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Digital Writing in the Academy: Gains, Losses, and Rigorous Playfulness

By

Jennifer Katherine DiZio

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Philosophy

in

Education

with a

Designated Emphasis

in

New Media

in the

Graduate Division

of the

University of California, Berkeley

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Spring 2017

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ABSTRACT

Digital Writing in the Academy: Gains, Losses, and Rigorous Playfulness

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Jennifer Katherine DiZio

Doctor of Philosophy in Education

with a

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University of California, Berkeley

Professor Glynda A. Hull, Chair

The ethnographic study presented here documents emergent behaviors that arose when two multimodal composing and production tools - Collabosphere and Tumblr - were used in three different college courses (Introductory Psychology, Education 1B, and College Writing 101). The work addresses how conceptions of writing in the college classroom and across disciplines shift, converge, and vary across courses and between disciplines. I use Engeström's (1999) model of activity theory to show how the introduction of new tools pushed both students and teachers to think more broadly and creatively about how they compose and comport themselves in academic settings. Specifically, this work reveals instances of expansive transformation as two activity systems – academic writing and digital writing – converged in these classrooms. By documenting new approaches that students and teachers developed when using new tools in an academic setting, I hope to visualize new opportunities for university writing to *expand* and include new literacy practices.

This study documents how digital tools in the Academy were perceived, repurposed and used in a variety of different ways. I used a combination of interviews with faculty and students, observations, and analysis of semiotic materials to gain a holistic understanding of the dynamic activity systems at play in each setting, and across the university. Specifically, I endeavored to document the types of expectations placed on undergraduate students and faculty to use digital tools in innovative and compelling ways, and how those expectations informed how both approached composing in their courses. Here I strove to understand the new demands on college writers within different disciplinary departments, new kinds of audiences, and new kinds of texts as students collaboratively composed. This study also conceives to help educators and teaching faculty think about what kinds of methods, rubrics and assessment frameworks would help support students using new tools for writing in college classrooms.

One of the central findings of this study is that in order to make room for expansive learning and new systems of writing to emerge, teachers must make explicit the course goals and

assessment models for grading and evaluating digital and multimodal pieces. Without this framework, students often default to those writing models that were successful for them in the past, which were text-heavy and often discipline-specific. Further, teachers also need to help extend student's notions of communication to include the visual and aural in a way that is both meaningful and critical. This study showed that it was not enough for students to simply present and prioritize multimodal composing, but that students needed a conceptual frame to understand *how* and *why* composing in different modes supported their analytic reasoning, and feel confident in their ability to synthesize them into their composing work.

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CHAPTER 1 : INTRODUCTION

The specific which you have discovered is an aid not to memory, but to reminiscence, and you give your disciples not truth, but only the semblance of truth; they will be hearers of many things and will have learned nothing; they will appear to be omniscient and will generally know nothing; they will be tiresome company, having the show of wisdom without the reality.

- Plato, from The Phaedrus

The impact of writing and new technologies has been plaguing scholars since their inception. When debating the impact of writing on thinking, Socrates portends that it will mark the end of discovering “true wisdom,” leaving only the semblance thereof (Hackforth, p. 10, 1952). Specifically, Socrates worried that writing technologies would replace one’s “memory,” without which reasoned debate between individuals would not occur. In Socrates’s view, this new technology would leave us with only a “partial understanding” of whatever truth one sought to understand (Hackforth, p. 10, 1952). Over a millennium later, we still find ourselves pondering the relationship between new tools, critical thinking, and knowledge production. Every day I hear fellow parents, teachers, students, and administrators discuss and debate the advantages and disadvantages of new technologies in the classroom and beyond their borders. Even though digital composing technologies are all around us — Facebook, Twitter, and Instagram to name but a few —there is an active debate as to what impact they may have on students’ writing practices.

In higher education circles, scholars often ponder the connection between writing and analytical thinking. Some studies have shown that there is a direct connection between a student’s ability to think critically and the time spent on reading and writing activities in the classroom (Hacker & Dreifus, 2011). The more students are asked to read and write in courses, the better the students are able to synthesize new ideas and articulate them across a variety of modalities (Roksa & Arum 2011; Lankshear and Knobel, 2011). Further, we see evidence that when students are given frameworks for writing across different genres, they show marked

improvement in being able to compose and articulate sophisticated ideas (Lea & Street, 1998; Jewitt, 2005; Ito, Gutiérrez, et al, 2013). This is especially important to consider with the introduction of new composing tools and practices into different types of classrooms; in order to be successful students need guidance in the rhetorical moves within a discipline, and they need to learn how to integrate and choose between different modalities.

