

Eli's Rehab Report

Clinical Rehab Roundup: Promote Assistive Technologies To Meet Special-Needs Students' Goals

Occupational therapists can take the lead on making AT a standard part of special-education programs.

Watson, A. H., Ito, M., Smith, R. O., & Andersen, L. T. (2010). Effect of assistive technology in a public school setting. *American Journal of Occupational Therapy*, 64, 18-29.

Occupational therapists wanting to use assistive technologies (AT) in school settings to address academic and communication goals have another body of evidence to prove the method's effectiveness, thanks to a new study published by the *American Journal of Occupational Therapy*.

The Individuals with Disabilities Education Improvement Act (IDEA) allows OTs and other interventionists working with special-needs students to consider AT -- which includes aids like written communication hardware and software, speechgenerating devices, and computer access -- as a strategy for meeting student's needs. Incorporating AT or other services and aids should be based on peer-reviewed research.

Problem: "Little evidence exists regarding AT's effectiveness in the public school setting, which creates the possibility that an IEP team may decline to implement AT, a potentially effective intervention strategy for helping public school," the study points out.

To determine whether AT is effective in the public school setting, researchers established a multidisciplinary team to help students ranging in age from three-21 enhance their academic and communication performance. The goal of the study was to reveal AT's contribution to supporting established goals, and show how well AT works relative to other strategies.

Methodology: Researchers narrowed the study's focus to 13 participants who would most benefit from AT. Each participant had a current individualized education program (IEP) and had case workers who would be able to complete all components of the study within the designated school year. The caseworkers completed a pre-test (before AT) and a post-test (after AT) to measure how the intervention affected proficiency and ability levels.

The study compared results using AT against results using nine other, more traditional intervention strategies, including "adaptations of specific curricular tasks" (e.g., worksheet modifications and alternate test taking) and "related and support services" (e.g., OT, physical therapy, and tutoring).

Positive results: Evaluators' post-test ranking indicated that AT was more effective than all other intervention strategies. For instance, the average ability level for all 13 participants increased 31 percent after AT intervention, going from 36 percent to 67 percent. However, students' outcomes reached their height when AT was combined with task adaptations and support services.

Crucial: The way AT was delivered to students was as important as the AT itself. "The participants in this study received AT from a multidisciplinary AT team and from an IEP team that made a commitment to seeking and implementing AT," researchers said. Simply handing an aid like AT to a student won't work -- that aid must be guided by trained professionals who know how to get the most from it.

Takeaway: OTs should share this study's results with all public school IEP teams to prove why and how AT should be promoted for special-needs students, especially those who've "struggled to meet their IEP goals and objectives with other interventions," researchers urge.

