the 7 low performing schools did not have a laboratory. All the 5 low performing schools that had a language laboratory but lacked laboratory technicians derived low communications between hearing impaired student. Only one of them was fully equipped. Moreover, none of the low performing schools had a library, and all the high performing schools had more than one laboratory. There for proper improvement availability of teaching/learning resources between the high performing schools and low performing

schools, Mudulia (2012); the use of Information and Communication Technology (ICT) in teaching and learning of reading and writing skills of children with hearing impairment in an positive impact on student and reinforce the teaching learning process, exploration and innovation of ict in special schools has taken positive on learning environment, Aziz-Un-Nisa Dr.Tayyaba Zarif(2014);Video-guided educational intervention is an effective intervention for improving school engagement of hearing impaired adolescent students. Since acquiring relevant education is essential for leading a quality life especially among the special needs population, Uche D.Asogwa, Theresa Onyema Ofoegbu,(2020).

Scope Of The Study

•Resource Assessment: Conducting a comprehensive inventory and assessment of the educational resources available in special schools catering to students with hearing impairment. This could include examining the availability of assistive devices, specialized teaching materials, classroom technology, and support personnel.

•Utilization Patterns: Investigating how students with hearing impairment interact with and utilize the available educational resources. This involves understanding their preferences, challenges faced in accessing resources, and the effectiveness of current utilization strategies.

•Impact on Learning Outcomes: Assessing the impact of resource availability and utilization on the academic performance, communication skills, and overall learning outcomes of students with hearing impairment. This could involve longitudinal studies to track progress over time.

•Technological Interventions: Investigating the role of technology in enhancing the availability and accessibility of educational resources for students with hearing impairment. This could include evaluating the effectiveness of assistive technologies, educational apps, and online resources.

Objectives Of The Study

1.To examine the availability of educational resources for students with hearing impairment in special schools.

2.To examine the utilization of educational resources by student with hearing impairment in special schools.

Hypothesis Of The Study

There exists some kind of issues among the children (student) of hearing impairment. The researcher tries to explore the resources availability and usages at special school in particular.

Method and design

A case study methodology entails conducting a thorough investigation of a specific case or cases to gain a deeper understanding of a phenomenon.

The target population is the total group of subjects about whom the researcher is empirically attempting to learn something. All the special school in Bhadrak District was the population of the study. Total 70 no of student was selected as sample from 2 special schools. The names of the school were Binapani Helen Keller Special School of deaf and Rankanidi School for deaf. Those tools are required to seek information regarding phenomena, keeping these things in mind the researcher used Self-developed questionnaire for teachers and principal of the school to know the view and opinion about the educational facilities given to the students in a special school. The questionnaires were developed for collection of data was nominal scale. The responses collected from teachers on different items were scores by frequencies and numbers collected were converted into the percentage.

The data are collected through online mode by communicating with teachers and principal of Rankanidhi school for deaf. Questions form was developed by the researcher for the principal and teachers. The researcher shared the Questions tools namely, questionnaire of teaching for Infrastructural facilities, Timetable, computer education, teaching learning materials Close-ended Questionnaire for the students. Co-scholastic activities, basic facilities provided to the students. Infrastructural facilities, organizational structure of school Checklist for teaching and non- teaching staffs, Co-scholastic activities, and basic facilities provided to the students. The data for the present study collected from the school students.

Analysis And Interpretation Of Data

Summary of availability of educational resources at special school for deaf and dumb

From Table 4.3.1 it was noticed that both the school taken for this study as sample were funded by SSEPD, Odisha and having the facilities like well-constructed building, well-equipped classrooms, language laboratory, playground, hygienic washroom, clean drinking water with sufficient classroom materials with good conditions. They have qualified teacher and staff like teacher, audiologists, and resource person as per norms. Both the school have resources for sign language like catalog, dictionaries, and sign language book for the HI students. Both the schools used 2D and 3D models while addressing to HI students and have the frequency modulation system, hearing aids, and loud speaker with audio system. It was found that both the school have the computer laboratory and computer instructor, ABACUS and library. Schools also access the internet facilities. Both the school provide good amount of sports kit to HI students also they have the therapy kit for them to support student's emotional and mental

well-being within the school. It was also notice that a good natural ambience available at in the form of flower and medicinal garden. Both the school have organized field trips and skill development workshops both for the teacher and the HI students frequently. However, it was also found that out of the two school one has the music room and instruments, test telephones, infrared system and audio loops facilities available for the HI students. Whereas, they did not have the facilities like science laboratory and museum room for the HI students at the school. Summary of Utilization of Educational Resources at special school for Deaf and Dumb