Many scholars have suggested that it is not the introduction of new technologies but rather our approach to teaching students how to engage with writing in the classroom that needs to be reevaluated (Lea & Street, 1998; Selfe, 2007). Although digital composing tools and practices that show society ways to communicate and produce with others across cyberspace have been part of our cultural milieu for over fifteen years, the way we approach the teaching writing, both in K-12 and in college, proves that strategies have not changed much in the last century (Selfe, 2007). When we look at guidelines for entry-level writing courses, we see today similar criteria that stress individually-produced and discipline-specific styles of writing as we did X years ago (Fishman & Lundsford, 2005). Unless emphasized by the individual department, there is usually little flexibility in introducing modalities other than print (e.g., videos or images) or the time to include the varied expectations for writing in different disciplines (Herrington, Hodgson & Moran, 2009). Consequently, when students advance to upper-division courses, they often have difficulties both understanding and transitioning to the style of writing expected of them (Jewitt & Bezemer, 2016; Russell, 2013).

Researchers in the field of new literacies often stress that teachers should emphasize the curriculum opportunities for students to think deeply about rhetorical moves, audiences, and different types of digital writing practices (Herrington & Moran, 2009). For example, the National Council of the Teachers of English proposes framing curriculum that allows students to “develop proficiency with technological tools, build relationships with others and solve problems collaboratively, design and share information for global purposes, manage and analyze multiple streams of information, create, critique and analyze multimedia texts, attend to the ethical responsibilities required by complex networks” (NCTE, 2013). This type of curriculum promotes the understanding of writing and technology as complex and socially-situated tool from which humans act to make meaning. Educational technology researchers like Henry Jenkins and Howard Rheingold propose that classrooms should take advantage of the “participatory nature”

of digital culture that helps to leverage students' interests and passions outside of school (Jenkins, 2009; Rheingold, 2013). If we can parlay students' interests in existing and interest-driven composing practices in informal spaces we can help promote engagement in literacy practices in academic environments.

Much of the empirical research on academic engagement suggests that students are more inclined to take risks and spend time on projects that they find meaningful or that connect to their daily lives (Rheingold, 2013; Fuchs, 2013). Digital tools can help leverage this by offering the full spectrum of ways to communicate and make meaning. They can also connect learners to other individuals and groups sharing common interests (Lankshear & Knobel, 2011; Hull, Stornaiuolo, & Sahni, 2010). Indeed, there is a dynamism to writing in a digital world because writers expect (and often get) an immediate response to their work. James Gee suggests that this is built on reciprocity: the emergence of digital culture assumes that we are at once producer and consumer, moving in and through the liminal space between the two (Gee & Hayes, 2011). Writing online matters because writers develop a keen sense of audience and informal membership; they feel that their contributions matter, and they sense a social connection to one another. As such, we need to teach students to compose for a variety of purposes and audiences, and in a digital age that requires a new way of thinking about composing and classroom spaces.

In my own work for this research project I sought to understand how new technologies were being used in university classrooms, particularly those that used writing as the primary mode of evaluation. My goal was to give a holistic picture of the classroom experience: the social, cultural, and institutional settings that informed the teachers' and students' experiences when using new tools for composing. I felt it was important to situate this research in college classrooms as there is both a lack of empirical work available in this space, but also because higher education is facing a kind of existential crises. (Allen & Seaman, 2013; Taylor, 2010). Confronted by overwhelming budget cuts, calls for more "relevant" curriculum, and decreasing student and teacher satisfaction rates, universities are looking to make big structural changes (Allen & Seaman, 2013; Cruz, 2012; Taylor, 2010). The point of the study was to understand the complexities that surrounded the introduction of new composing tools, and with them new types of literacies, in a spectrum of college courses. The choice to include several difference disciplines was made to compare and contrast the ways student writing and digital literacies were

viewed across different subjects and in differing student populations. Overall, this ethnographic study sought to address this fundamental gap in research on digital composing in university classrooms.

Across the following chapters I present a study that followed the use of two multimodal composing and production tools, Collabosphere and Tumblr, in three different college courses representing three different disciplines — psychology, education, and writing — over the course of one semester. My research addresses how conceptions of writing in the college classroom and across disciplines shift, converge, and vary across courses and between disciplines. In this work I wanted to (a) understand how the new tools were perceived and what types of composing practices occurred, and if there were shifts in both students' and teachers perceptions of composing over time; (b) I also endeavored to document the types of expectations placed on undergraduates and faculty to use digital tools in innovative and compelling ways; the goal was to understand the kinds of social supports necessary for them to do so; and (c) I strove to understand the new demands on college writers within different disciplinary departments, new kinds of audiences, and new kinds of texts as students collaboratively composed. I also questioned how best to evaluate and provide feedback on digital and multimodal work.

