



Chapter 17

Exploring Digitally Enhanced Literacy Practices With Preservice Teachers

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ABSTRACT

Two professors in a teacher preparation program purposefully examined their courses for ways in which the learning opportunities in each separate course could be connected to facilitate development of preservice teachers' understandings of purposeful integration of technology within literacy instruction for elementary student learners. Preservice teachers in the courses used their knowledge of children's literature and best practices to create rich learning opportunities before examining them through the lens of the TPACK framework and SAMR model. This process enhanced and transformed preservice teachers' instructional decisions to illuminate educational technology as part of literacy instruction.

INTRODUCTION

The introduction and inclusion of digital tools supports developing educator knowledge and practice around digital literacies and skills, and can extend more traditional pedagogical approaches to support student learning through personalization, choice, creativity, and self-expression (Argueta, Huff, Tingen, & Corn, 2011). This creates new opportunities in teacher development and preparation to consider purposeful technology integration for K-12 teaching and student learning. However, literature suggests that in teacher education programs educational technology classes continue to be taught in isolation from content methods courses notwithstanding an agreement that developing meaningful technology integra-

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tion skills for preservice teachers requires the integration of content and technology (Angeli & Valanides, 2009; Brush et al., 2003; Hughes, 2013; Kay, 2006). Maintaining an antiquated model of separation between technology and content does little to support future educators' skill development for effective technology integration. This has been found particularly true in developing pedagogical knowledge of educational technology in early literacy learning (Voogt & McKenney, 2017).

This chapter addresses the need for integrated, cohesive facilitation of future teachers' understandings of how technology and literacy are not isolated areas of instruction in the classroom, but instead should be intimately intertwined with one another, providing opportunities for transformative experiences in areas of literacy that were not possible before. Using recently published award-winning children's literature as the foundation to engage young learners in developing their literacy practices, this chapter describes the experiences of how university faculty and preservice educators aimed to discover how technology could transform instruction, while continuing to develop literacy learning. Accordingly, this chapter focuses on the need for future teachers to understand:

- How to use high quality children's literature in the creation of research-based best practice instructional opportunities for literacy
- How to examine the use of technology in literacy instruction purposefully with consideration for its affect on learning outcomes

In this chapter, the authors share their practices that examined the integration of content within two methods courses in an elementary teacher education program. As the preservice teachers were concurrently enrolled in two courses, Reading, Language Arts, and Children's Literature for K-3 Teachers and Technology in K-8 Education, the two professors collaborated on course content and objectives to support preservice teachers' knowledge development and application in purposeful ways. The authors discuss the role of teacher modeling as well as the unveiling of the metacognition of pedagogical decision making specific to the use of technology that was done with the preservice teachers in the university classes. From the very first day, the instructors purposefully unpacked the iterative processes they employed in thinking about how instruction and learning was impacted through the use of technology in the university courses. Using the instructional activities created in the literacy course, the students were tasked in their educational technology course with examining the learning objectives by applying Anderson and Krathwohl's (2001) revision of Bloom's Taxonomy to identify knowledge and cognitive process levels. This was the foundation in which the preservice teachers began to conceptualize technology integration to support and enhance learning activities. Utilizing the Technological Pedagogical and Content Knowledge (TPACK) framework (Mishra & Koehler, 2006), and the Substitution, Augmentation, Modification, Redefinition (SAMR) model (Puentedura, 2006; 2010), preservice teachers transformed early literacy learning through the purposeful use of digital technologies.

BACKGROUND

Teacher preparation for literacy instruction in elementary classrooms is focused on content knowledge and strategies to develop reading, writing, and speaking and listening skills for students. However, these practices are not always in consideration for how learners are engaging with literacy outside of schools. Literacy focused professional organizations have called upon teacher preparation programs to consider

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