Table 4.3.2 followed the observation that 80% of students used resources for interactive and engaging learning and 20% off students did not use resources. 100% of students said that the teacher gave demonstrating a high level of expertise and commitment and utilized sign language like catalogs and dictionary. 80% of students said that the teacher was using pictures, 3d model, foe enhancing the teaching process among these 20% of students said that the teacher was not using the 3d model, foe enhancing the teaching process. 30% of students said that the teacher was using frequency modulation system for holistic development among these 70% of students said that the teacher was not using the frequency modulation system for holistic development. 90% of students said that the teacher was using telephones, infrared system and audio loops for interesting the classroom among these 10% of students said that the teacher was not using. 50% of students said that the teacher was using television, projectors, computers, video tapes, smart boards for efficiency and effective teaching learning process among these 50% of students said that the teacher were not using these materials for teaching learning process. 62.83% of student asked that the teacher was using hearing aids, loudspeaker and audio system for enhancing the learning process among these 37.15% of students said that the teacher was not using. 60% of students asked that the teacher was using ICT for enhancing the teaching learning process among these 20% of students said that the teacher was not using the ICT. 50% of students said that the teachers were providing the library to support the growth and holistic development among these 20% of students said that the teacher were not using. 60% of students said that the teacher was using picture books, story book and craft book among these 40% of students said that the teacher were not using these kinds of materials. 10% of students said that the teacher was providing science laboratories for development in the science field among these 90% of students said that the teacher was not using science lab. 51.42% of students said that the teacher was providing language laboratory for development the communication skill and academic success of hearing impairment among these 48.58% of students said that the teacher was not using. 20% of students said that the teacher was giving

motion film for enhancing learning process among these 80% of students said that the teacher was not using. 30% told that the teachers were using technology resources for effective learning process among these 70% of students said that the teacher were not using these resources. 55.71% of students asked that the school had a safe and inclusive environment for suitable learning process among these 44.29% of students told that had no inclusive environment. 70% of students said that the teachers were providing some extracurricular activities for holistic development among these 30% of students said that the teachers were not using these extracurricular. 80% of students said that the teacher was providing the effective support such as assistive technology for students with special needs among these 20% of students said that the teacher was not providing. 45.71% of students said that the teachers were encouraging a healthy balance between academic and extra-curricular activities among these 54.29% of students said that the teacher were not providing. 70% of students said that the teacher was giving sufficient guidance and resources for career planning process among these 30% of students said that the teacher was not providing. 74.28% of students said that the teacher was providing adequate support service for facing academic challenge among these 24.58% of students said that the teacher was not providing. 71.42% of students said that the teachers were giving effectively communicating and enforcing the behavior among these 28.58% of students said that the teacher were not providing. 42.85% of students said that the teacher was providing a dynamic and immersive learning environment that encompasses various educational, physical, and emotional benefits for teaching learning process among these 57.15% of students said that the teacher was not providing. 60.50% of student said that the teacher was using the incorporation of sports in education contribute for the holistic development among these 39.95% of students said that the teacher was not providing.

Findings

1.Both the schools having the facilities like well-constructed building, well-equipped classrooms, language laboratory, playground, hygienic washroom, clean drinking water with sufficient classroom materials with good conditions.

2.Qualified teacher and staff like teacher, audiologists, and resource person as per norms were present.

3.Both the school have resources for sign language like catalog, dictionaries, and sign language book, 2D and 3D models, frequency modulation system, hearing aids, and loud speaker with audio system.

4.Schools have the computer laboratory and computer instructor, ABACUS and library with the internet facilities.

5.Both the school provide good amount of sports kit to HI students also they have the therapy kit for them to support student's emotional and mental well-being within the school.

6.Both the school have organized field trips and skill development workshops both for the teacher and the HI students frequently.

7.Out of the two school one has the music room and instruments, test telephones, infrared system and audio loops facilities available for the HI students. Whereas, they did not have the facilities like science laboratory and museum room for the HI students at the school.

8.80% of students used resources for interactive and engaging learning and 20% off students did not use resources.

9.100% of students said that the teacher gave demonstrating a high level of expertise and commitment and utilized sign language like catalogs and dictionary.

10.80% of students said that the teacher was using pictures, 3d model, foe enhancing the teaching process among these 20% of students said that the teacher was not using the 3d model, for enhancing the teaching process.

11.30% of students said that the teacher was using frequency modulation system for holistic development among these 70% of students said that the teacher was not using the frequency modulation system for holistic development.

12.90% of students said that the teacher was using telephones, infrared system and audio loops for interesting the classroom among these 10% of students said that the teacher was not using. 50% of students said that the teacher was using television, projectors, computers, video tapes, smart boards for efficiency and effective teaching learning process among these

13.50% of students said that the teachers were not using these materials for teaching learning process. 62.83% of student asked that the teacher was using hearing aids, loudspeaker and audio system for enhancing the learning process among these 37.15% of students said that the teacher was not using.

