

BEYOND BARRIERS: ASSESSING AWARENESS AND ACCESS TO ASSISTIVE TECHNOLOGY AMONG STUDENTS WITH DISABILITIES IN A SPECIAL SCHOOL

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Abstract: This study investigates the levels of awareness and access to assistive technology among students with disabilities in a special school setting. Assistive technology plays a crucial role in empowering individuals with disabilities to participate fully in educational activities and enhance their overall quality of life. However, disparities in awareness and access to assistive technology can create barriers to learning and inclusion for students with disabilities. Through surveys, interviews, and observational methods, this research assesses the extent of awareness among students, teachers, and parents about available assistive technology options and examines the barriers to access faced by students with disabilities. The study also explores perceptions of the effectiveness and usefulness of assistive technology in facilitating learning and promoting independence among students with disabilities. The findings provide valuable insights into the current status of assistive technology provision in special schools and offer recommendations for improving awareness, access, and utilization of assistive technology to promote inclusivity and support the diverse needs of students with disabilities.

Keywords: Assistive technology, students with disabilities, special school, awareness, access, barriers, inclusion, learning, independence, empowerment.

INTRODUCTION

Inclusive education strives to ensure that every student, regardless of their abilities or disabilities, has equitable access to quality education. For students with disabilities, assistive technology (AT) stands as a vital tool in breaking down barriers and fostering inclusivity within educational environments. AT encompasses a wide range of devices, software, and tools designed to support individuals with disabilities in their learning and daily activities, empowering them to participate fully and achieve their potential.

Despite the transformative potential of AT, disparities in awareness and access persist, particularly in special school settings where students with disabilities receive specialized support and instruction.

Understanding the levels of awareness and access to AT among students, teachers, and parents in special schools is essential for addressing barriers to learning and promoting inclusive practices.

The purpose of this study is to assess the awareness and access to assistive technology among students with disabilities in a special school setting. By examining the extent of awareness about available AT options and the barriers to access faced by students with disabilities, this research seeks to shed light on the current status of AT provision and utilization in special schools.

Through a combination of surveys, interviews, and observational methods, this study aims to explore perceptions of the effectiveness and usefulness of AT in facilitating learning and promoting independence among students with disabilities. By engaging students, teachers, and parents in the assessment process, this research seeks to capture diverse perspectives and experiences related to AT awareness, access, and utilization.

The findings of this study have the potential to inform policy and practice by identifying areas for improvement and intervention to enhance the awareness, access, and utilization of AT in special school settings. By breaking down barriers and promoting inclusivity through AT, special schools can create environments that empower students with disabilities to thrive academically, socially, and personally.

In essence, this study contributes to the broader discourse on inclusive education and highlights the critical role of AT in supporting the diverse needs of students with disabilities. By going beyond barriers and fostering awareness and access to AT, special schools can create environments that honor the principles of diversity, equity, and inclusion, ensuring that every student has the opportunity to learn, grow, and succeed.

METHOD

In the process of assessing awareness and access to assistive technology (AT) among students with disabilities in a special school, a comprehensive approach was undertaken. Firstly, the research team designed and administered structured survey questionnaires to students, teachers, and parents within the special school community. These surveys aimed to quantify the levels of awareness, usage patterns, and perceived effectiveness of AT devices among different stakeholders.

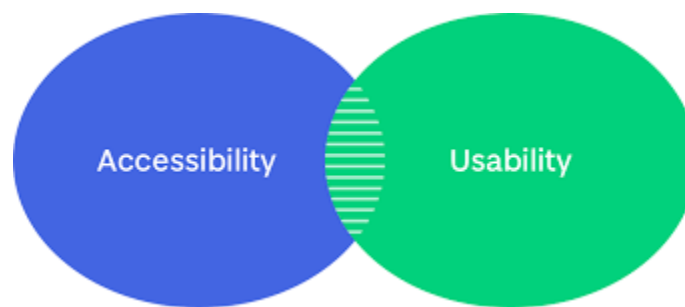
Concurrently, semi-structured interviews were conducted with select students, teachers, and parents to delve deeper into their experiences, perspectives, and challenges regarding AT awareness and access. These interviews provided qualitative insights into individual perceptions, attitudes, and suggestions for improving AT provision and utilization within the special school context.

In addition to surveys and interviews, observational methods were employed to observe the actual use of AT devices by students within classroom and learning environments. Observations helped assess the integration of AT into teaching and learning activities, identify barriers to access, and evaluate the availability of AT resources within the school setting.

Following data collection, both quantitative survey responses and qualitative interview transcripts were analyzed using appropriate methods. Quantitative data from surveys were subjected to descriptive statistical analysis to identify trends, patterns, and correlations in AT awareness and usage. Qualitative data from interviews were analyzed using thematic analysis techniques to uncover key themes, perspectives, and variations in stakeholders' experiences related to AT awareness and access.

