

Chapter 14

Examining the “Digital Divide”: A Study of Six Pre–Service Teachers’ Experiences with ICTs and Second Language Education

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ABSTRACT

Since the concept of “digital divide” first appeared, many researchers have argued for a more nuanced definition that highlights its complexities and better reveals its impact on the appropriation of ICTs. In this paper, the author analyzes the experiences of six Master of Education (M.Ed.) pre-service teachers learning to integrate ICTs into their practice. These case studies demonstrate how novice teachers’ learning processes can be impacted by the unequal distribution of the temporal, material, mental, social, and cultural resources available (van Dijk, 2005). A number of pedagogical and curricular recommendations for the M.Ed. program are then provided.

INTRODUCTION

In recent years, Information and Communication Technologies (ICTs) have become an intrinsic part of our everyday lives. In this paper the term ICTs will refer primarily to computers and their networks. There is an increasing belief among the general public and educational leadership that computer literacy is essential to functioning properly in today’s society. According to Eteokleous (2007), such perception “is warranted because

the computer represents not only an excellent curricular tool, but also a revolutionary classroom approach that can help students achieve important gains in learning and understanding” (p. 670). Consequently, many countries such as the United States have developed new policies and invested large sums of money to ensure that ICTs are integrated into the classroom. In the 1990s, the concept of a “digital divide” came to the forefront of political debates highlighting inequality of access to ICTs. At the time the digital divide referred mainly to the gap between those who had physical access to ICTs and those who did

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not (Kim, Lee, & Menon, 2009). Consequently, in the United States many programs were developed at a federal and state level to place more computers in schools and homes with limited access to ICTs and to enhance their connections to the Internet (Egbert & Yang, 2004). In fact, schools were perceived as agents of change that would help minimize generational inequalities and close the digital divide (Holloway & Valentines, 2003; Stevenson, 2008). Large sums of money were then invested to promote the integration of ICTs into the classroom as a teaching tool and to ensure all students’ access to a computer and an Internet connection (Warschauer, 2004). ICTs are also used in the field of Second Language Education (SLE) and it is now imperative for second language teachers to acquire the necessary technological skills to use computers as an integral part of their teaching (Tognozzi, 2001).

Since the concept of a digital divide first appeared many researchers have discussed its limitations and have argued for a more nuanced definition that highlights its complexities and better reveals its impact on the appropriation of ICTs (Selwyn, 2006; van Dijk, 2006; Warschauer, 2004). The goal of this article is to examine the integration of computers and their networks into second language teacher education programs and pre-service teachers’ knowledge-base development. More precisely, in this paper I will analyze the experiences of six SLE Master of Education (M.Ed.) pre-service teachers who were learning to integrate ICTs into their practice. These case studies demonstrate how pre-service teachers’ knowledge-base development related to technology-enhanced second language education can potentially be impacted by the unequal distribution of temporal, material, mental, social and cultural resources (van Dijk, 2005).

After reviewing the literature on the subject and reframing the digital divide I will discuss the experiences of six SLE pre-services teachers and provide a number of pedagogical and curricular recommendations for the SLE M.Ed. program.

REVIEW OF THE LITERATURE

In the mid 1990s, the expression “digital divide” was first “used in a publication by the US Department of Commerce’s National Telecommunication and Information Administration” (van Dijk, 2006, p. 221). This study placed the issue of unequal access to computer technologies at the forefront of the political and academic agenda by questioning whether ICTs were widely available to everyone. Earlier research on the digital divide focused more on physical access, considering demographic factors such as age, race, and income (Selwyn, 2004). For instance, Hoffman et al. (2000) conducted a systematic investigation of the differences between whites and African Americans in the United States with respect to computer access. They wanted to examine whether observed racial differences in access and use could be accounted for by the differences in income and education, how access influenced use, and when race affected equal access. The study revealed that people with a college degree were more likely to own and use a computer, but even with a college degree, African Americans were less likely to own and use a computer than their white counterparts. According to the researchers, one of the factors that could explain such a phenomenon was the lack of economic access to computers for many African Americans.

Although many studies still focus on physical access, in recent years scholars have increasingly argued for an expansion of the concept of the digital divide that would take into consideration “social, psychological and cultural backgrounds” (van Dijk, 2006, p. 221). It became clear that “meaningful access to ICT comprises far more than merely providing computers and Internet connections” (Warschauer, 2004, p. 6) and that access is “woven in a complex manner into social systems and processes” (Warschauer, p. 8). Many researchers started to focus on users’ practices with ICTs and the ways that these technologies were appropriated and intrinsically connected to social,

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