Chapter 6

Using Assistive Technology
Enabling All Children to Feel Capable and Connected in the Early Childhood Classroom

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ABSTRACT

This chapter explores how technology is used with young children with special needs in the United States. It also discusses the legal issues and mandates and the reality of how teachers and schools are dealing with children with special needs in early childhood settings. Information resources and how assistive technology fits into developmentally appropriate practice is included in this discussion.

INTRODUCTION

This chapter investigates the value of assistive technology by first addressing its definition of law and the legislative history of assistive technology to enrich the lives of children with special needs, and then describes the benefits of technology in all areas of development, including cognitive, language, physical and social domains of development. The final part of the chapter investigates the use of assistive technology in the early childhood classroom and in the home, and offers guidance to teachers and families of children with special needs to assist them in learning to access technology tools that can be great assets to the inclusion of their children in early childhood classrooms and throughout their communities.

As an early childhood special education teacher, I found that technology is not only a great equalizer, but also a great motivator for young children with special needs. For most people, it is success that breeds success. When children experience success with the use of a device that enables them to do more than they could do without it, they find within themselves the desire to try again and achieve even more. They feel like contributing, capable members of the overall school community and family, an idea supported by those who promote social and emotional learning for young children (Albert, 1996; Bailey, 2001; Cooper, 2005) and it is my belief as a special educator that there is no greater motivator available to teachers than to empower

children in this way. More recently in my career, I have worked passionately as a teacher educator, preparing eager men and women to meet the needs of the early childhood students in their care, and I continually impress upon those teacher candidates the importance of assisting all children in feeling like vital members of the classroom and overall school communities. During the last decade, technology has become a buzz word in education. Accreditation boards scan syllabi and lesson plans to see where technology is being implemented, and entire courses are devoted to ensuring that students leave their teacher education programs prepared to incorporate technology into their teaching goals. While this is all appropriate and understandable, if the underlying theme of using technology to enable *ALL* children to experience success is overlooked, a very valuable asset of technology in education is missed. This chapter sets out to address this essential element of the technology in education issue.

BACKGROUND

Children, regardless of their levels of functioning in cognitive, social, emotional, language, and/or physical domains, have the desire to belong and to feel significant (Nelsen, 1996). Like no other time in our educational system's history have educators been better able to support this desire in children with special needs. Not only do educators have the law working on the behalf of children who struggle, the increased availability of technology in classrooms, even in classrooms for young children, supports the efforts of teachers and students in enabling all children to feel capable and connected (Albert, 1996) to their peers in the early childhood classroom environment and beyond.

With assistive technology, the ability of young children to experience success through access to the general curriculum and to contribute to the overall functioning of the school community is heightened in a way that goes beyond meeting the academic goals outlined on the child's Individualized Education Plan (IEP). With the aid of technology, not only can children gain access to the curriculum and succeed in mastering measurable goals outlined therein, they can genuinely be valuable, contributing members of the school community, thus enriching their social and emotional competence in ways that are not as easily measured but perhaps most important to overall growth and satisfaction.

ASSISTIVE TECHNOLOGY

Definition and Special Education Law

Special education services are provided to young children in educational settings under the Individuals with Disabilities Education Improvement Act of 2004 (PL 108-446). Originally named the Education for All Handicapped Children Act (PL 94-142), this legislation has been amended and reauthorized three times with the most recent reauthorization being in 2004. One of the major revisions of the law occurred in 1997, when Congress mandated that every Individual Educational Plan (IEP) team must consider assistive technology when planning the educational program of an individual with a disability. Assistive technology was originally defined in the Assistive Technology Act of 1988. The 1988 version of the act was amended in 1998, and the original definition of assistive technology has become standard definition in all subsequent federal legislation and regulations legislation affecting children with special needs (Alliance for Technology Access, 2004), including the Individuals with Disabilities Education Improvement Act of 2004. Assistive technology is legally defined in two parts. First, an assistive technology device is defined as "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or

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