In the next two chapters, I will offer the theoretical and methodological frameworks that guided the study. In Chapter Two, I use activity theory to outline my theoretical lens for analyzing the social, historical, and cultural dynamics at play between two converging systems — academic and digital writing. I will then review current, relevant research on the uses of new tools in classroom settings, and then I will turn more broadly to research on composing digitally. I will address gaps in the research to frame the potential contributions of this current work. Chapter Three outlines an overview of the sites and participants, the data collected across the three sites, and the techniques used to analyze this data. In Chapter Four I present my findings that document the different stances, supports, and constraints both students and faculty faced when composing with new tools in the university. I reveal the different ideas students and faculty had about what writing is (and should be), the value added by digital tools, and the challenges faced by teachers around evaluating student work. In Chapter Five I present a single case study of one instructor's attempt to integrate the full complement of digital literacies — using text, image, sound, and video in a networked, internet-enabled environment — into a college writing

course. These chapters highlight the types of “contradictions” that occurred when introducing digital writing tools into the classroom. I conclude in Chapter Six with an overview of the study, including the lessons learned from these instructors and students, and some musings on where the field of college writing is headed.

CHAPTER 2 : LITERATURE REVIEW

“The medium is the message. This is merely to say that the personal and social consequences of any medium - that is, of any extension of ourselves - result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology.”

- Marshall McLuhan, 1964, p. 1

“Activity theory is a theory of object-driven activity. Objects are concerns, they are generators and foci of attention, motivation, effort and meaning. Through their activities people constantly change and create new objects. The new objects are often not intentional products of a single activity but unintended consequences of multiple activities.”

- Yrjö Engeström, 2009, p. 304

2.1 Theoretical Framework

Now, more than ever, is it imperative that we understand the complex and nuanced ways that human beings come together to make meaning and consume and produce information, both online and offline. Our world is in a state of flux, as can be evidenced by the comments and ways we receive, circulate, and repurpose information (Dede, 2012; Forte & Bruckman, 2006). Gone are the days of singular modes for transmitting information for most authors. For most symbol users, be they teachers, reporters, or librarians, the rise of the internet and the multiple platforms to distribute and circulate information means that users potentially have at their disposal infinite ways to consume and produce semiotic materials (Brandt, 2005; Gee & Hayes, 2011). Significant to this phenomenon is the recent and meteoric rise of social media networks which offer a new place for people to come together and create, share, and comment on information. By socializing and personalizing the way we connect and communicate with each other online we have blurred the boundaries between individualized and collective contributions (Rheingold, 2011; Gee & Hayes, 2011). Hence, our approaches to teaching composing in the classroom must begin to reflect these social phenomena.

Many scholars have contributed research on the distribution and use of social networks and digital tools both in and out of school, and more specifically on how youth connect and communicate with each other both locally and globally (Hull & Nelson, 2005; Cole, 2006; Gutiérrez, Baquedano-López & Tejada, 1999). Educational researchers, technologists, and media scholars have analyzed—in theoretical and empirical studies—the learning pathways these new tools and networks engender, and they have shown their contributions to the material output in learning environments and on the socialization of learners in online and offline spaces. Yet, we still have far to go. Teachers often have very little framework or training for incorporating new tools into a classroom, especially for assessment and evaluation (Jewitt, Bezemer, & O'Halloran, 2016). Similarly, institutions have not kept pace for the changing needs of both students and instructors in this digital age (Russell, 2013; Taylor, 2010). As Donald Leu reminds us, new literacies are rapid and changeable, and therefore our definition of literacies must change accordingly (Leu, 2015). Without support and guidance, our teachers and students often default to traditional (logocentric) methods of composing.

The idea of changing literacy practices and changing socio-cultural theories of learning technologies (in both formal and informal classroom spaces) helps to ground the present study (Lankshear & Knobel, 2011; Gee, 2004; Hull & Schultz, 2002). Specifically, I will use activity theory as a frame from which to analyze the literacy events that occur in and outside of classrooms (c.f. Engeström; 1999; Cole, 1998; Heath, 1983). Writing research has used Cultural Historical Activity Theory (or CHAT) to analyze social behavior since the 1980s (Cole, 1996; Cole, Engeström & Vasquez, 1997). Central to this framework is the idea that assessing the cultural and historical uses of tools in learning environments is essential for an accurate analysis of literacy practices. Students and teachers, like those observed in this study, come to the classroom with different ideas and expectations about what it means to produce academic writing. For this case study, I use activity theory to investigate how “writing in the university” is changing with the introduction of new digital tools into the classroom.

