Assistive Technology
Outcomes and Benefits

Implementing AT in Practice: New Technologies and Techniques

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Volume 12, Summer 2018

Peer Reviewers for ATOB Volume 12
Implementing AT in Practice: New Technologies and Techniques

The Editorial Board would like to thank the peer reviewers who generously donated their time and talent to reviewing manuscripts for this Volume 12 of ATOB.

Assistive Technology Outcomes and Benefits
Editorial Policy

Aim and Scope

Assistive Technology Outcomes and Benefits, published by the Assistive Technology Industry Association, is an open access, peer-reviewed journal that publishes articles specifically addressing the benefits and outcomes of assistive technology (AT) for Persons with Disabilities across the lifespan. The journal's purpose is to advance the AT industry by (a) fostering communication among stakeholders interested in the field of AT, including manufacturers, vendors, practitioners, policy makers, researchers, consumers with disabilities, and family members; (b) facilitating evidence-based demonstrations and case-based dialogue regarding effective AT devices and services; and (c) helping stakeholders advocate for effective AT devices and services.

Assistive Technology Outcomes and Benefits invites for consideration submissions of original papers, reports and manuscripts that address outcomes and benefits related to AT devices and services. These may include (a) findings of original scientific research, including group studies and single subject designs; (b) marketing research related to AT demographics or devices and services; (c) technical notes regarding AT product development findings; (d) qualitative studies, such as focus group and structured interview findings with consumers and their families regarding AT service delivery and associated outcomes and benefits; (e) project/program descriptions in which AT outcomes and benefits have been documented; (f) case-based reports on successful approaches to service delivery; and (g) consumer perspectives on AT devices and services.

Submission Categories

ATOB welcomes scholarly contributions. However, many stakeholders engaged in the field of AT do not have an academic background. ATOB offers a unique opportunity for these stakeholders to contribute their expertise and experience in the context of achieving successful outcomes and beneficial impacts. ATOB understands that many potential authors may lack experience in authoring papers for peer-reviewed journal publication. Therefore, the ATOB Editorial Board is pleased to offer assistance in preparing and refining relevant submissions.

Voices from the Field

Articles submitted under this category should come from professionals who are involved in some aspect of AT service delivery with persons having disabilities, or from family members and/or consumers with disabilities. Submissions may include case studies, project or program descriptions, approaches to service delivery, or consumer perspective pieces. All submissions should have a clear message and be written with enough detail to allow replication of results.

Voices from the Industry

Articles submitted under this category should come from professionals involved in developing and marketing specific AT devices and services. Case studies, design, marketing research, or project/program descriptions are appropriate for this category.

Voices from the Academia

Articles submitted under this category should come from professionals conducting research or development in an academic setting. Submissions are likely to include applied/clinical research, case studies, and project/program descriptions.

Types of Articles

Within each of the voices categories, authors have some latitude regarding the type of manuscript submitted and content to be included. However, ATOB will only accept original material that has not been published elsewhere, and is not currently under review by other publishers. Additionally, all manuscripts should offer sufficient detail to allow for replication of the described work.

Applied/Clinical Research

This category includes original work presented with careful attention to experimental design, objective data analysis, and reference to the literature.

Case Studies

This category includes studies that involve only one or a few subjects or an informal protocol.

Design

This category includes descriptions of conceptual or physical design of new AT models, techniques, or devices.

Marketing Research

This category includes industry-based research related to specific AT devices and/or services, demographic reports, and identification of AT trends and future projections.

Project/Program Description

This category includes descriptions of grant projects, private foundation activities, institutes, and centers having specific goals and objectives related to AT outcomes and benefits.

Approaches to Service Delivery

This category includes descriptions of the application of assistive technology in any setting (educational, vocational, institutional, home-life) to improve quality of life for people with disabilities.

Consumer and Caregiver Perspectives

This category offers an opportunity for product end users, family members, and caregivers to share their experiences in achieving successful outcomes and benefits through the application or use of AT devices and services.

Mandatory Components of All Articles

Authors must include a section titled Outcomes and Benefits containing a discussion related to outcomes and benefits of the AT devices/services addressed in the article.

Authors must include a short description of the article's target audience, and indicate the article's relevance to that target audience. Authors may describe their work as it relates to more than one audience, and should specify the value that each group may derive from the work.

Publishing Guidelines

Each manuscript must reflect the style guidelines of the Publication Manual of the American Psychological Association (6th edition, 2009).

Manuscripts should be no more than 25 pages in length (double-spaced), including references, tables, and figures.

Due to the electronic format of the journal, all submissions should be submitted as email attachments in a Microsoft® Word format.

See the detailed Manuscript Preparation Guidelines for Authors for more information on formatting requirements and submission instructions.

For More Information

Please see ATOB's Editorial Policy at http://www.atia.org/at-resources/atob for more details regarding the submission and review process, ATOB's Copyright Policy, and ATOB's Publication Ethics and Malpractice Statement.

