



12

BRIEF

Assistive Technology for Children with Disabilities and Special Health Care Needs: Introducing the Consortium's Annotated Bibliography on Audiovisual Resources

Children with disabilities and special health care needs have complex habilitative and health care needs, often requiring a comprehensive array of services that continually evolves with the developmental changes and growth of the child. Assistive technology (AT) and related assistive technology services are critical components of this ever-changing service array.

What are Assistive Technology and Assistive Technology Services?

Assistive technology and assistive technology services are the services, supports, and devices that are used to increase, maintain or improve the functional capabilities of children with disabilities. Examples of assistive technology range from simple devices such as a suction cup rattle to adapted toys or learning devices, automated door openers, mobility aids and sophisticated communication devices and computers. Assistive technology services include assessing the needs of the child, helping a family make a decision about the most appropriate device, fitting devices to meet specific

needs, training the user and providing on-going consultation, and assessment to ensure the technology is meeting the child and family's goals. Assistive technology can be low-tech or high-tech in nature. Placing wooden blocks under a desk to increase its height to accommodate a wheelchair or building up the handle of a spoon to make eating easier are examples of low-tech assistive technology. High-tech devices include, for example, computers, alternative-augmentative communication systems and power-drive wheel chairs.

Under-Utilization of AT and AT Services

Children and their families often have a difficult time learning about and accessing the low or high tech options available to assist them with their daily life activities. Appropriate assistive technology services and supports have become more available to children through continued advances in technology and key legislation such as the 1997 amendments to the Individuals with Disabilities Education Act (IDEA), the Assistive Technology Act of 1998, the

Technology-Related Assistance for Individuals with Disabilities Act of 1994 and the Americans with Disabilities Act (ADA). There still is, however, a significant gap between existing AT and utilization of AT and AT services. For example, only 7% of children with disabilities receiving early intervention services receive AT or AT services (Technical Assistance Project, 2000). Underutilization of AT may affect the lives of children and the ease with which they can be integrated into home and community activities.

The Need for Information and Training in AT

There are multiple reasons for underutilization of AT: lack of information about AT and AT services; limited training of providers in assessment for and utilization of AT; financial challenges and complicated payment mechanisms for AT; and clinical decision making models that reduce the timeliness and utility of AT in treatment planning. In an effort to address one of these barriers to AT, the lack of information and limited training in AT, the Consortium for Children

and Youth with Disabilities and Special Health Care Needs compiled an annotated bibliography of information about training videotapes and compact disks (CDs) that focus on AT.

Format and Content of An Annotated Bibliography of Assistive Technology: Videotapes and Compact Disks

This bibliography is designed to help providers and families learn more about AT and AT services in a variety of functional domains for children and training areas for providers. Visual technologies, including videotapes and compact disks, are particularly helpful in introducing service providers and consumers to the benefits of assistive technology and assistive technology services. Additionally, the development and expansion of the Internet has increased the amount of readily accessible information. The bibliography is divided into eleven categories, which are described below. Sample titles are presented for each category.

- ◆ **General Overview.** An eclectic set of videos provides introductory information about AT for a range of disabilities and professional disciplines. Sample titles include: *Considering the Need for Assistive Technology: What Does it Mean?; Power of Assistive Technology;* and *SETTING the Stage for Success With Assistive Technology.*
- ◆ **Assessment and Evaluation.** These videos provide information about selected AT assessment and selection models. A sample title

for this category is: *Models of AT Assessment/Selection.*

- ◆ **State Assistive Technology Programs and Video Libraries.** Each state has an assistive technology program funded by the National Institute on Disability and Rehabilitation Research (NIDRR). For service providers and consumers, several state programs offer an informational video on AT and AT video lending libraries including cross-state lending and dubbing services. Example titles from the Mississippi Project Start include: *Assessment: The Critical First Step, Children's Rehab Center Assistive Technology, Funding of Assistive Technology for Individuals with Disabilities* and *Simple Technology: Tools for Independence.*
- ◆ **Advocacy.** The video in this category is entitled: *Technology and Self-Advocacy: A Bridge to Independence.* This video highlights strategies for advocates to promote technology as a bridge to independence for people with disabilities.
- ◆ **Early Childhood Intervention.** Assistive technology for children under the age of five is being utilized more frequently. Many of these sources were very recently created to highlight the benefits of AT in the birth to five year-old age group. A sample title in this category is: *Welcome to My Preschool!: Communicating with Technology.*
- ◆ **Cultural Perspectives.** These videos capture the disability experience for different ethnic

groups and cultural perspectives about AT. AT use and selection may be influenced by cultural beliefs. The Utah and Nevada state assistive technology programs develop and disseminate video resources on culture and AT highlighting, for example, how Native Americans select AT that is compatible with their culture. A sample title is: *Empower: An Introduction to Assistive Technology for the Navajo Nation.*

- ◆ **Devices or Techniques.** The majority of the videos and CDs in the annotated bibliography fall into this category. There are device-specific videos for augmentative and alternative communication, play and mobility. Sample titles include: *Augmentative and Alternative Communication (AAC) Technology; Multimedia and More: Help for Students With Learning Disabilities;* and *Toys for All Children.*
- ◆ **Recreation.** This is an important but especially difficult area to obtain resources for families. These videos educate families, educators and service providers about the role of recreation in the lives of children and youth with disabilities. The videos include demonstrations about participation in various recreational activities such as skiing, bicycling and hiking. A sample title in this category is: *The Sky's the Limit.*
- ◆ **School (K-12).** Under IDEA, each Individual Education Program (IEP) Team must discuss

the need for assistive technology to meet the student's individualized program plan. These video resources are designed to educate service providers and school faculty about improving access to education through technology resources. Videos show access to science curriculum, computers, and successful application of technology in educational programs. A sample title in this category is: *Successful Science: Technology and Support for Students with Disabilities*.

◆ **Computer Access and Compact Disks.** Utilization of computers and the Internet pose specific challenges for people with disabilities. These videos and CDs provide information about access to computers, access to the Internet and offer guidance about assistive technology. The compact disks technology provides an interactive way of learning about assistive technology. A sample title in this category is: *Computer-Access Assistive Technology*.

◆ **Training Videos and Video Packages.** Many of the video resources are designed as packages for training generic or discipline-specific groups. Included are video packages for training educators, physical therapists, occupational therapists, other service providers and families about the purpose, functional applications, transdisciplinary aspects and legal requirements of AT and strategies to access this technology. Sample title: *Assistive Technology Training Kit: Featuring Tech for Tots*.

Summary

The creation of an annotated bibliography about assistive technology videotapes and compact disks provides educators, service providers, and families with children with disabilities an additional resource to learn about and incorporate assistive technology into the lives of children and young adults so they can more efficiently integrate into their home, schools, jobs and community.

This brief is one in a series that cover disability issues among children and youth with disabilities and special health care needs.

These publications can be obtained directly from the Consortium for Children and Youth with Disabilities and Special Health Care Needs or at our website www.consortiumnrrtc.org. The Consortium is funded by the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education.

For further information on this brief, please contact Toby Long, Ph.D., P.T. (longt@georgetown.edu) at the Georgetown University Center for Child and Human Development.



For further information on The Consortium for Children and Youth with Disabilities and Special Health Care Needs, its partners or projects, please go to the consortium website at: www.consortiumnrrtc.org



This project is supported by Grant H133B001200 from the National Institute on Disability and Rehabilitation Research, U.S. Department of Education.

Notice of Non-Discrimination

In accordance with the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and implementing regulations promulgated under each of these federal statutes, Georgetown University does not discriminate in its programs, activities, or employment practices on the basis of race, color, national origin, sex, age, or disability. The statutes and regulations are supervised by Rosemary Kilkenny, Special Assistant to the president for Affirmative Action Programs. Her office is located in Room G-10, Darnall Hall, and her telephone number is 202/687-4798.

How to get the Consortium's Annotated Bibliography entitled *Assistive Technology Annotated Bibliography: Videotapes and Compact Disks*. Available to download or view at www.consortiumnrrtc.org. Scroll down to "Sample our Latest Products", "New Product", and click onto "Assistive Technology Annotated Bibliography: Video Tapes and Compact Disks".