Chapter 2
Using Digital Tools to Teach Writing in K-12 Classrooms

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ABSTRACT
The purpose of this chapter is to provide four examples from K-12 classrooms that use a variety of current, research-based online tools for teaching the following writing pedagogies: (1) process writing, (2) cultural studies, (3) content area writing, and (4) collaborative writing. Each classroom example includes supporting research, a teacher story, variations and barriers of technology tools, and additional website resources. These examples adapt five of Leu’s (2002) new literacies principles: (1) change is a defining element of the new literacies, (2) literacies build on and complement previous literacies, (3) new literacies require new forms of strategic knowledge, (4) new literacies are socially constructed, and (5) the teacher’s role becomes even more important within the new literacies. The chapter concludes with future research directions for using digital tools to teach writing.

INTRODUCTION
In recent years, writing has gained a more prominent position in the field of literacy; unfortunately, even with this growing focus, students are still performing poorly in writing (Applebee & Langer, 2009; Graham & Perin, 2007). One approach that can be a catalyst for changing these statistics is technology integration (Anderson, Grant, & Speck, 2007; Leu, Kinzer, Coiro, & Cammick, 2004). The purpose of this chapter is to provide real examples from K-12 classrooms that illustrate why and how to use current, research-based online tools for teaching writing. These examples are timely and interesting to both teachers, who need documentation of what works, and literacy instructors, who are charged with modeling new literacies in their pre-service and in-service classes (Tenore, 2011). Admittedly, this discussion is biased based upon our backgrounds; we are teachers and researchers who study new literacies and use them in our classrooms.
BACKGROUND

According to the literature, when digital tools are used to teach writing, students are highly motivated to write, and teachers are more energized to teach (Boscolo & Gelati, 2007; Leu, 2002). It is understandable, however, that many teachers are overwhelmed and confused about which Web-based tools to use (Bauer & Kenton, 2005; Thurlow, 2006). For instance, public controversies surround the role of new literacies such as IM, Facebook, and Twitter in K-12 classrooms (Leu, O’Byrne, Zawilinski, McVerry, & Everett-Cacopardo, 2009). Furthermore, technology tools are increasing at a rapid rate, and as a result, “new envisionments for their use are constructed” (Leu, 2002, p. 319). These new envisionments include an additional emphasis on communication, since writing online is different from traditional writing (Everett-Cacopardo, Forzani, Kennedy, Leu, McVerry, & Zawilinski, 2011). This emphasis on communication is an added challenge for K-12 teachers, resulting in the need for future research to explore the complexities regarding these tools for classroom use (Coiro, Knobel, Lankshear, & Leu, 2008; MacArthur, Graham, & Fitzgerald, 2006).

Current studies exploring the relationship between writing and new technologies are beginning to examine the productivity of digital tools such as cloud computing, Web 2.0 tools, and other technological applications related to writing. Initial findings point to the impact of technology on students’ writing in the classroom in several ways (Herrington, Hodgson, & Moran, 2009). First, new technological tools offer the potential for improving metacognition in the writing process. Through capturing and recording discussions, for example, students are able to critically analyze discussions in brainstorming sessions (Jackson, 2009; MacArthur, 2006). Not only do these digital tools impact metacognition, they also increase motivation through authentic writing experiences (Boscolo & Gelati, 2007; Frey & Fisher, 2010; Davis, 2012). New technologies influence writing in the classroom by including multi-media and multi-modal forms of writing (Bezemer & Kress, 2008; Vasudevan, Schultz, & Bateman, 2010; Everett-Cacopardo et al., 2011). Not only do multi-modal forms of communication empower students to make their own decisions, but they also increase the students’ attention to assignments in the classroom. All of these findings, thus, are particularly interesting to teachers of writing as they point to prospective results for their students.

With the limitless potential of these tools in mind, K-12 teachers are searching for efficient ways to improve students’ writing. Along with the growing research base supporting the use of technology to teach writing, there is also a specific need for classroom research and case studies of teachers using a variety of technology tools (Goldberg, Russell, & Cook, 2003). The four examples provided in this chapter seek to fulfill this need. Sharing these practical and effective classroom practices provides teachers with models for addressing issues and problems with implementation; additionally, it fuels their confidence and enthusiasm for utilizing technology in writing instruction.

FOUR CLASSROOM EXAMPLES

This section provides four K-12 classroom examples that use technology to teach the following writing pedagogies:

1. Process writing,
2. Cultural studies,
3. Content area writing, and
4. Collaborative writing.

Each classroom example includes the following subheadings: