

## Early Intervention and assistive technology:

Using specialized devices to overcome challenges

In life, simple communication and freedom of movement are things that many people take for granted, but they present significant challenges for some. The Early Intervention Program (EI) serves preschool students with a wide variety of disabilities. Students in the program are all unique individuals, many of whom need adaptations or modifications to be able to effectively participate in preschool activities. One area that can be extremely powerful in aiding students in classroom participation is assistive technology (AT).

As part of a two-year grant from the Office of Child Development and Early Learning, the EI program is strengthening and expanding its training, support, and expertise in the area of assistive technology.



*Teacher Melody Malia is pleased with her student's practice of pre-writing skills while utilizing a slant board, an assistive device that strengthens musculature and promotes proper hand grasp and wrist positioning.*



*The BCIU EI program is an early adopter of the use of cutting-edge technology, such as the iPad, with students who are not using spoken language to communicate and interact with others.*

### What is Assistive Technology?

Assistive technology is any tool or device that a student with a disability uses to do a task that he or she could not otherwise do without it, or any tool the student uses to do a task more easily, faster, or in a better way. AT can take the form of commercial products or something someone creates, ranging from “low-tech” devices, such as pencil grips, to expensive “high-tech” devices, such as computers that can provide speech output.

Assistive technology has a powerful potential for improving the quality of life for a student with disabilities by contributing to his or her learning, independence, and self-esteem.

### Use of Technology

Computers and other technologies have given many children with disabilities options unimagined even a decade ago. As there is a wide array of assistive technology, there are also many choices that must be made by families and educators. One of the goals for BCIU's EI program was to use the funds available through the AT grant to establish and train an AT team. This team has been tasked with researching and exploring new technologies to create additional avenues for students to access their environment and to learn in ways that meet their needs.

In 2010, the AT project team purchased iPad and iPod Touch units in order to explore the use of touch-based devices for AT applications. Using an application called **Proloquo2Go** on an iPad or iPod Touch, students can select



*Low-tech assistive devices, such as picture cards and sentence strips, help the student to communicate his wants and needs to teacher Cathy Skrocki, right, and paraeducator Denise Olpp.*

and assemble different images into short phrases or sentences, which the device will speak for them. For students who are not using spoken language and may not be expressing wants and needs, this device can give them a much-needed method to communicate and interact with others. This cutting-edge technology is undergoing research in several universities and labs around the country, and Berks County is a part of the early wave of implementation.

### **Strengthening Partnerships**

Effective, appropriate decisions about assistive technology can only be made when teams are well-informed about the unique characteristics of the environments in which the student spends time and the tasks that are being performed in those environments. The AT grant enables the EI program to partner with early childhood centers and infant/toddler providers to ensure students are able to use the devices assigned to them in multiple environments.

The AT team will identify and integrate assistive technology into activities and routines for students within specialized and inclusive settings. Once a student is eligible to transition to school-age programs, the EI program then works closely with school districts to provide support as the child transitions to kindergarten. By working on early social and communication skills and offering the technology to support them, the EI program facilitates a successful transition and provides the school district with a strong foundation on which to build.

### **Professional Development and Resources**

The AT grant project provides professional development to staff from the EI program, infant/toddler providers, and preschool partners. A lending library of equipment and resources will also be established and will be made available to EI and partner personnel. This ensures that as students' needs are identified, staff can access appropriate resources and have the materials necessary to carry out AT trials to determine the most appropriate devices for individual students.

### **Goals and Outcomes**

Through the use of different technologies, professional development, and good partnerships, our goal is to improve the outcomes for special needs children up to age five through the use of assistive technology to facilitate access to services, curriculum, and school and community activities.

The AT project increases the capacity of early intervention agencies and their partners to provide assistive technology by making training, resources, and technical assistance available throughout the early childhood education community in Berks County. Ultimately, the AT project provides students with established supports that can inform school district assessments during the students' move to a school-age setting, ensuring continuity and a seamless transition.

To learn more about Early Intervention and assistive technology, contact **Kathy Evison**, program administrator, at 610-987-8539 or [katevi@berksiu.org](mailto:katevi@berksiu.org).



*Laura Rice, speech therapist, has a "motivational" snack ready for her student, who is communicating through the use of an iPad and an application called Proloquo2Go.*