Sites of multimodal literacy: Comparing student learning in online and face-to-face environments

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Abstract

This case study explores the efficacy of online environments for the teaching and learning of multimodal literacies. In our research, we seek to explore student learning between two groups who had experienced similar first-year composition curricula, one online and one face-to-face (f2f). Through an assessment of a pilot online curriculum taught at the University of New Mexico, which we call eComp, we explore the affordances and constraints of online and f2f learning environments for the development of multimodal literacies in first-year composition.
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1. Introduction

With distance education continuing to grow at a rapid pace and with more than 7 million students taking at least one online course (Allen & Seaman, 2014), composition scholars have increasingly studied and reported on the efficacy of online courses. These studies vary in content from focusing on student-perceived success in the online classroom (Boyd, 2008) to measuring the comparability of online courses to their face-to-face (f2f) counterparts (Arbaugh, 2000; Collins & Pascarella, 2003; Neuhauser, 2002; Sapp & Simon, 2005). In this article, we extend the conversation by asking how student learning of multimodal literacies differs in online and f2f environments. Specifically, we analyze assessment scores comparing student learning of multimodal literacies in online and f2f courses. It is not our intention to determine which is "better" equipped to provide students access to multimodal literacies, but instead, to understand the differences between the two environments. To compare student learning across these courses, we assess student e-portfolios from three sections of English 102, the second course in a two-semester sequence of required first-year writing courses at our institution. Of the three courses, one was taught f2f, two were taught online, and all featured an emphasis on multimodal composition. From the results of our assessment, we not only want to extend the scholarship regarding best practices within the online classroom, but we also hope to generate a conversation regarding what instructors of an f2f classroom can learn from the online environment, especially when adopting a multimodal curriculum.

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To contextualize our research, we first describe the recent scholarship surrounding online and multimodal pedagogies before discussing the ways in which our project highlights gaps in the scholarship, suggesting the need for more focus on online multimodal classes as a unique pedagogical environment. We then describe our methodology and the results gathered from a holistic assessment of student e-portfolios collected in the online and f2f classes utilizing a similar curriculum. The article presents our findings, combined with an explanation of the limitations of our small pilot study, and plans for future research. Lastly, based on the results of our assessment, we reflect on potential reasons for the differences in student learning of multimodal literacies in online and f2f classrooms and provide suggestions for teaching multimodal composition in both environments.

2. Online and multimodal learning

Although scholars largely agree that online education offers an experience equal in quality and effectiveness to traditional writing f2f courses, as Scott Warnock (2013) suggested, the conversation surrounding the "effectiveness" of online courses "is more challenging and dynamic than it might first appear" (p. 2). Recent research, most notably studies that assessed test scores and grades, indicated that student success in online courses was comparable to f2f courses (Arbaugh, 2000; Collins & Pascarella, 2003; Neuhauser, 2002; Sapp & Simon, 2005).[1] Similarly, in a study comparing a technical writing course taught online and f2f, Mehlenbacher, Miller, Covington, & Larsen (2000) reported "no significant difference" findings in terms of performance overall between the two groups. However, the authors also suggested "no significant difference" findings in the scholarship surrounding online education, including their own, could be influenced by other factors, such as student motivation, prior knowledge, and variances in learning styles.

To understand what factors impact student learning in online classrooms, scholars have analyzed specific components, such as student participation and instructor interaction. For instance, Meyer (2003) and Picciano (2002) suggested that students in online courses, especially those who are more introverted than their peers, generally participated more in online discussions than in traditional f2f synchronous discussions. William Finlay, Christy Desmet, and Lorraine Evans (2004) found that students participated more often and were generally more satisfied than students within f2f classes, with students' comments suggesting that the online classroom allowed for more interactive community building, particularly within asynchronous discussion boards. Boyd (2008) also found that students in the online classroom perceived the platform to be more interactive, thus leading to greater satisfaction with the overall course.

When researchers did find variations in learning, as Finlay, Desmet, and Evans (2004) suggested, the differences most likely were affected by factors such as instructor motivation and the instructional quality of the course. We suggest that another factor that might influence student learning is the introduction of a multimodal curriculum—one that focuses on asking students to produce documents beyond traditional print-based texts native to a digital environment. Specifically, we seek to understand the differences in student learning of multimodal literacies within online and f2f environments.

To date, no comparative study of online versus f2f learning has focused on student acquisition of multimodal literacies. For more than a decade, teachers and scholars have called for the cultivation of multimodal literacies, asking students to create texts that exceed the alphabetic by including sound, animation, images, and more (Takayoshi & Selfe, 2007). Acquisition of multimodal literacies, NCTE (2005) suggested, includes prompting students to use multiple modes[2] of communication to transform the meaning of their work. As Lutkewitte (2014) noted, "[M]ultimodal composition offers us the opportunity to discover other ways of knowing and communicating ideas besides the ways we know and communicate through traditional print-based writing" (p. 11).

Just as multimodal composition offers students new and engaging ways of learning, it also offers instructors new ways to approach online education. Because online students already communicate through technology in multiple ways (i.e., asynchronous discussion boards, course blogs, videoconferencing, nonlinear classroom environments, etc.), multimodal composition, specifically in terms of the creation of digital documents, is a natural fit for online writing

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[1] We acknowledge that others, such as Sener (2004), have pointed out the problematic implications of comparing online courses with f2f counterparts, stating that the differences between online and f2f education make comparison and equivalence an "irrelevant goal" and that online education should therefore be evaluated "on its own terms" (p. 1). However, we felt that our research goals were valid, especially in light of the dearth of scholarship about multimodal assessment generally and multimodal online assessment specifically.

[2] While these modes do not have to be digital in nature (Shipka, 2011; Williams, 2007), all of the projects discussed in this article were technologically based and were meant to promote digital literacy as well as multimodal literacy.