INTRODUCTION

In order to make assistive technology more readily available to people with disabilities who reside in Massachusetts, the Massachusetts Rehabilitation Commission created an initiative called MassMATCH, which is funded by the U.S. Department of Education under the Assistive Technology Act of 1998. The acronym, “MassMATCH,” refers to the Massachusetts Program for Maximizing Assistive Technology in Consumer's Hands. The mission of the program is “to promote the use of assistive technology and assistive technology services to enhance the independence of people with disabilities, enabling equal participation in all of life's activities.”

One of the projects that falls under the MassMATCH umbrella is the Assistive Technology School Swap (ATSS) program. This program consists of a “members only” website where member schools can post their AT inventory, make AT they are not currently using available for loan to other schools, and/or search for equipment that they would like to borrow to meet their own students’ needs.

As Physical Therapy Doctoral candidates researchers chose to assist the MassMATCH program as a capstone project. The primary goal was to recruit schools in the Greater Boston area to participate in the ATSS program. Once the schools were recruited, our main objective was to help identify and post their inventory to the website, establish the website as a member resource for communication and exchange of ideas, and facilitate exchange of equipment between schools to meet the individual needs of students with disabilities.

BACKGROUND AND SIGNIFICANCE

According to the Americans with Disabilities Act as amended (see http://www.ada.gov/pubs/ada.htm), a disability is any physical or mental impairment that substantially limits one or more major life activities. In the pediatric population, disabilities can affect a child’s ability to receive, process, and analyze any new information, making learning more difficult. Under the law commonly known as the Individuals with Disabilities Education Act (IDEA, P.L. 94-142), children have the right to a free and appropriate public education that is equivalent to the education offered to children without disabilities. At times, children need the assistance offered by personal aides and/or assistive technology (AT) to supplement the classroom resources available to them.

IDEA governs how states and public agencies provide early intervention, special education and related services to more than 6.5 million eligible infants, toddlers, children and youth with disabilities. There are two relevant sections to this law: Part B and Part C. Part B covers youth and children, ages 3-21, and allows them to receive special education and related services. Part C covers infants and toddlers (birth-2) along with their families, and allows the children to receive early intervention services (U.S. Department of Education, 2010).

Another legislative Act supporting the integration of children with disabilities in mainstream educational programs is the Free Appropriate Public Education (FAPE) Act for students with disabilities. According to the U.S. Department of Education, Office for Civil Rights (2010), FAPE is guaranteed under Section 504 of the Rehabilitation Act of 1973 and the Individuals with Disabilities Education Act. FAPE broadens the initial language introduced...
by IDEA, requiring public schools to provide “free appropriate public education” to each qualified person with a disability who is in the school district’s jurisdiction, regardless of the nature or severity of the person’s disability.”

Under IDEA and FAPE, school systems are required to produce an Individualized Education Plan (IEP) for each student who is found to have a disability. The IEP is the cornerstone to each child’s educational program. It is a binding contract that specifies the services provided (speech therapy, occupational therapy, physical therapy, etc.) and how often the services will be delivered. An IEP describes the student’s present levels of performance, how the student’s disabilities affect academic performance, and specific accommodations and modifications needed to assist the individual child. The IEP must be designed to meet the needs of each child in the least restrictive environment. This refers to the environment in which the child is able to succeed academically. Often times, appropriate AT is needed to give each child the best opportunity to learn.

Students with disabilities face barriers in mainstream school environments for a variety of reasons. One example is that AT resources may be limited. The Massachusetts Rehabilitation Commission defines AT this way: “Assistive Technology is a device or service that increases, maintains or improves the functional capabilities of people with disabilities.” AT helps make it possible for people to function optimally for longer periods of time. Assistive devices can fall into any of the following categories: computers, devices to aid daily living, environmental adaptations, hearing, learning/ cognitive/ developmental, mobility/ seating/ positioning, recreation/ sports/ leisure, speech communication, vehicle modification/ transportation, vision, and other. Among children in public school systems, AT should be utilized to improve each child’s independence and ability to reach full potential in the least restrictive environment for that child.

Lack of awareness on the part of students, parents, and educators regarding the availability of various forms of AT is one reason why children with disabilities fail to thrive in a mainstream school. By assisting with the MassMATCH ATSS program, our aim was to provide resources to improve awareness about the kinds and availability of AT that can help children be more successful in mainstream education.

PROJECT DESCRIPTION

This project utilized community-based participatory research to join university and state agency resources to solve a problem of mutual interest. Qualitative data were collected from activity journals kept by each of the researchers, feedback from community partners and school personnel, and the literature addressing issues related to the role of AT educational settings.

PROJECT TASKS

Important from the outset was the need to establish a close working relationship with the personnel in the MassMATCH program who are responsible for the ATSS project. We worked closely with the director, who was a full time employee, and his assistant, an individual who was considered job ready based on his Massachusetts Rehabilitation Vocational Rehabilitation Plan but was still unable to find full time employment. MassMATCH personnel educated us about the role of the ATSS program and trained us to train school personnel about the website. They also provided us with leads for contacting schools who would probably be interested in participating in the ATSS program. From there, we were able to delve into other aspects of the work, which included the following:

- Recruit schools to participate in the program
- Train school personnel about value and use of ATSS website
- Conduct ongoing needs assessment of each school’s AT program
- Provide individualized school support required
  - Locate equipment
o Take pictures, write text descriptions

o Enter information into the web-based inventory database

o Identify schools’ decision to “swap” within school district, across consortia, or across the state and post it appropriately

- Collect feedback from school personnel to share with MassMATCH about the need to modify the database or website to improve user friendliness of the project

- Conduct a review of manufacturers’ websites and professional literature to develop a “Virtual AT Tool Kit” for the website, including pictures and descriptions of helpful educational AT not already in use by participating schools

- Identify and set into place incentives to maintain use of by participating schools and attract new schools to the MassMATCH ATSS program.

RESULTS AND DISCUSSION

Data from researcher journals, MassMATCH and school personnel feedback, and the literature were reduced using the typical qualitative data analysis methods of coding and categorizing. Results were summarized into a report for Massachusetts Rehabilitation Commissions’ MassMATCH personnel and website developers to facilitate changes needed to improve the ATSS program and maintain a user friendly website environment with built in incentives to promote continued use. Results of this work and implications for other state Assistive Technology Act programs will be the focus of this presentation.

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REFERENCES


