Managing Portable Technologies for Special Education

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INTRODUCTION

Public education has a responsibility to insure that all students learn to the fullest feasible extent. The Rehabilitation Act of 1973 and the 1975 Education for All Handicapped Children Act laid the ground work for legislation that specifically address the academic needs of students with special needs. Part of that legal picture focuses on the role of technology, beginning with the Technology-Related Assistance Act of 1988. These technology-focused laws require that manufacturers and service providers address the accessibility needs of people with disabilities. To this end, portable technologies increasingly provide multiple ways for students with special needs to have physical and intellectual access to information. Librarians are well positioned to manage those resources, and optimize their use by these student populations. This chapter focuses on the management aspects of portable technologies for special education.

BACKGROUND

Individuals with Disabilities

The Americans with Disabilities Act of 1990 defines a person with a disability as one who has a physical or mental impairment that substantially limits one or more major life activity. The Individuals with Disabilities Education Act specific lists thirteen disabilities that enable youth to receive associated services: autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment.

The Individuals with Disabilities Education Act of 1990 also defines special education. This specially designed education includes services such as speech-language pathology services, travel training, and vocational education. Instruction can occur in a variety of settings. Instruction should be adapted to the needs of the child resulting from the disability, and should ensure that the child has access to the general curriculum.

Legislation

Over the years, individuals with disabilities have experienced a number of challenges as they have tried to pursue their education. They were typically relegated to separate institutions were they were given inferior instruction. Staff were often under-prepared, and even the medical diagnoses could be inaccurate, leading to inappropriate treatment. In addition, some populations, such as English language learners, were

sometimes falsely labelled as handicapped. In short, students with disabilities were denied opportunities to access education and opportunities to learn (U.S. Department of Education, 2010).

Federal laws about inclusive education date back to the 1950s with the Supreme Court case Brown v. Board of Education (347 U.S. 483 (1954)), which struck down the concept of separate-but-equal education. Although it was based on racial issues, the outcome impacted special education.

The 1970s issued in a couple of significant laws pertaining to special education. The 1973 Rehabilitation Act (Pub. L. No. 93-112), section 504, required all children with disabilities to be educated in the least restrictive environment. Based on Section 508 of this act, the Web Accessibility Initiative develops guidelines and support materials to help people plan and implement accessible online materials. The 1975 Education for All Handicapped Children Act (Pub. L. No. 94-142) (EHA) provided for free appropriate public education, including special education to meet the needs of all students with special needs.

Probably the most impactful legislation addressing special education occurred in 1990. EHA was reauthorized and retitled as The Americans with Disabilities Act (ADA) (Pub. L. No. 101-336). This act prohibited discrimination based on disabilities, which encompassed telecommunications and public institutions such as school and libraries. In the same year, the Individuals with Disabilities Education Act (IDEA) (Pub. L. No. 101-476) required schools to provide assistive devices and associated training to help students with disabilities learn.

Focusing on technology, the 1988 Technology-Related Assistance for Individuals with Disabilities Act (Publ. L. No. 100-407) helped states developed technology-enhanced assistance programs for individuals with disabilities and their families. The 1996 Telecommunications Act (Pub. L. No. 104-104) required telecommunications manufacturers and service providers to address accessibilities needs of individuals with disabilities. The Twenty-First Century Communications and Video Accessibility Act of 2010 (Pub. L. No. 111-260) aimed to ensure that Americans with disabilities can more fully participate in society and enjoy all that new technologies have to offer, especially Internet-based and mobile services. Petcu, Yell and Fletcher (2014) provided a review of assistive technology (AT) rulings from 2005 to 2013 and AT service cases in which parents were the prevailing party.

Within the legislative language of The Individuals with Disabilities Education Act (title I, part A, section 602) assistive technology devices refers to "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of a child with a disability." In that same legislation section, assistive technology service means "any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device."

Portable Technology

The term "portable" technology has changed its characteristics since the last century. The first so-called portable computers, for instance, were the size of a suitcase and were very hefty to lift and carry. In today's lingo, portable technology usually implies a stand-alone device that may be carried easily in one hand, such as a cell phone, small player, signal device, or laptop computer. Sometimes the terms "mobile" or "handheld" are used instead of "portable." In educational circles, the term "mobile learning" or "m-learning" refers to learning activities in which the learner actively incorporates these portable or mobile devices.

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