Chapter 21

Individuals with Disabilities and Internet Use

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ABSTRACT

This entry examines the use of the internet by individuals with disabilities. Before people with disabilities can use the Internet for socializing, communicating, gathering information, learning, or working, they must first be able to access the Internet. This may require additional assistance by either people or modified hardware and software. Some authors have expressed concern that there is a digital divide, with many people with disabilities not accessing the Internet. The differing needs of people with disabilities, and how their needs may be met with technology and adaptations are explored. Examples of various uses of the Internet by people with disabilities are presented. This field does not have a large research base; it is difficult to do controlled large group studies with such diverse populations, so much of the information comes from position papers, demographic reports, case studies, or exploratory research.

INTRODUCTION

Over the past 50 years, the rights of individuals with disabilities have been made explicit though legislation in the United States, such as Section 504 of the Rehabilitation Act (1975), the Americans with Disabilities Act (1990) and the Individuals with Disabilities Education Act (2004), as well as similar legislation in other countries. As people with disabilities are more visible and participatory in society, they are also using the internet, along with various specialized access technologies, to maintain contact with others, to learn, and to work.

Dobransky & Hargittai (2006) noted that people with disabilities can use the internet and computers to escape the isolation and stigma that are sometimes associated with disabilities. Bradley & Poppen (2003) reported that internet access has improved how individuals with disabilities evaluate their communication with others. In addition,
Grimaldi & Goette (1999) and Cook, Fitzgibbon, Batteiger, Grey, Caras, Dansky, & Priester (2005) reported that internet use improved the sense of independence and self-determination for individuals with disabilities.

The benefits of accessing the internet through computers are not limited to just the psychological realm (Dobransky & Hargittai, 2006). For example, improved health outcomes and positive impacts on health-related quality of life issues were reported by Magnusson, Hanson, & Borg (2004) and Drainoni, Houlihan, Williams, Vedrani, Esch, Lee-Hood & Weiner (2004). However, in many cases, there must be support by both other people and modified hardware and software before people with disabilities can access and use the internet. This brief review will explore many of the internet accessibility issues and supports available for people with many different disabilities, including those with cognitive, sensory, physical and other types of disabilities. This review is not intended to provide an in-depth analysis of every disability and its impact on internet accessibility and use since individuals with disabilities vary significantly. Add to this the speed at which technology and the internet is changing. However, this review captures some of the available material on how the internet can improve life for people with disabilities.


Although recent research examined possible inequality in access to and use of the internet and other digital media, the fact that many studies (e.g. Finn 1999; Grimaldi & Goette 1999; Bradley & Poppen 2003; Seymour & Lupton 2004; Guo, Bricout, & Huang, 2005) have been based on limited samples, leaves many questions unanswered (Dobransky & Hargittai, 2006). Add this to issues related to defining disability, and it is easy to see why it is difficult to reach conclusions. In an attempt to avoid some of these problems, Dobransky & Hargittai used representative data collected by the Bureau of Labor Statistics and the Census of the United States and reported “that people with disabilities are less likely to live in households with computers, are less likely to use computers and are less likely to be online (p. 313)”. This could be a result of either lacking access to a computer with an internet connection, or, if they have a computer and internet connection, not having the adaptive hardware and software needed to use it (i.e. a text reader for somebody who is blind or who cannot read text for other reasons, or a speech to text program for somebody with mobility issues that limits typing). However, when looking at disability by category, Dobransky & Hargittai clarified that once socioeconomic background was controlled for, people with hearing disabilities and those with limited mobility were as likely as those without disabilities to be Internet users. As a result, they suggest that future research disaggregate people with disabilities into relevant categories in order to untangle this issue. However, it is important, before proceeding with this review to provide some context and definitions of disabilities.

**CATEGORIES OF DISABILITY**

There are multiple definitions, classifications, and categories of disability. For example, in the United States, a student with a disability is defined by the Individuals with Disabilities Education Act (IDEA), in part, as a child “with mental retardation, hearing impairments, speech or language impairments, visual impairments, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities” (U.S. Department