We Learn in the Form of Stories: 
How Digital Storytelling Supports Critical 
Digital Literacy for Pre-Service Teachers

Lynne Masel Walters, Department of Teaching, Learning and Culture, Texas A&M University, College Station, USA
Sam von Gillern, Department of Teaching, Learning and Culture, Texas A&M University, College Station, USA

ABSTRACT
This article discusses the use of digital storytelling to enable pre-service teachers to develop critical digital literacy skills. Digital storytelling and new literacies share the same set of abilities: 1) finding, evaluating and consuming digital content; 2) exploring identity and cultural landscapes; 3) creating new digital materials drawing from multiple media; and 4) communicating what was found or created with an audience. The study is based on the essays of pre-service teachers enrolled in Cultural Foundations of Education, who produced two digital stories. Responses showed that they believed the assignments helped them become more reflective, culturally aware and media savvy, and led them to a critical and practical knowledge of multimodal content production. Digital storytelling, then, utilizes almost all of the critical digital skills and literacies pre-service teachers are expected to bring to diverse, globalized, and technology-infused 21st century classrooms.

KEYWORDS
Critical Digital Literacy, Culture and Education, Digital Storytelling, Multimodal Communication, Pre-Service Teachers, Teacher Education, Technology in Education

INTRODUCTION
In last few decades, perspectives on literacy has changed. No longer is it considered the ability to read and write. Today’s literacy is both digital and critical, digital in the sense that it requires the use of computer-based technology and critical in the sense that the individual must find, evaluate, create, and communicate information.

According to Lohnes Watulak (2016), critical digital literacy encompasses four main elements: 1) understanding cultural, social, and historical contexts of technology use; 2) critical thinking and analysis; 3) reflective practice; and 4) facility with the functional skills and tools of digital technology production. Therefore, critical digital literacy is not a radical departure from the concept of digital literacy, which is the ability to use technological devices, such as computers, tablets and smartphones. It adds an intentional emphasis to the critical components, that is, the ability to find, evaluate, and create information on those devices Lohnes Watulak (2016).

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Critical digital literacy refers to a range of competencies needed by 21st-century learners to engage in an increasingly digital and diverse world. These competencies include building relationships with others to pose and solve problems collaboratively and cross-culturally; designing and sharing materials with global communities; managing, analyzing, and synthesizing multiple streams of simultaneous information; and creating, evaluating, and sharing multi-media texts (Lohnes Watulak, 2016).

Most importantly, perhaps, critical digital literacy implies an understanding of the ethical responsibilities and the essential skills of inquiry and self-expression necessary for citizens of a democracy, all of whom are now required to navigate the complex environments created by interactive technology and intercultural communication (Lohnes Watulak, 2016; Thomann & Jolls, 2016). Digital literacy involves critically engaging with technology and developing an awareness of how commercial and political agendas and social and cultural understandings can shape the ways in which technology is used to convey information and meaning (Peyton & Hague, 2016). Critical digital literacy is a field that addresses imbalances of power and, in particular, pays attention to the voices of those who are less frequently heard (Pahl & Rowsell, 2006). While critical digital literacy is important in a variety of contexts, it is particularly important in the field of teacher education. It is imperative that teacher educators encourage pre-service teachers to think critically about power and technology to help them understand their relevance in the modern world and hone their ability to help their future students develop critical digital literacy skills of their own.

LITERATURE REVIEW

Teacher educators can use digital storytelling to promote critical digital literacies in pre-service teachers. Whenever students create a digital story or share it with an audience, they are using digital literacy skills, developing their critical thinking abilities and cultural comprehension (Peyton & Hague, 2016). By creating a space for all students in a classroom to share their stories, including those that are usually silenced, they can develop an understanding of how and what to communicate to different audiences and unpack the ethics of sharing and listening to personal stories (Pangrazio, 2016). Digital storytelling is a transformational approach that shifts the traditional art of storytelling into the 21st-century environment of digital technology (Robin, 2008). Digital stories are personal narratives that document a wide-range of culturally and historically embedded lived experiences by combining voice, sound and images into a short video, typically developed by non-professionals with non-professional tools, to be communicated to an audience (Lambert 2010; Reed & Hill 2010). Unlike oral stories that are subject to varying interpretations and emphasis, digital stories become permanent artifacts that capture a specific moment in time, one telling of an experience and stand as objects for personal reflection, critique, and sharing with an audience (Latham, Reyes, & Qi, 2006).

Examining critical digital literacy through the digital storytelling platform is appropriate as they share the same set of skills: 1) finding, evaluating, and consuming digital content; 2) creating new digital materials; and 3) communicating or sharing what was found or created with an audience (Heltin, 2016). To develop critical digital literacy skills, individuals must be immersed in the complete digital experience, in other words, to go on and off screen and behind and beyond it. Digital storytelling offers that experience. With its characteristics of technology, multimodality, interactivity, capacity to promote self-reflection, and emphasis on process, digital storytelling allows the creator to fully engage with new media devices. This engagement can be an effective tool for developing critical digital literacies (Given, 2006).

Storytelling is the original form of teaching (Pedersen, 1995). “We learn in the form of stories,” said psycholinguist and reading theorist Frank Smith. “The best teachers are the best storytellers” (Smith, 2014, p. 62.). Storytelling is a simple, but powerful, way of helping individuals make sense of the complex and unordered world of experience by crafting story lines (Bruner, 1990; Van Gils, 2005). However, teachers have been reluctant to add digital elements to the stories they tell and the students produce in the classroom. In fact, while schools have spent millions on technology, the
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