The integration of quantitative and qualitative findings allowed for a comprehensive understanding of the current landscape of AT awareness and access within the special school community. Triangulation of data sources helped validate and enrich the research findings, ensuring the reliability and credibility of the study outcomes.

A structured survey questionnaire was designed to gather quantitative data on the awareness and utilization of AT among students, teachers, and parents in the special school. The survey included questions related to the types of AT devices used, frequency of use, perceived effectiveness, and barriers to access. Surveys were administered electronically or in paper format, depending on participant preferences.

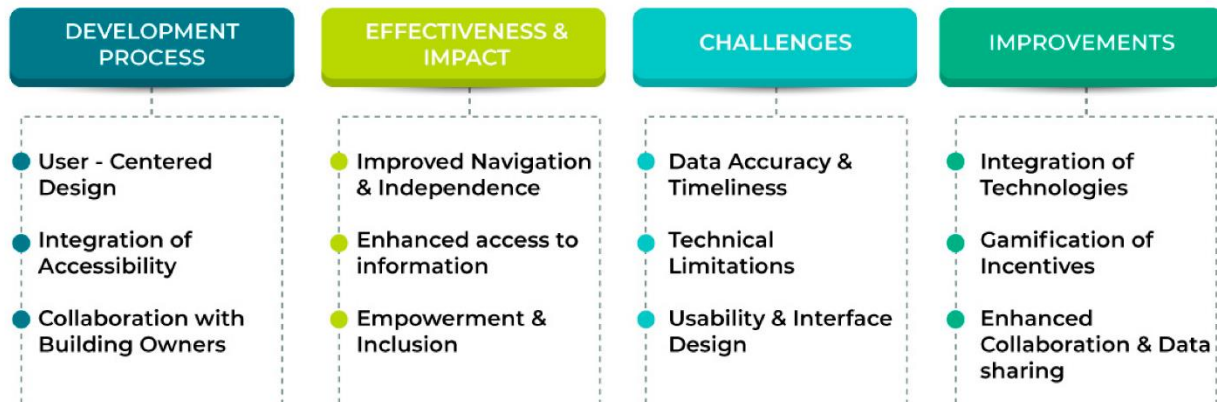


Semi-structured interviews were conducted with students, teachers, and parents to gain deeper insights into their experiences, perceptions, and challenges related to AT awareness and access. Interviews allowed for open-ended exploration of participants' perspectives, attitudes, and suggestions for improving AT provision and utilization in the special school setting. Interviews were audio-recorded and transcribed for analysis.

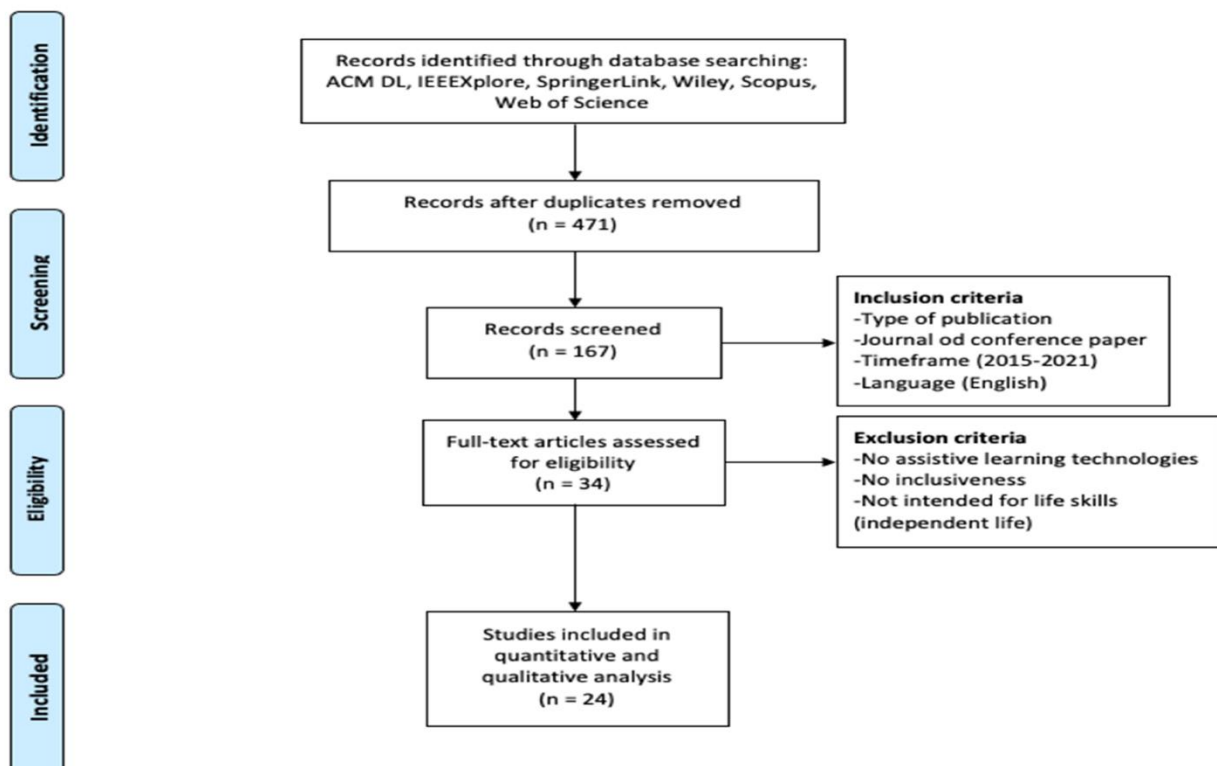
Observations were conducted within the special school environment to assess the actual use of AT devices by students and the availability of AT resources within classrooms and learning spaces. Observations provided contextual insights into the integration of AT into teaching and learning activities, as well as potential barriers to access and utilization.