14.60% of students asked that the teacher was using ICT for enhancing the teaching learning process among these 20% of students said that the teacher was not using the ICT. 50% of students said that the teachers were providing the library to support the growth and holistic development among these 20% of students said that the teacher were not using.

15.60% of students said that the teacher was using picture books, story book and craft book among these 40% of students said that the teacher were not using these kinds of materials.

16.10% of students said that the teacher was providing science laboratories for development in the science field among these 90% of students said that the teacher was not using science lab.

17.51.42% of students said that the teacher was providing language laboratory for development the communication skill and academic success of hearing impairment among these 48.58% of students said that the teacher was not using.

18.55.71% of students asked that the school had a safe and inclusive environment for suitable learning process among these 44.29% of students told that had no inclusive environment. 70% of students said that the teachers were providing some extracurricular activities for holistic development among these 30% of students said that the teachers were not using these extracurricular.

19.80% of students said that the teacher was providing the effective support such as assistive technology for students with special needs among these 20% of students said that the teacher was not providing.

20.45.71% of students said that the teachers were encouraging a healthy balance between academic and extra-curricular activities among these 54.29% of students told that the teacher were not providing.

21.70% of students said that the teacher was giving sufficient guidance and resources for career planning process among these 30% of students said that the teacher was not providing. 74.28% of students said that the teacher was providing adequate support service for facing academic challenge among these 24.58% of students said that the teacher was not providing.

22.60.50% of student said that the teacher was using the incorporation of sports in education contribute for the holistic development among these 39.95% of students said that the teacher was not providing.

Discussion And Conclusion

Finding emerged out of the analysis that both the schools having the facilities like well-constructed building, well-equipped classrooms, language laboratory, playground, hygienic washroom, clean drinking water with sufficient classroom materials with good conditions, also supported by Atieno (2017) that the teaching and learning materials were available and are utilized in schools especially those used in classroom instruction like chalks, duster and charts except physical facility are lacking and there goes inadequacy of human resources; qualified teacher and staff like, audiologists, and resource person as per norms were present as supporting the importance that the teachers have high competency toward the common function of the audiologists but a very worrying understanding on their specific role, an audiologist helps to

reduce the impact of hearing loss for the deaf students that the involvement of audiologists in the education system benefits many teachers and students thus prepares a better and more conducive environment, Hanafi Mohd Yasin Mohd, Mohd Mokh (2023); both the school provide good number of sports kit to HI students also they have the therapy kit for them to support student's emotional and mental well- being within the school as same as the study show that used by teachers, the role played by the school as well as the challenges and obstacles faced by student in highlighting the sports potential of these students with hearing disability ,encourage them to more active in sports with therapy and sports kit, Mohd Hanafi Mohd Yasi (2021); both the school have organized skill development workshops both for the teacher and the HI students frequently also found by Dr. Zahid Majeed, Mr. Munawar Hussan (2022) that mostly the vocational training or workshop of computer, tailoring, typing and gardening was being offered to the children with hearing impairment in govt. special education schools. Vocational training is very necessary for the children with hearing impairment; 60% of students asked that the teacher were using ICT for enhancing the teaching learning process among these 20% of students told that the teacher were not using the ICT supported by Aziz-un-Nisa Dr.Tayyaba Zarif (2014) that the use of Information and Communication Technology (ICT) in teaching and learning of reading and writing skills of children with hearing impairment in an positive impact on student and reinforce the teaching learning process, exploration and innovation of ict in special schools has taken positive on learning environment; 10% of students said that the teacher were providing science laboratories for development in the science field among these 90% of students told that the teacher were not using science lab is supported by Aijaz Ahmed Gujjar, Naeem Khan , Mirza Naveed (2010) that instructional facilities, teaching learning materials, science laboratories and the relevant equipment's were not available in majority of the schools; 51.42% of students told that the teacher were providing language laboratory for development the communication skill and academic success of hearing impairment among these 48.58% of students told that the teacher were not using the lab supported by Mudulia (2*012) that 2 out of the 7 low performing schools did not have a laboratory. All the 5 low performing schools that had a language laboratory but lacked laboratory technicians derived low communications between hearing impaired student .only one of them was fully equipped; 80% of students told that the teacher were providing the effective support such as assistive technology for students with special needs among these 20% of students told that the teacher were not providing is also supported by Ravi Kant And Amit Shankar (2022) that use of assistive technology, special teachers must have the requisite

knowledge and skills to utilise assistive technology effectively and successfully for the adoption of assistive technology for differently able children. Teachers should be actively involved in the selection of assistive technology and have the expertise and competence to apply, integrate and assess the devices, according to the idea.

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