Chapter 2

Technology Access Gap for Postsecondary Education: A Statewide Case Study

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ABSTRACT

Technology to learn the digital literacy skills required to attend postsecondary institutions or to access distance learning courses. Three groups of students are impacted by the lack of access to technology: (a) without broadband access, (b) students’ low socioeconomic status, and (c) students’ primary language is not English. Without digital literacy skills, selecting, applying, and fully participating in a postsecondary education is difficult. This chapter will outline the challenges these three groups of students have in accessing broadband, the impact the lack of access created in Florida, and solutions that were suggested to address lack of high speed broadband.

INTRODUCTION

Accessing and analyzing digital information, creating products, sharing new information, and communicating ideas are digital literacy skills considered important for employability and life skills (MediaSmarts, n. d.). Digital literacy skills are so important that the Partnership for 21st Century Learning (P21) stated that “all learners need and deserve 21st century learning opportunities to thrive as tomorrow’s leaders, workers, and citizens” (P21, n. d.). Within the Framework for 21st Century Learning are the digital literacy skills of information, media, and technology (P21, 2007). The framework represents the skills and the knowledge that teachers, educational experts, and business leaders view as important to be successful in work, life, and citizenship.
Lack of access to technology creates a technology divide that begins at the elementary educational level and impacts students’ postsecondary educational careers. A relationship exists between the use of digital media and student academic achievement. The time that students spend using computers correlates with higher scores on the Program for International Student Assessment which scores on the mathematics assessment section (Organization for Economic Co-Operation and Development, 2005). The same variable of time spent using informational technology also correlates with better grades and grade point averages (Jackson et al., 2008). The more time students spend using technology leads to a greater diversity in activities in which students engaged while on the computer. The increased diversity of activities created more opportunities to engage in self-selected academic activities, including reading websites and writing about their experiences (Jackson et al., 2008).

The impact of an inadequate access to technology extends beyond high school and leads to a cycle of continual lack of access (See Figure 1). Lack of access at the K-12 educational system translates into implications for postsecondary institutions as admission decisions are based upon standardized assessments, grades, and grade point averages. It is possible that students without technology are not developing the skills that will allow them to be admitted to a university. Furthermore, the lack of access promotes a continual digital divide in which 90% of college graduates compared with 37% of non-high school graduates have high-speed Internet access in their homes (Zickuhr & Smith, 2013).

Broadband serves as a gateway to a highly connective world. Individuals with low socioeconomic status (SES) do not have the resources to either own a computer or to pay for broadband in order to access the full range of educational resources. Individuals whose primary language is not English often place ownership of the technology as a low priority. This paper will explore these three contributing factors to the lack of access to technology for distance learning both at a national and a state level and the proposed solutions to access to the university system in Florida.

Figure 1. Cycle generated by lack of access

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