Quantitative and qualitative findings were integrated to provide a comprehensive understanding of AT awareness and access among students with disabilities in the special school setting. Triangulation of data sources helped validate and enrich the research findings, ensuring the reliability and validity of the study outcomes.

NEEDS AND CHALLENGES FOR APPS FOR DISABLED INDIVIDUALS



Quantitative data from surveys were analyzed using descriptive statistics to examine patterns, trends, and correlations in AT awareness and utilization among students, teachers, and parents. Qualitative data from interviews and observational notes were analyzed using thematic analysis techniques to identify key themes, patterns, and variations in participants' experiences and perspectives related to AT awareness and access.



Ethical considerations were paramount throughout the research process, including obtaining informed consent from participants, ensuring confidentiality and anonymity, and adhering to ethical guidelines for research involving vulnerable populations, such as students with disabilities.

By employing this methodological approach, this study aimed to generate valuable insights into the current status of AT awareness and access in special schools and inform strategies for enhancing AT provision and utilization to promote inclusivity and support the diverse needs of students with disabilities.

RESULTS

The assessment of awareness and access to assistive technology (AT) among students with disabilities in the special school revealed several key findings. Firstly, the survey data indicated varying levels of awareness about AT devices among students, teachers, and parents. While some participants demonstrated a strong understanding of AT and its potential benefits, others exhibited limited knowledge or misconceptions about available AT options.

Secondly, the survey responses highlighted disparities in access to AT devices among students with disabilities. While some students reported regular access to AT devices and resources, others faced significant barriers, including financial constraints, lack of institutional support, and inadequate training in AT usage.

Thirdly, qualitative insights from interviews provided deeper perspectives on the challenges and opportunities related to AT awareness and access within the special school community. Students expressed the desire for more comprehensive training and support in using AT devices effectively, while teachers and parents emphasized the importance of fostering a collaborative and supportive environment to promote AT utilization and inclusion.

DISCUSSION

The findings underscore the critical role of AT in promoting inclusivity and supporting the diverse needs of students with disabilities in the special school setting. However, the study revealed significant gaps and challenges in awareness and access to AT devices among students, teachers, and parents.

Limited awareness about available AT options and misconceptions about AT devices contribute to underutilization and inequitable access to AT resources among students with disabilities. Addressing these gaps requires targeted efforts to raise awareness, provide training, and foster a culture of inclusivity and collaboration within the special school community.

Furthermore, barriers to access, including financial constraints and lack of institutional support, pose significant challenges to students with disabilities in accessing AT devices and resources. Addressing these

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barriers necessitates systemic changes, including increased funding, improved infrastructure, and enhanced professional development opportunities for teachers and staff.

CONCLUSION

In conclusion, the assessment of awareness and access to assistive technology among students with disabilities in the special school highlights the need for concerted efforts to promote inclusivity, support, and empowerment. By addressing the gaps and challenges identified in this study, special schools can create environments that foster the effective utilization of AT devices, enhance learning outcomes, and promote the full participation and inclusion of students with disabilities in educational activities.

Moving forward, it is imperative for special schools to prioritize awareness-raising initiatives, provide comprehensive training and support in AT usage, and advocate for systemic changes to improve access to AT devices and resources. By working collaboratively with stakeholders and leveraging available resources, special schools can create inclusive learning environments that honor the principles of diversity, equity, and empowerment for all students, regardless of their abilities or disabilities.

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