Introduction to Volume 14

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Welcome to Volume 14 of Assistive Technology Outcomes and Benefits (ATOB). The theme of this issue is “Assistive Technology for Literacy” which is an ever-growing topic of interest. To address this interest, ATOB editors have brought together a series of thought-provoking articles that highlight recent advancements in the field of AT and technologies. These articles can inform policies and practice both at the national and local levels. As the mother of a child who uses AT to express his literacy skills, I am able to witness how these advances can also improve the lives of individual students. The collection of articles included within Volume 14 of ATOB offers different perspectives on how AT can be used to improve literacy skills for students with various types of disabilities from early childhood to higher education.

The volume begins with an article representing Voices from Academia with Sofia Benson-Goldberg and Karen Erickson of University of North Carolina who explore the extent to which adults understand the graphic symbols paired with the Communication Bill of Rights. The study shows that the graphic symbols provided little support to participants to comprehend the text. Results are used to discuss implications for pairing graphic symbols with text with persons with IDD. The volume then leads into an article by Jennifer Keelor, Nancy Creaghead, Noah Silbert, and Tzipi Horowitz-Kraus who highlight key findings of a recent study that investigates the impact of text-to-speech (TTS) on reading comprehension for students with...
reading difficulty. The study shows that reading comprehension was significantly higher for students using TTS, signifying that TTS is an effective reading support tool for many students.

Starting at the preschool level, authors Ruby Natale, Christina Sudduth, Monica Dowling, Sarah Messiah, Christina Nunez and Michelle Schladant explore how the use of AT can improve early literacy outcomes. The article provides information about how a training program called Step Up AT to Promote Early Literacy (Step Up AT) for teachers and parents of children with disabilities from ages 3 to 5 promotes early literacy development skills. Using a multi-pronged approach through online learning modules, access to AT tools, and in-person coaching for teachers and caregivers, this toolkit improved literacy skills for children with a variety of disabilities from diverse language and cultural backgrounds in South Florida. Finally, within this section of Voices from Academia, Ben Satterfield’s article on Mastery of Assistive Technology in High School and Postsecondary Performance summarizes a survey of 47 students with high-incidence disabilities in the university system in Georgia who received AT supports. Anecdotal comments reveal that students may be more successful in college if they are comfortable using AT before entering higher education.

Volume 14 also includes one article representing Voices from the Industry by Miriam Monahan, Johnell Brooks, Julia Seeanner, Casey Jenkins, and Jay Monahan that applied usability principles and a subject matter expert to improve the literacy of an AT application designed to address driving literacy and visual search skills for individuals with autism spectrum disorder.

Volume 14 then concludes with Voices from the Field starting with the perspective of Denise DeCoste and Gayl Bowser. This article on the evolving landscape of assistive technologies in K-12 settings demonstrates how technologies and the roles of AT providers have shifted over the last 30 years. This article discusses various elements of successful implementation of AT in the classroom, including the intersection between AT and Universal Design for Learning (UDL). Deanna Wagner and Gretchen Hanser then explore early childhood and emergent literacy for students with cortical vision impairment, and opportunities for self-directed reading and the use of PowerPoint to make books that are customized to meet students’ vision needs. Within this section, Sharon LePage Plante also reviewed how a technology program, Structured Literacy™, provides direct and explicit instruction for students to decode words. This approach demonstrates how AT can be an effective tool for engagement with documented gains in students’ work. At the secondary school level, Lauren Tucker’s article, Adapted Text Benefits for Teachers and Students: A Retroactive Case Study, explores the utilization of pre-created audio supported adapted text paired with instructional practices in a self-contained English classroom. The study reports a positive influence on students within a self-contained English classroom as well as increased student engagement and motivation with the new learning materials. Volume 14 then concludes with Erin Sheldon and Karen Erickson who explore comprehensive emergent literacy instruction and the barriers faced by students with severe disabilities and complex communication needs (CCN) when accessing general education curriculum. This article effectively demonstrates the need to educate students with severe disabilities and CCN in inclusive settings coupled with evidence-based comprehensive emergent literacy interventions.
These articles show the powerful impact of technology for students with diverse categories of disabilities, from early childhood to higher education. Each article highlights different ways AT is being used to increase motivation and improve learning outcomes. Please review and reflect upon these articles and share them broadly to help us make the world a more accessible place.

**Declarations**

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