Chapter 6
Wheelchairs as Assistive Technology:
What a Special Educator Should Know

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ABSTRACT

Federal law supports the use of assistive technology in the education of students with disabilities. Arguably, wheelchairs are included as assistive technology. However, many barriers exist to selecting the appropriate technology and supporting its use within the educational setting. An informed team including the parent, educator, therapists, and wheelchair supplier can assist the student in reducing these barriers.

INTRODUCTION

According to Individuals with Disabilities Education Act (IDEA),

Assistive technology device means 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 the functional capabilities of a child with a disability. (IDEA, 2004)

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Mobility devices, including strollers, manual wheelchairs, scooters, and power wheelchairs, fit this definition of an assistive technology device.

In the educational setting, wheelchairs increase or improve the functional capabilities of the student in a variety of ways. Wheelchairs may provide the student with access to the school building and school transportation. Other students rely on a wheelchair to provide support of their body during educational activities. For yet other students, the wheelchair increases the student's independence in multiple school environments, such as in the gymnasium, on the playground, in the cafeteria,

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and between classrooms. A wheelchair can also provide an alternate method to carry the tools they need to access their education. These tools might include textbooks, writing tools or a computer, a communication device or other assistive technology. Independence can lead to greater social interaction with peers and being seen as more capable by teachers.

Different types of technology are needed relative to the student's needs and the purpose intended. Of course some students utilize their wheelchairs for multiple purposes. The special educator may be a key facilitator in assuring that the student's technology is a good match relative to their needs in the school setting since they may have the most consistent interaction with the student in the learning environment.

BACKGROUND

In the 1950's, students with disabilities were not seen in the typical school building. In this era, if a wheelchair was seen, it was used as a movable seat for a student with temporary health impairments such as a broken bone. Indeed, it was not until 1975, when Congress enacted Public Law (PL) 94-174, that children with disabilities were guaranteed a free public education. Previous to this, if children with disabilities had access to an education, it was in a completely separate school. Subsequent to passage of PL 94-142 and the continuing affirmation in IDEA and its subsequent revisions, it is not unusual to see students with a variety of disabling conditions resulting in mobility impairments in the school.

In the 35 years since a free, appropriate education for students with disabilities was first legislated, many changes have been needed. At first, many school buildings were not wheelchair accessible. It soon became clear that if students were to have access to a truly free, appropriate education, they would have to have physical access to their school and classrooms. However, it was not until 1990 and the passage of the American with Disabilities Act (ADA) that legislated that all public buildings must be accessible to people using wheelchairs that school buildings began to change. Existing schools as well as new buildings were mandated to provide accommodations for students with mobility impairments such as barrier free entry points, bathrooms with enough room to accommodate wheelchairs in the stalls and secure grab bars, and elevators to provide access to buildings with more than one floor.

Today, in spite of existing legislation, often securing access and accommodations to allow a student who uses a wheelchair to all classes *and* extra-curricular activities is won on a case by case basis. However, wheelchairs are now a common sight in public school buildings and the fight to gain this right is now being extended to higher education.

FUNCTIONAL REASONS AND COMMON DIAGNOSES FOR USE OF A WHEELCHAIR IN THE EDUCATIONAL SETTING

Muscular Incoordination

Students with a variety of diagnoses may display muscular incoordination. These diagnoses may include cerebral palsy, ataxia, and head trauma. The results may include effortful movement, inability to move voluntarily, reduced accuracy of movement, and/or slow response times. This may mean that the student may not be able to keep up with the movement of peers. The student may be unable to sit without support, stand, or walk. They may be unable to respond to quick environmental changes that put them at risk for falls. A student with any of these limitations may require the use of a wheelchair.

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