Ensuring Equal Access to Technology: Challenges of Providing Assistive Technology Service for Individuals with Disabilities

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With the passages of landmark laws such as the Americans with Disabilities Act (ADA) and the Individuals with Disabilities Act (IDEA), equal access to technology for all individuals regardless of their abilities or disabilities has been getting increasing attention in the field of education and rehabilitation. The Technology-Related Assistance for Individuals with Disabilities Act (Tech Act, 1988), and the Public Law 105-17 the IDEA amendments of 1997, define assistive technology (AT) device as any item, piece of equipment, or product system that is used to increase, maintain, or improve the functional capabilities of a child with a disability (IDEA 1997). AT devices are typically categorized as no technology, low technology, medium technology, or high technology depending on the existence and level of sophistication in the included electronic components. An AT item can be as low-tech as the Dycem mat, which is a non-slippery material used to prevent objects from tipping or slipping, or as high-tech as the Pathfinder which is a highly sophisticated communication device. AT devices can also be classified into a number of categories based on how they assist individuals in meeting the tasks that are demanded by different environmental settings (i.e., computer access aids, communication aids, daily living aids, education and learning aids).

Considering a continuum of assistive technology items and services for individuals with disabilities is a recommended practice in the field of rehabilitation and education. However, due to the vagueness of the current laws and lack of clear guidelines on how the service should be provided, service providers at education and rehabilitation agencies are faced with challenges of developing effective AT service delivery system on their own. While funds for AT has been decreased, it is still the intent of the laws that school professionals consider AT as an option for students with disabilities. Once professionals identify the needs for the use of any AT item on the Individualized Education Plan (IEP), they must provide the item at no cost to parents (IDEA 1997). School and rehabilitation professionals are faced with additional challenges of evaluating the technological needs of individuals with disabilities and identifying the appropriate AT items that will increase their functional capabilities in the settings of home, school, and community. In other words, AT items can function as an equalizer that will enhance the independence and freedom of individuals with disabilities.

Given the fact that rehabilitation and education agencies attempt to fulfill the intent of the laws regardless of these challenges, the purpose of this case study is to examine how a number of rehabilitation and education agencies provide assistive technology services to individuals with disabilities. An instrumental case study method (Stake, 1995) will be used to examine how AT service delivery system is developed and functions. Case study research method is widely used to investigate a phenomenon in its real-life context (Yin, 1984). Using a purposive sampling method, five to ten agencies in a Midwestern metropolitan city have been identified for the case study. These agencies provide AT services for individuals with disabilities between the ages of birth to 21. A professional who is responsible for coordinating AT service at each agency will be contacted. Data sources include interviews, site visit, and document review. A face to face interview will be conducted using a semi-structured questionnaire that contains items including the population served, funding sources, staffing pattern, evaluation procedure, purchase/lease procedures, technology training, inventory, device/equipment lending policy, and challenges and barriers to providing effective assistive technology services. In addition, documents such as evaluation models and AT inventory will be collected with the consent of each agency. Data will be analyzed using both quantitative and qualitative methods. Findings from this study will shed lights on the development of effective AT teams by education and rehabilitation agencies where the administrators are either in the process of or at the planning stage of developing AT service team. In addition, it is expected that the findings from this study will enable researchers to develop a structured survey for a larger scale research to examine the factors that are associated with effective AT service delivery and utilization.

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