

Assistive Technology **Outcomes and Benefits**

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Maximizing the Benefits of Evolving Assistive Technology Solutions

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Assistive Technology Outcomes and Benefits

Maximizing the Benefits of Evolving Assistive Technology Solutions

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Assistive Technology Outcomes and Benefits (ATOB) is a collaborative peer-reviewed publications of the Assistive Technology Industry Association (ATIA).

Editing policies of this issue are based on the *Publication Manual of the American Psychological Association* (6th ed.) and may be found online at www.atia.org/atob/editorialpolicy. The content herein does not reflect the position or policy of ATIA and no official endorsement should be inferred.

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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.

Articles may be submitted under three categories—

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 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 that are appropriate include

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 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 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 11: Maximizing the Benefits of Evolving Assistive Technology Solutions

Jennifer L. Flagg, *ATOB Editor-in-Chief*
 Carolyn P. Phillips, *ATOB Associate Editor*

Welcome to Volume 11 of Assistive Technology Outcomes and Benefits (ATOB). The theme for this issue, “Maximizing the Benefits of Evolving Assistive Technology Solutions” advances our vision for ATOB to be an effective tool for knowledge transfer, tracking trends, and highlighting new information on the outcomes and benefits of assistive technology (AT) for persons with disabilities. The theme was chosen following the Editorial Board’s annual review of the ATIA Conference’s research strand. We noticed that many of the 2016 conference sessions were focused on ways that mainstream technologies, such as tablets and smartphones, can be used both in place of and as complements to AT devices. At the same time, there were a number of sessions exploring new developments related to dedicated AT devices. As a result, this issue considers a full range of promising technology solutions employed by and for people with disabilities. Read on for details of the six articles featured here in ATOB Volume 11.

The issue kicks off with two voices from academia. First up is Darren Gabbert with his article, “Assistive Technology Outpacing Disease Progression: A Longitudinal Case Study.” Mr. Gabbert describes a process that was used to determine appropriate workplace accommodations for an individual whose functional needs and job requirements were changing frequently due to progression of a disease. He explains how that process was used to identify the

individual’s functional needs and then find suitable solutions, taking advantage of improvements in available mainstream and assistive technology. AT specialists, employers, and people with disabilities will appreciate the systematic, cyclical nature of the AT assessment and evaluation process, which can be used it to address issues of increasing functional limitations and changing job requirements.

Next up is an article from Karen Erickson, Lori Geist, and Penelope Hatch entitled “Impact of Self-Regulated Strategy Instruction Integrated with SOLO Literacy Suite.” The authors share results and insights from their study into how literacy software might combine with a self-regulated strategy development approach to improve educational outcomes for struggling writers in elementary classrooms. The authors’ thorough discussion of their work and the positive outcomes the students achieved will be valuable for administrators and instructors seeking to integrate these or similar technologies and strategies in their classrooms.

The next two articles share perspectives from AT industry stakeholders. In “Opinion Paragraph Writing Intervention for Students with Significant Disability,” Pamela Mims, Carol Stanger, Robert Pennington, Wendee White, Julie Sears, and Nancy Strickler describe a method for using reading and writing apps on tablets to improve the opinion-

writing skills of students with intellectual disabilities. Teachers and AT specialists are likely to value the authors' detailed description of the implementation of the method in a classroom setting. Additionally, this article offers the reader an excellent example of a successful university-industry collaboration. Such partnerships can provide academics with funding for AT efficacy studies, while also supplying industry with objective evidence of a product's effectiveness, combined with valuable feedback from its end users.

The second industry perspective comes from Richard Steele, Lisa Haynes, and Leland Wheeler in their article, "Technology Benefits to Elderly with Infirmaries in a Functional Maintenance Program." This piece describes a collaboration between a rehabilitation services provider and an AT manufacturer, where online speech and language exercises were incorporated into existing functional maintenance programs at long-term care facilities. The authors' findings indicate that among older adults with cognitive impairments and communication challenges, improvements were seen in both expressive language and memory. Long-term care providers and facility managers will find this information useful for their patients, and family members of elderly long-term care residents may wish to use these findings to advocate for the adoption of this technique and technology for their loved ones.

Two voices from the field round out this issue of ATOB. Chris Klein's contribution, "Communication and Developing Relationships for People who use Augmentative and Alternative Communication," is a consumer perspective piece, written from his experience as a long-time user of an augmentative and alternative communication (AAC) device. Mr. Klein conveys the critical importance of communication in relationship-building and calls for a shift in the focus of current thinking in AAC, away from skill-building for the purpose of meeting educational mandates and towards the inherent benefits of social communication. To that end, he describes a service-oriented approach of mentorship by and for people who use AAC devices as one way to address

the challenges involved in making that shift. Mr. Klein's article will be of interest to AAC device users themselves, their family members and friends, AAC product manufacturers, and AAC device service providers.

Lastly, Diane Bryen, Juan Bornman, John Morris, Enid Moolman, and F. Mark Sweatman contributed an article entitled "Use of Mobile Technology by Adults Who Use Augmentative and Alternative Communication: Voices from Two Countries." The authors describe their use of surveys to investigate how people who rely on AAC are using mobile technology and what barriers they face in doing so. Based on the survey findings, they present recommendations for researchers who may be interested in studying similar topics, for developers in both the mobile technology and AT industries, and for people who use AAC devices.

As you read, consider the distinctions and commonalities that emerge from this diverse set of papers. The surface distinctions are easy to discern; the contents vary from improving the writing ability of young students, to enabling social communication among users of AAC devices, to providing effective accommodations for individuals with disabilities in the workplace, to increasing positive outcomes of functional maintenance programs for aging individuals. You may notice, though, that from just beneath the surface, some commonalities shine through. By its nature, each investigation featured in this volume relies upon the use of advanced technology – computers, smartphones, and stand-alone AAC devices – regardless of whether the technology is considered mainstream or assistive. In all of these cases it is technology that is enabling people to move beyond functional limitations to engage in meaningful activities and to achieve their personal goals. AT is transformational. However, we must also remain mindful of the assessment and implementation strategies, the training, and the information dissemination approaches that allow us to maximize the benefits of these evolving AT solutions. The value of the Assistive Technology Industry Association in helping people to achieve these aims

cannot be overlooked. It is through continued discussion and collaboration that we can see these positive outcomes spread throughout the AT community.

In that spirit, ATOB encourages AT stakeholders to read, learn and share, and to actively participate in this conversation. ATOB offers several ways to do just that. We continue to seek out authors who can share innovative practices, as well as people with disabilities who can give voice to their firsthand experience with assistive technology. Peer reviewers are also vital to ATOB's success, and we welcome interested individuals to volunteer for this role by emailing ATOBEditor@atia.org. Finally, as an open-access journal, ATOB encourages its readers to share these studies and stories with others. Let us continue the conversation and carry this positive momentum forward into reaching even greater milestones on the path toward inclusion and full access for all.

Declarations

This content is solely the responsibility of the authors and does not necessarily represent the official views of ATIA. The authors reported no financial or non-financial disclosures.

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