Technology Policies and Practices in Higher Education

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INTRODUCTION

Teacher preparation classrooms are filled with digital learners, and as educators, we encourage ideas of integrating technology into their future content and pedagogy. The U.S. Department of Education Enhancing Education Through Technology Act of 2001 requires the integration of technology into elementary and secondary education, so teacher educators should be preparing their preservice teachers for integration in their future content and pedagogy. As educators we know teachers teach how they were taught, so effective use of available technology needs to be modeled for preservice teachers in order to permeate their future teaching of our youth. So, what classroom technology policies and practices are education classes actually modeling for their learners? For optimal learning and to effectively prepare preservice teachers for teaching in a digital world, teacher educators should be encouraging them to utilize the devices at their disposal.

BACKGROUND

Technology is an integral component of life as we know it, and many students have mobile technology devices available to them. To meet learners where they are, educators must discontinue the use of outdated teaching methods and embrace a digital world (Rossing, 2012). But, out of fear that students may not be focusing on the instruction, educators are banning the use of smart devices in their classrooms. Smart phones are used by indi-

viduals in the workplace for a variety of purposes, so "why do we prohibit students from using these devices in the place where they do their own daily work?" (Hill, 2011, p. 22). Students should be encouraged to utilize the devices at their disposal to improve class participation, investigation, activities, and creativity. The real advantage of using smart phones in education comes when they are no longer supplemental, but essential components in the learning process (Hill, 2011). By utilizing the devices that are a part of their everyday lives, students have the ability to continue gathering information and gaining knowledge outside of school. Integrating technology that is utilized by today's learners' in their everyday lives has the potential to revolutionize formal education (Peluso, 2012).

Technology integration in education refers to the utilization of technology to promote teaching and learning. By meeting students where they are in respect to technology, educators can create more learner-centered instruction, solving the challenges of students' needs and desires to learn differently (McCaffrey, 2011). The inclusion of technology in teaching and learning modifies the current teaching paradigm and empowers students through hands-on learning. By integrating technology into pedagogy, educators can engage students like never before and cultivate deep, meaningful learning (McCaffery, 2011). When mobile devices are integrated into education, students' learning can be extended beyond the boundaries of the classroom; "students with these devices can go any place and anywhere to get their information, learning from the palms of their hands" (Hill,

2011, p. 24). But, for many teachers, technology use in the classroom is an intimidating prospect; the ability to effectively integrate technology into the existing structure of teaching is no easy task.

Teachers are the key to effective technology integration; in order to transform their teaching paradigms it is imperative preservice teachers learn how to integrate technology (Bitner & Bitner, 2002). Instructing preservice teachers on effective technology integration can lead to teacher buy-in and the establishment of technology enriched curriculum (Hogue, 2013). Although preservice teachers are often digital learners and may be comfortable working with technology, they are frequently not taught how to integrate it into their pedagogy. Often "models of teaching based on their own experiences as students do not include the integration of technology into instruction" (Rosenfeld & Martinez-Pons, 2005, p. 146). Unfortunately, teachers have limited access to examples of effective technology integration after which to pattern their teaching (Bitner & Bitner, 2002). Rosenfeld and Martinez-Pons posit that teacher education programs often "focus on how to use technology rather than on how to teach with technology and integrate it into everyday teaching" (2005, p. 146). By observing their peers integrating technology and incorporating tools, teachers can be encouraged to apply the practices to their pedagogy (Hogue, 2013).

Technology education is a requisite for today's learners to be prepared for leadership in a digital world. In spite of the Department of Education's mandate to integrate technology into K-12 education and the International Society for Technology in Education's (ISTE) emphasis on infiltrating teacher preparation programs in order to accomplish effective incorporation of technology into teaching and learning (ISTE, n.d.), teacher preparation continues to be overlooked (Bitner & Bitner, 2002). Although preservice teachers may be comfortable working with technology, models for integrating it into their pedagogy is lacking. Effective preservice teaching prototypes of technology integration need to be modeled in order to succeed in achieving successful implementation in K-12 education.

MAIN FOCUS OF THE ARTICLE

The purpose of this study was to reveal the technology policies and practices being modeled for preservice teachers in their teacher preparation curriculum. The research sought to answer the following research questions:

- What classroom technology policies are education classes modeling for their learners?
- Are teacher educators encouraging the use of smart devices for learning in their teacher preparation courses?
- Are teacher educators effectively demonstrating personal technology integration to preservice teachers?
- What technology integration practices are educators modeling in their teacher preparation courses?

The study was comprised of faculty who are instructors of teacher preparation courses at a teaching intensive university in the Rocky Mountain region. The sample consisting of 26 teacher preparation instructors was purposeful, as the intent of the study was to gather information about how teacher educators are modeling technology utilization and policies for their preservice teachers.

Syllabi for teacher preparation courses are collected and archived each semester. The researcher was granted access to the Fall 2014 syllabi for teacher education courses for the purpose of this study. In total, 84 syllabi were reviewed for this study. Also, a 13 question survey was sent to all 26 faculty of teacher preparation courses via their university email. The survey consisted of primarily open-ended questions regarding technology policies and technology integration in teacher preparation courses (see Appendix). Some sample questions were:

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