The Digital Divide

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Technology allows students to work at their own pace, explore the world around them, and enhance their understanding due to the wealth of information it provides. However, many people are behind in the "digital age," especially students. With the research presented in this paper, I will help the reader understand the reasons for the digital divide and the ways to resolve the problem.

In my observations as a future teacher, I have come to learn that the only way to help students prepare for their future is to teach them the skills needed later in life. Findings show that most students use computers and a majority use the Internet. In 2003, "about 91 percent of 53 million persons surveyed—all age 3 and over (nursery school through grade 12)—were found to use computers. It was also found that about 59 percent of 35 million persons surveyed, used the Internet" (DeBell, 2003). Since technology is becoming such an important resource in today's society, I believe teachers must educate their students about the importance and use of technology in order for their students to be successful in the future. Unfortunately, many teachers and students have negative feelings toward the use of technology or they are uneducated in the role technology plays in today's society. Thus, there exists a digital divide.

According to Barron and her colleagues' book, *Technologies for Education: A Practical Guide* (2002), it is stated that many students learn differently; "in other words, one student may be an audio learner and benefit most when instruction is delivered through sound and narration; another student may be a visual learner and benefit most when information is conveyed through pictures and text" (p.7). Since there are different ways to learn, Barron and her colleagues suggest using technology to help cater to the various needs of a student. Unfortunately, some theorists argue that technology is not needed to cater to the needs of a student (Robyler, 2000). These theorists are normally the ones who support objectivists' views. Objectivists' argue that computers are only needed and used for typing papers or playing games—a view also found among students (Mike Bennett, personal interview, Oct. 25, 2007). Therefore, according to these theorists, computers

contribute little to the learning process. On the other hand, constructivists believe that objectivists' views are out-dated due to the increased implementation of technology in today's society (Robyler, 2000). Attitude is not the only reason the digital divide is increasing, socioeconomic issues and funding also contribute.

Henry Jay Becker argues in his article, *Who's Wired and Who's Not*, that many students who come from low-SES (socioeconomic status) schools do not have the opportunity to use technology except for at school. He states that normally low-SES schools are in lower income neighborhoods, so many students do not have computers at home or connection to the Internet. If they do have computers, they might only be able to perform basic functions. Thus, when these students come to schools that have advanced technology, they are subjected to the basic levels of computer use (e.g., word processing and basic Internet use). Becker later mentions that the richer, more affluent neighborhoods often accompany high-SES schools, so students who live in these areas are more likely to have computers with advance technology and Internet connection. Therefore, these students are better prepared to use higher levels of technology in schools because they already know the basics of technology (p. 55).

Hoffman and Novak (1998), in their study among White and African American students, came to the same conclusion as Becker. They found that "whites are more likely to have a computer in their homes (44.2% compared to 29.0%)." Also, "whites are more likely to have used the Web (26% versus 22%)" (p.1). According to another analysis completed in 2003, it was concluded that computer and Internet use is still higher among Whites than among Blacks. The analysis also added Hispanics to the equation, saying their use of computers and Internet was still lower than Whites (DeBell, 2003). As I have lived in various states, I have observed the same findings.

One of the solutions for helping decrease the digital divide is to increase technology in schools. This can be done by increasing the need for teachers educated in technology. It is believed

that as teachers understand technology they will change their attitudes about the use of technology in their curriculum, since many of their views come from their fears of the unknown (Barron, 2002). Another solution is to continue to find ways to fund technology and have computer software and hardware available to students. Since funding for technology is the responsibility of the district, not the state, property holders become the main benefactors for technology (Mike Bennett, personal interview). However, there must be other ways than raising property taxes to fund technology in schools.

Changes in teachers' credentials and school funding will possibly take legislation—the passing of laws that demand teachers have experience with technology and laws to increase funding for technology. Both of these solutions will help because affectively implementing technology into classrooms will provide students, who do not have access to technology at home, with increased knowledge of technology (Hoffman & Novak, 1998, p.9). If teachers do not understand technology, or how to implement it into their curriculum, the technology they are provided is useless and their students might not be prepared to enter a society full of technology. Thus, the role of schools in bridging the digital divide is crucial (DeBell, 2003).

Again, technology allows students to work at their own pace, explore the world around them, and enhance their understanding due to the wealth of information it provides. I admonish all future teachers to be prepared to implement technology into their classrooms and society to help with the funding issues. As these issues are addressed and solutions are implemented, I believe the digital divide will continue to decrease.

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