

Assistive Technology **Outcomes and Benefits**

Published by the Assistive Technology Industry Association (ATiA)

*Volume 10
Summer 2016*

Assistive Technology Outcomes: Meeting the Evidence Challenge

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Assistive Technology Industry Association

ISSN 1938-7261

Assistive Technology Outcomes and Benefits

Assistive Technology Outcomes:

Meeting the Evidence Challenge

Summer 2016 Volume 10

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Assistive Technology Outcomes and Benefits (ATOB) is a collaborative peer-reviewed publication 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 presented herein does not reflect the position or policy of ATIA and no official endorsement should be inferred.

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Assistive Technology Outcomes: Meeting the Evidence Challenge

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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](http://www.atia.org/at-resources/atob/) 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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Assistive Technology Outcomes: Meeting the Evidence Challenge Summer 2016

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Volume 10, Summer 2016, Volume 1 pp vii-ix
Copyright ATIA 2016 ISSN 1938-7261
Available online: www.atia.org/atob

Introduction to ATOB Volume 10: Assistive Technology Outcomes: Meeting the Evidence Challenge

Jennifer L. Flagg, ATOB Editor-in-Chief

If you attended the Assistive Technology Industry Association (ATIA) 2015 conference, you may have participated in Assistive Technology (AT) Outcomes Day, a collaborative event, jointly hosted by the Research Committees from ATIA and the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA). The AT Outcomes Day included three sessions: two focused on industry's perspective, while the third addressed academic models for data collection.

If you missed this significant event, the *Assistive Technology Outcomes and Benefits* (ATOB) Editorial Board is pleased to offer you a second chance, by continuing the Outcomes Day discussions through six articles on the topic of "Meeting the Evidence Challenge" in the arena of AT outcomes.

Several of the AT Outcomes panelists expand on their presentations, while others add new perspectives drawn from academia, industry, and the field. Collectively these articles attempt to improve the quality of life for people who use assistive technology. However, the avenues pursued to that end vary significantly. Read on for details about

the contents of this Volume 10, Issue 1 of *ATOB*.

Voices from Academia

This issue begins with two scholarly articles reviewing some of the long-standing issues in the area of assistive technology outcomes measurement. First, Ben Satterfield considers current and past efforts geared towards improving the collection and analysis of AT outcomes measurement data. His "History of Assistive Technology Outcomes in Education" presents an overview of outcomes measurement projects, programs, and tools that have been implemented over the past 25 years. Readers will find this discussion useful in orienting themselves in the work that has been completed, and in identifying the challenges that still persist.

Roger Smith then extends that discussion in his contribution titled "The Emergence and Emergency of Assistive Technology Outcomes Research Methodology." In this piece, Dr. Smith considers the ways that outcomes measurement has been approached by the medical field and how those advancements could be applied to assistive

technology. In doing so, he describes the problems with attempting to conduct randomized controlled trials related to AT use, and touches upon solutions that would help AT prescribers and payers to accept other forms of evidence.

Voices from the Field

In an article of practical interest to therapists, AT specialists, educators, and administrators, Chris Bugaj and Beth Poss present a practical and informative discussion of tools that can be used for outcomes data collection and analysis. Their article, “Multiple Means of Measurement: Tools for Collecting and Analyzing Evidence of Student Progress,” describes the movement towards digital data recording, including details regarding several tools for capturing, displaying and analyzing evidence of outcomes.

Voices from Industry

The article “Supporting Literacy Achievement for Students with Intellectual Disability and Autism through Curricular Programs that Incorporate Assistive Technology” is geared towards AT service providers, administrators, and special education professionals. Authors Carol Stanger, Pamela Mims, Leah Wood, and Lynn Ahlgrim-Delzell describe ten related research studies, each of which considered the efficacy of one of five Attainment Company products. Gains in English language arts skills were demonstrated by study participants, who were students with developmental disabilities and autism. This work is married to the Volume 10 theme in two ways. First, it demonstrates the efficacy of the products being studied, giving service providers the evidence they may need to recommend these products to their clients. Second, it presents a sample of studies that contain protocols that could be applied to measuring AT outcomes for other products.

Russell Cross and Bob Segalman collaborate to describe the value of using automated data logging in speech-generating devices in their article “The Realize Language System: An Online Speech Generating Device Data Log Analysis Tool.” Parents, service providers, and educators will appreciate the detailed discussion of state of the art technology in automated data logging, as well as the in-depth look at the application of data logging technology in Prentke Romich Company’s Realize Language system.

In their article, “Measuring Assistive Technology Outcomes: A User Centered Approach,” Adam Kinney, Dianne Goodwin, and Lynn Gitlow describe the inclusion of AT device users in the design and development of Blue Sky Design’s Mount’n Mover product. A retrospective study evaluating this product demonstrated positive client outcomes. The authors then attribute the successful outcomes to the user-centered process applied to design the product’s features and functions. AT developers and service providers will likely find value in the process description, as well as the resulting outcomes, which both provide valuable insights into the wants and needs of users of the Mount’n Mover.

Make Your Voice Heard

While these articles offer many suggestions and solutions related to achieving positive outcomes for people with disabilities, significant work remains to be done. Models and methods for data collection and analysis have the potential to shape the way we view outcomes, not only in relation to health and function, but also in terms of community participation, and ultimately, life satisfaction. Collaborations between manufacturers and researchers offer great potential for providing practical solutions with proven efficacy. It is our hope that these articles will help spur continued communication and further action

that enables all stakeholders to advance the AT field towards quality of life improvements for those we are here to serve.

ATOB welcomes continued discussion on these issues, as well as the many other facets involved in the development and use of assistive technology for and by people with disabilities. If you are a prospective author, we encourage you to visit the *ATOB* webpage at <http://www.atia.org/at-resources/atob/> to review open calls for papers, and to learn more about how you can make your voice heard.

Declarations

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

Acknowledgement

The contents of this introductory article were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), grant number 90DP0054-01-00. NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this article do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government.