Chapter 25 Pre-Service Teachers' Perspectives on Learning to Teach Social Studies in a Technology-Rich Pedagogy Course

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ABSTRACT

Preparing new teachers for teaching with technology is a multi-faceted process. The study reported in this chapter examined the impact that immersion in two technology-enriched, pre-service social studies pedagogy courses had on the way beginning teachers approached technology use in their teaching of social studies. The study took place over two years and tracked education students through their social studies pedagogy course experiences and their practice teaching as part of their teacher preparation program then into their first year of teaching. The findings identified that the pre-service pedagogy courses did assist in increasing the education students' understanding of a variety of ways to approach the use of various technology tools as well as their willingness to use them in their teaching. However, the results also point to the importance of pre-service teachers' developing a positive attitude and a willingness to take risks with technology; of all instructors being prepared to infuse technology use in their classes in ways that fit with what is current in the schools; and of schools and mentor teachers encouraging, supporting, and modeling best practice with technology.

INTRODUCTION

A common assumption amongst educators is that the current generation of new teachers is more technologically savvy and therefore more inclined to infuse technology into their teaching. However,

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a recent 2010 study of teachers' use of technology in the classroom surveyed more than 1,000 teachers and administrators and found that newer teachers were not necessarily using technology more often than experienced teachers and that most felt their pre-service program did not sufficiently prepare them for using technology or for teaching 21st century skills (Grunwald Associates, 2010).

Technology in schools is becoming more readily available as is the expectation by school district personnel and ministry officials that teachers are using it both to support their teaching and enhance their students' learning. These expectations are reflected in the information and communication technology (ICT) outcomes found in school curricula. Accordingly, our new teachers need to feel better prepared for this reality upon completion of their formal teacher preparation experiences.

Customarily most teacher education programs have attempted to develop pre-service teachers' technology skills through a mandatory stand-alone technology course focused on learning how to use various computer-based programs. However what we do know from the research is that to best prepare our beginning teachers for technology infusion, we must build educational experiences throughout the entire teacher education program, including the student teaching (Brush & Saye, 2009; Grove, Strudler & Odell, 2004; Lambert, Gong & Cuper, 2008). While a stand-alone technology course can assist with the development of technological skills, effectively integrating new technology into educational practice is not just a matter of learning how to use a particular technology. In addition to exposure and practice with these tools, pre-service teachers need to develop deeper understandings about how a technology rich environment can help to develop and deepen children's subject-specific knowledge (Angeli, 2004; Bai & Ertmer, 2008; Beaudin & Hadden, 2005; Belland, 2009; Brown & Warschauer, 2006; Brush & Saye, 2009; Dexter, Doering & Riedel, 2006; Magliaro & Ezeife, 2007). According to Wiske, Franz, and Breit (2005), pre-service technology education should be a "process of reflecting on how to teach and how students can learn most effectively in today's world" (p. 3). Thus pre-service teachers need to be encouraged to think about where the use of digital technologies fits into their philosophy of teaching, especially their beliefs about the nature of students and learning (Windschitl & Sahl, 2002). These opportunities to examine why, when and

how to use technology are best infused while preservice teachers are developing subject specific knowledge structures and thinking about pedagogy (Brush & Saye, 2009; Dexter & Riedel, 2003). Additionally, if Internet-based technologies are to be used to enhance 21st century skills such as problem solving, collaborating and higher level thinking, then pre-service teachers need to see these uses modeled (Brown & Warschauer, 2006; Fleming, Motamedi & May, 2007). In addition to modeling, pre-service teachers need opportunities to practice their emerging technology knowledge and skills in authentic ways in order to become more familiar with their use and to see their potential for enhancing students' learning (Jacobsen, Clifford & Friesen, 2002). This direct exposure to and practice with technology can also help them to develop self-efficacy and increase comfort with technology use (Cassidy & Eachus, 2002; Magliaro & Ezeife, 2007; Wang, Ertmer & Newby, 2004).

Subject specific pedagogy courses are a natural fit for examining the potential of various technologies for supporting and enhancing teaching and learning. The literature in the area of strategies for blending social studies pedagogy and technology is quite extensive (Bates, 2008; Brush & Saye, 2009; Doering, et al., 2009; Garcia & Rose, 2007; Hammond & Manfra, 2009; Lee, 2008; Swan & Hofer, 2006); however, much of it is focused solely on examining the technological knowledge and skill developed during the course experiences and on secondary education. More needs to be known about how helpful these courses are in preparing beginning teachers for technology use in their future classrooms, especially for elementary classroom teachers.

This chapter describes a study that examined the impact of immersion in two technologyenriched, pre-service elementary social studies pedagogy courses on the way beginning teachers approached technology use in their teaching of social studies. The study findings add to the discussion about the affects of technology-infused

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