Chapter 58
Supports for and Barriers to Implementing Assistive Technology in Schools

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ABSTRACT

This study examines practitioners' perceptions of the factors impacting the implementation of assistive technology (AT) for students with disabilities in five public school divisions. Participants were five members of division-wide AT facilitation teams. Interview data indicated barriers including lack of stakeholder buy-in with a focus on administrative support. Important supports included the development and maintenance of relationships with instructional staff and technology coordinators. The ongoing need to build stakeholder awareness of and skill in implementing assistive technology was a common theme. Participants perceived that, if empowered to do so, an AT facilitation team can overcome existing barriers to implementation.

INTRODUCTION

The *Individuals with Disabilities Education Act (1997)* defined assistive technology devices and services for students in K-12 public education settings and required that AT be considered for every student with a disability. That consideration is focused on AT service provision in an educational environment. The broad definition includes a wide variety of items that might be considered assistive technology devices and may be categorized into the following areas of need: writing, spelling, reading, math, study/organizational skills, listening/seeing, communication, computer access, electronic and other aids to daily living, recreation, leisure, positioning, seating and mobility. Given the wide variety of AT tools and services available for students with disabilities,

a significant challenge facing school personnel is how to coordinate assessment, training, integration, and ongoing service provision related to AT. Currently, many school divisions have no coherent procedures for assessing the need for and implementing the use of AT. The range of personnel involved in the processes, from administration to related service providers, is so great that "on the fly" coordination is ineffective. Providing AT for one individual may in fact be done by one or two staff members, but for school divisions with dozens or hundreds of students requiring the types of services described above, clearly-defined systems are required.

PURPOSE OF THE STUDY

The purpose of this study is to determine the barriers to and supports for implementing AT in public schools. Knowledge of these will indicate the areas on which to focus when developing effective systems change related to AT. To determine what was already known on the subject, we searched the MetaLib online catalog including the InfoTrac One File, ERIC Index to Educational Materials, Academic OneFile, PowerSearch, LexisNexis Academic, and Dissertation Abstracts electronic databases in April 2008. While searching the databases, we found no relevant matches for the subjects "assistive technology" and "systems" although there is a single study of "Using participatory action research to examine outcomes and effect systems change in assistive technology financing" (Hammel, Finlayson, & Lastowski, 2003). As financing is not our primary focus, but rather implementation, we determined that exploratory research is lacking and needs to be conducted. Results from this study can be used to inform the development of technical assistance supports for all schools working to adhere to the legal requirements related to AT assessment and service provision as well as to inform future research.

SAMPLE AND DATA COLLECTION

In this grounded theory study, we collected interview data from five practitioners. The participants interviewed were theoretically sampled: each of five researchers contacted one public school employee with whom she is currently working on an initiative related to assistive technology. We selected only those persons who we have seen to be knowledgeable of assistive technology and its implementation in the public school environment. Although grounded theory research usually involves a greater number of interviews, we felt that we collected enough information on this subject from only five interviews to both saturate the categories we create and provide meaningful data to inform our work.

ANALYSIS

We analyzed our interview data as we collected it, transcribing and analyzing each one as it was completed. We used the constant comparative method of data analysis to take information from each interview and compare it to our emerging categories. Categories were created related to events, happenings, and instances; those categories were saturated with information from the interviews (Creswell, 1998). Through the use of open coding, we made preliminary categories related to barriers to and supports for the acquisition and implementation of assistive technology in schools. As categories emerged, we expanded or collapsed the category to best reflect the information collected. We examined each category to determine what, if any, subcategories should be identified and expanded upon with additional information. These categories are addressed in the remainder of the paper.

FINDINGS AND DISCUSSION

We share our findings as suggestions for improvement in the area of AT systems change in preK-

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