

Learning Techniques and Technology in Achieving Academic Success among Students with Disabilities in Higher Education (Poster)

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טכניקות לימוד וטכנולוגיה בהשגת הצלחה אקדמית בקרב סטודנטים עם מוגבלויות בהשכלה גבוהה (פוסטר)

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Abstract

The importance of education for better life outcomes is well recognized. Yet, students with disabilities (SWD) remain underrepresented in higher education. Despite legislative advancements and growing awareness, SWD often face unique challenges that hinder their academic success (Taneja-Johansson, 2021).

Digital technology, particularly mobile devices, has become an essential part of students' academic lives. With a variety of technological learning tools available, SWD are able to engage in educational activities. Many academic institutions provide free access to wireless networks, making mobile devices an affordable and convenient tool for learning (Fichten et al., 2019).

The use of artificial intelligence (AI) tools by students has gained significant attention in recent years. Despite the potential of AI-based learning environments to create personalized educational techniques for students with learning difficulties, SWD are less likely to engage in online learning compared to their non-disabled peers (Yenduri et al., 2023).

The current study examined how SWD perceive the factors contributing to their academic success. For this purpose, 12 female and 8 male students were interviewed about the challenges they face in their academic learning and what kinds of help they believe would assist them cope academically, compared to their non-disabled peers. They discussed technologies as well as human assistance. Most participants were diagnosed with Learning Disabilities (LD), with a few having physical or sensory disabilities. The study employed a combination of qualitative thematic analysis and quantitative techniques (Koren, 2023).

The findings indicate that SWD use technologies for similar purposes as their non-disabled peers. The participants employ general-purpose technologies and software as assistive tools, without recognizing them as dedicated assistive technologies (AT). While previous research has focused on the exclusive use of AT by SWD, this study highlights a growing trend of using universally available technologies, such as screen readers and AI tools.

The study discusses the implications of the blurred distinction between dedicated AT and general-purpose tools regarding the academic inclusion of SWD. The results suggest that SWD

attribute their academic success primarily to effective learning strategies and support from both social networks and formal academic structures. Smartphones, laptops, and AI applications are perceived as essential tools for ensuring their full inclusion in the academic environment. These findings underscore the need for further research on the application of AI for SWD across diverse educational systems. The implications of these findings are significant for university staff and disability support services, highlighting the importance of integrating such technologies into institutional frameworks to enhance accessibility and academic achievement.

Keywords: Students with disabilities, Assistive technologies (AT), Artificial intelligence (AI).

מילות מפתח: סטודנטים עם מוגבלויות, טכנולוגיות מסייעות, בינה מלאכותית.

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