



The Digital Divide

Much public attention has been focused on the increasing importance of the computer, the Internet, and other forms of technology in daily life. Computers and Web-based activities are integral parts of most workplaces and are becoming increasingly incorporated into the educational experiences provided by schools. What is sometimes overlooked, however, is that variations in children's opportunities for certain kinds of interactions with these newer forms of technology may be perpetuating a "digital divide" in which some children have extensive access to the newest forms of technology for educational purposes, while others may be using them primarily for entertainment.

In *The Future of Children* volume "Children and Electronic Media," experts discuss differential access and the potential implications this has for children's development. The term "digital divide" came into popular usage during the mid-1990s and originally referred to variations in access to personal computers and other allied technologies (such as Internet connections) according to differences in socioeconomic status, race and ethnicity, gender, and geography. More recently, as the gap in access to computers has narrowed somewhat, the term has also been applied both to broadband connectivity and to differences in technical support and in how members of different socioeconomic status or ethnic groups use technology.

Although general access to computers has been improving, research suggests that home computer availability continues to vary by both parental education and race and ethnicity. A recent survey conducted by the Kaiser Family Foundation found that 91 percent of eight- to eighteen-year-olds whose parents completed college have access to an in-home personal computer, as compared to 84 percent of those whose parents attended but did not finish college, and 82 percent of those whose parents completed no more than high school. Differences in the availability of personal computers varies by race and ethnicity as well, with a higher share of white (90 percent) than either African American (78 percent) or Hispanic (80 percent) eight-eighteen-year-olds living with personal computers. The pattern is similar for Internet connections (approximately 78 percent for white children, 60 percent for African American children and 67 percent for Hispanic children) and instant messaging programs (approximately 79 percent for white children, 47 percent for African American children, and 52 percent for Hispanic children).

Similarly, even though computers and the Internet are available in almost all public schools, schools with the highest poverty concentrations have higher ratios of students to instructional computers (5 to 1 vs. 4.1:1) and less access to computers outside regular school hours than do schools with the lowest poverty concentrations. In a related finding, children from higher-income households are more than twice as likely as those from the lowest-income households to use a home computer to complete school assignments (77

percent versus 29 percent) and are more than three times as likely to use a personal computer for word processing or desktop publishing.

Interestingly, in terms of race and ethnicity, although a significantly higher share of white youths (57 percent) than either African American (44 percent) or Hispanic youths (47 percent) report using a computer on any given day, still the three groups do not differ reliably in the total amount of time they use computers. Apparently fewer minority youths use computers, but those who do use them for longer periods than do their white counterparts. At the same time, minority youths seem to be spending more time with screen media (television, videos, movies) than whites. Daily viewing averages 5:53 hours for African American eight-eighteen-year-olds, 4:37 hours for Hispanic eight- to eighteen-year-olds and 3:47 hours for white eight- to eighteen-year-olds. These relationships between media use and race and ethnicity largely withstand controls for socioeconomic status.

The evidence described above suggests that, though access to technology has been improving, the digital divide remains a cause for concern. Children from higher-income households are more likely to have greater access to computer technology, both at home and at school. Similarly, there are also racial and ethnic differences in children's access to and use of various forms of media. As these young children move through an educational system and into a workforce that increasingly relies upon the use of technology, it seems likely that limited opportunities to utilize computers and technology for educational purposes could represent a serious disadvantage for some children in terms of achieving educational and professional success.

Prepared by Ann Cami based on information contained in *The Future of Children: Children and Electronic Media*, Jeanne Brooks-Gunn and Elisabeth Donahue, eds., Volume 18, Number 1, Spring 2008 www.futureofchildren.org.

Specific Chapters Referenced Include:

Donald F. Roberts and Ulla G. Foehr, "Trends in Media Use", pp. 11-38.

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