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Introduction to Volume 12

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Welcome to Volume 12 of Assistive Technology Outcomes and Benefits (ATOB). In response to an ever-increasing number of available assistive technology (AT) solutions, the theme of this issue is "Implementing AT in Practice: New Technologies and Techniques." The AT community is continuously benefitting from major technological advancements in the fields of communication, prototyping, artificial intelligence, and machine learning. The articles in this issue touch upon a wide range of interrelated issues, ranging from descriptions of collaborative endeavors related to AT research and development to practical aspects of AT use.

Improved Product Insights from Collaborative Endeavors: This issue beings with "Improving Assistive Technology in Practice: Contributions from Interdisciplinary Research and Development Collaboration." In this article, Medola and colleagues describe the importance of ensuring that devices are not only practical and functional, but also offer appropriate aesthetics and symbolism. This combination of design priorities is aimed at making sure the AT will contribute to the individual's functional abilities as well as acceptance of the product, ultimately leading to greater satisfaction. To that end, Medola and coauthors describe a collaboration between a rehabilitation center and a university. Researchers, students, and rehabilitation team members work together to design and conduct studies about how design changes impact user actions, while students begin some development work through design projects. The authors note that the greatest benefits for AT users can only be achieved through the manufacture and distribution of solutions by industry partners. The authors suggest that as technology advances, it may be tempting to integrate all sleek components into new products; but that in an industry such as AT where reimbursement caps often direct purchases, decisions regarding new products and features should be tempered by consumer input to guide designers and manufacturers to offer products that will be affordable and desired by users.

Accessible Wearable Technology - Important Considerations for Designers: The second article in this issue, "The Assistive Wearable: Inclusive by Design," by Zeagler, Gandy and Baker, tackles the importance of placement of sensors and displays for wearable technology. The authors use body map images to help designers of wearable AT better understand appropriate placement of their products on the human body. Indeed, as technology becomes more and more integrated not only with our lives, but as something that may be affixed to our bodies, comfort, usability, and accessibility challenges become magnified. Whereas a person may continue to use somewhat uncomfortable but helpful technology, so long as they can put it down, users are unlikely to continue wearing unusable or uncomfortable technologies for long periods of time. This article will be of great interest to designers and researchers alike who can use this information to inform the creation of products that are useful to and valued by their target audiences.

Using Technology to Improve AT Implementation in Schools: Root-Elledge and colleagues discuss a hub and spoke model for connecting experts with practitioners through remote professional development training. In their article "The ECHO Model® for Enhancing Assistive Technology Implementation in Schools," the authors share results from a study demonstrating that professionals participating in ECHO trainings reported increased knowledge and skills, improved professional satisfaction, and decreased professional isolation. The use of such efficient and immediate strategies for AT training offers tremendous promise to benefit clients through the delivery of new knowledge to AT device and service providers who are working in resource constrained or geographically diverse areas.

Improving Literacy Among Students with Intellectual Disabilities: In the article "Teacher Experience, Text Access, and Adolescents with Significant Disabilities," Hatch and Erickson share the results of a quasi-experimental study measuring literacy gains among adolescents with moderate to profound intellectual disabilities. The intervention, Start to Finish Literacy Starters, is a commercially available product that uses age-appropriate and ability-appropriate texts to provide students with engaging material that meets their unique reading-level needs. Results demonstrate that students with intellectual disabilities stand to gain from this tailored approach to their literacy instruction, and educators will continue to see increasing improvements as they use the program more frequently. This product demonstrates how existing technology, resources, and strategies can be combined in new and unique ways to improve literacy outcomes. Results from this study may help educators justify the use of this or similar programs to help students achieve their full potential in literacy.

Mobile Technology Use by People who use AAC: Bryen and Chung share insights gathered from people who use AAC devices in their article, "What Adults Who Use AAC Say About Their Use of Mainstream Mobile Technologies." Manufacturers of both AAC and mobile devices will appreciate the data and recommendations presented in this article, which provide insight into

the unique challenges experienced by people with complex communication needs. As technology continues to evolve, we must ensure that people with disabilities are engaged in conversations regarding accessibility. Accordingly, the method used for gathering and analyzing data may also be of interest not only to manufacturers, but also to policymakers who are seeking consumer input to guide accessibility regulations.

The collection of articles presented here offers a glimpse of the ever-evolving world of accessible mainstream and assistive technologies. As the capabilities of these devices continue to improve, so too will our capabilities as technology consumers. The critical piece is ensuring that designers are aware of the usability implications of their design decisions. It is our hope that this issue of ATOB will help to close the gap between user expectations and product performance. Please review and reflect upon these articles and share them broadly to help us make the world a more accessible place.

Declarations

This content is solely the responsibility of the authors and does not necessarily represent the official views of ATIA. No financial disclosures and no non-financial disclosures were reported by the authors of this paper.