

# Chapter 12

## The Digital Divides in the U.S.: Access, Broadband, and Nature of Internet Use

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### ABSTRACT

*The purpose of this chapter is to describe the digital divides in the U.S. in terms of access, broadband connectivity, intensity of Internet use, and nature of Internet use. These divides hold true for both adults and youth and have far-reaching implications for both groups, as well as for society as a whole. For the most part the digital divides center around race, income, and, to a lesser extent, gender. Because the digital divides are complex and multifaceted any approach to reduce or eliminate them must also be complex and multifaceted. We suggest ways that educational, community, government, and corporate resources can be brought to bear on eliminating the digital divides.*

### INTRODUCTION

The objectives of this chapter are to provide evidence that: (1) There is a digital divide in Internet access

in the U.S. that centers around race, income and education; (2) There is a digital divide in the U.S. in intensity and nature of Internet use that centers around race, income and education but also around gender; (3) The intensity and nature of the Internet digital use divide may have consequences as far

DOI: 10.4018/978-1-60566-699-0.ch012

reaching as the initial Internet access divide. The existence of these digital divides, broadly defined, has far-reaching implications. Vital information about health, government, jobs, education and commerce are migrating relentlessly online and thus becoming increasingly less available to those who need this information the most – underprivileged groups, and increasingly more available to those who need it least – affluent groups; (4) Efforts to reduce the digital divide in the U.S. and elsewhere through public access are unlikely to results in digital equity. Rather, direct intervention from public and private organizations will be needed to reduce and possibly eliminate the digital divide.

A second set of objectives of this chapter is to demonstrate that: (1) Digital divides are almost as pervasive among youth in the U.S. as they are among adults. The so called “Net Generation” is actually a quite exclusive group which leaves out many other groups in our society; (2) Digital divides among youth have as many if not more negative implications as digital divides among adults, potentially contributing to gaps in academic performance and professional, social and political integration; (3) Digital equality has the potential to level the playing field by providing the underprivileged “have nots” with the same opportunities for cognitive, social and psychological development as their more affluent peers.

Other objectives of this chapter are to provide evidence of the importance of being “connected” in order to obtain the educational and occupational resources needed for successful employment in the 21st century workforce. Using our own research we describe the changing nature of the digital divide in the U.S., the possible benefits of IT use to the academic performance of low-income children, and gender differences in select dimensions of academic performance among children in the U.S. and China. We conclude by discussing policy implications aimed at reducing the digital divides to achieve economic, political and social parity among racial/ethnic and gender groups.

## **BACKGROUND**

Since the Internet first entered the public consciousness (circa, 1995) there have been countless discussions about the digital divide, including debates about its very existence and likely persistence (Driori, 2005, van Dijk, 2005; Jackson, 2008; Pew Internet and American Life Project (Pew), 2005; National Telecommunication and Information Administration (NTIA), 2000). Initially, the term “digital divide” was used to refer to the gap between those who had access to digital technologies, especially the Internet, and those who did not (NTIA, 2000). More recently, the term has been used to refer to the gap between those who have regular, “effective” access to digital technologies and those who do not. Thus, discussions have shifted away from physical access and toward the digital skills and literacy needed for success in the 21st Century global marketplace (Driori, 2005; Livingstone, 2003; Van Dijk, 2005).

Is there a digital divide? As we will demonstrate in this chapter, the answer to this question depends in part on how you define digital divide (Livingston, 2003; Van Dijk, 2005). We will demonstrate that the multidimensional nature of the digital divide necessitates multi-faceted strategies for closing the gap between the information haves and have nots.

## **THE FIRST DIGITAL DIVIDE: ACCESS TO INFORMATION TECHNOLOGY (IT)**

For over a decade national survey research conducted by the Pew Internet and America Life Project (Pew), the National Telecommunication and Information Administration (NTIA) and independent researchers have documented the existence and persistence of a racial digital divide with respect to physical access to the Internet (e.g., Hoffman, et al., 2001; Pew, 2005; NTIA, 2000). In most of this primarily survey research “access”

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