Chapter 13
Teacher Candidates’ Perceptions of Technology Used to Support Literacy Practices

Donna Glenn Wake
University of Central Arkansas, USA

ABSTRACT
This study explores teacher education candidates’ perceptions of technologies used to support K-12 student literacy development. Candidates selected technologies for future adoption based on impressions of each technology’s ability to support student literacy development. Technologies included broad-based applications (blogs, wikis, podcasts, digital storytelling) as well as more specific applications (Prezi, Glogster, Voicethread). Results indicate that candidates selected first those technologies they saw as useful in presenting content in a teacher-directed paradigm. They then considered technologies that allowed for student authoring and manipulation representing more student inquiry-based approaches. Data were disaggregated for secondary versus elementary candidate populations.

INTRODUCTION
The definition of literacy has changed due in large part to the emergence of Web 2.0 technologies (Borsheim, Merritt, & Reed, 2008) and new conceptions of literacy as articulated by the New London Group (Cope & Kalantzis, 2000; Larson, 2008; McPherson, Wang, Hsu, & Tsuei, 2007). No longer can literacy be thought of as print on a page. Rather, literacy should be re-envisioned as multimodal involving images, actions, words, and sounds. In addition, students no longer operate in their literacy practices alone by reading and responding to text for classroom purposes or writing for teacher as evaluator. Instead, students now collaborate with each other in social networks as creators and co-authors of content (Richardson, 2010). These multimodal and collaborative approaches to literacy involve technology.

As we consider the impact of technology on how we receive and communicate information, we should keep in mind what it means to be literate
in the 21st Century (Gee, 2004). Students immerse themselves in literate practices through their technology usage. They are technology savvy. They know how to download music, text their friends, take photos with Smartphones, and access the Internet from a number of devices. They send, receive, and interpret media daily, if not hourly, but they may not see these applications as literacy or be critical about their use of these technologies in their literate lives (Albers & Harste, 2007). Furthermore, they may not consider the reciprocal relationship between technology and literacy in classroom contexts, particularly if their teachers are not supporting them in these practices for academic purposes.

The goal for technology integration in the classroom reaches beyond merely motivating students to take part in the lesson with the latest “cool” tool. Instead, teachers should focus on supporting student literacy development with these technologies (Borsheim, Merritt, & Reed, 2008; Huang, 2006; Kay, 2006, 2007). These tools prepare students to utilize multiliteracies, prepare them to consider the role of text, and prepare them to take part in the ever evolving role of literacy.

Technology radically changes what we know about teaching and learning. Learners have the ability to find and interpret information and to self-publish their findings to an extended social audience. These shifts place the learner in charge of their own learning. Teachers are no longer in sole control of content. Instead, technology integration moves classrooms from teacher-dominated paradigms to student-centered environments (Leu, Kinzer, Coiro, & Cammack, 2004; Richardson, 2010). Yet students will need support in critically evaluating the information they encounter and in socially and collaboratively creating responses to this information (Gee, 2004).

Teachers should consider how best to teach and apply these new literacies in their classrooms so as to support learners’ literacy development. Employing a multiliteracies approach in instructional practice provides learners with opportunities to consume and produce modern texts as they “access, evaluate, search, sort, gather, and read information from a variety of multimedia and multimodal sources and … collaborate in real and virtual spaces to produce and publish multimedia and multimodal texts for a variety of audiences and purposes” (Borsheim, Merritt, & Reed, 2008, p. 87).

Similarly, teacher educators have to consider how best to support teacher candidates in developing technology proficiency and integrating technology into content-based instructional practice (Borsheim, Merritt, & Reed, 2008; Groth, Dunlap, & Kidd, 2007; Richardson, 2006). Beyond technology proficiency, teacher educators must also support candidates’ effect toward and perceptions of technology (Carroll & Morrell, 2006).

BACKGROUND

The conceptions of new literacies and the influence of Web 2.0 have made the field of literacy education increasingly relevant and simultaneously problematic. Teacher candidates may or may not have an appropriate background for effectively selecting and using technologies to support their students’ literacy development. The purpose of this study was to examine which technologies teacher candidates viewed as most likely to support student literacy development and to determine if level of licensure affected candidates’ selection of technologies to support literacy in future instructional practice.

Web 2.0

Web 2.0 is a concept that positions users as content creators and collaborators in online supported environments. In contrast, in Web 1.0 users were limited to passive viewing of content. Users working in Web 2.0 environments share and co-design multimodal content in applications like social networking sites, shared documents, blogs,