Apart from the theoretical contributions that researchers have made by using activity theory to guide written research, it is a helpful heuristic from which to examine the intersections between the institutional and the cultural proclivities of both teachers and students (c.f. Russell, 2013). As Russell (2013) notes, activity theory allows the “analyst to make principled meso-level

(institutional) and macro-level (ideological) generalizations based on observations of micro-level phenomena, and thus to trace the uses of writing across scales of time and level of generality” (p.2). Further, it allows the researcher to trace the moments of conflict or tension between competing demands, understandings, and resources. These moments of conflict are important to visualize and analyze as they help educational, literacy, and writing researchers forge a path towards “expansive learning” (Engeström, 2001). According to Engeström, “an expansive transformation is accomplished when the object and motive of the activity are conceptualized to embrace a radically wider horizon of possibilities than the previous mode of the activity” (Engeström, p. 138, 2001). Hence, using activity theory as a theoretical frame helps us address the changes that occur as people re-conceptualize their roles, rules, and outcomes across time (Engeström, 1997; 2001; 2015).

Before outlining the tenets of activity theory, it is helpful to step back and trace its lineage and use in educational research and its applicability in this study. My use of activity theory here is predicated on the notion that literacy in practice is socially, culturally, and historically located; thus, any review of semiotic materials, classroom dynamics, and institutional workings must be analyzed accordingly (cf. Street, 1995; Gee, 2003). Socio-cultural theorists take their cues from Vygotsky, who articulated the relationship between tool and sign in the learning process (Vygotsky, 1978; Cole, 1998). Vygotsky postulated that one’s learning and development can be understood as a relationship between a subject (the person), an object (or objective), and tools that mediate behavior (see Figure 2.1). According to Vygotsky (1978), the tool’s function is to serve as a conductor of human activity; it is externally oriented and leads to a change in the object or objective (in literacy research the tool could be anything from a pencil to a digital program) that mediates human behavior. A sign, on the other hand, is internally oriented and leads to mastering something within oneself (Cole, 1998).

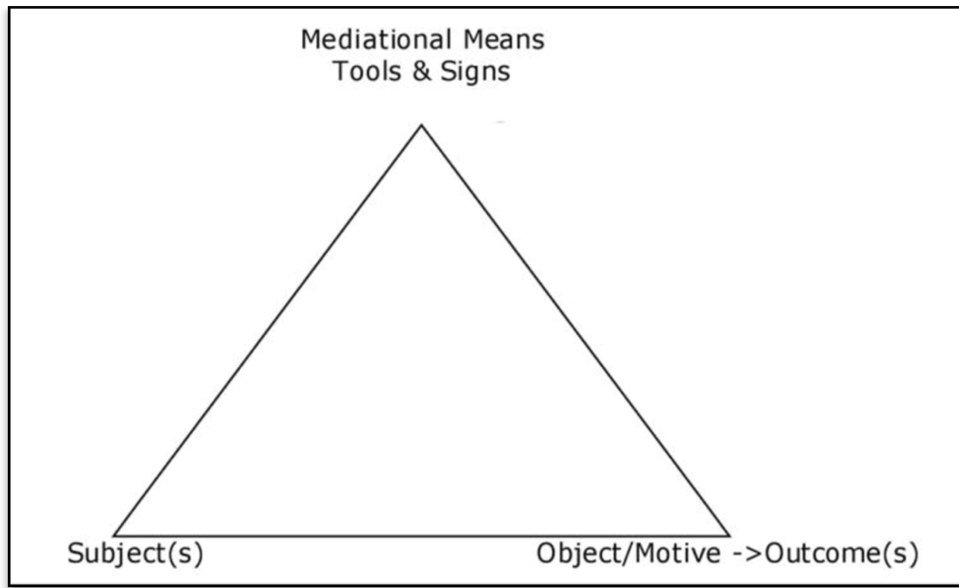


Figure 0.1: Vygotsky's Mediation Triangle. From Daniels (2001).

While Vygotsky is considered the forefather of socio-cultural theories of learning and development, activity theorists took the idea of tool mediation a step further to foreground context in their analysis (Leont'ev, 1981; Cole, 1996). Leont'ev and Luria (Wertsh, 1981) coined the term “activity theory” as a way to analyze human behavior in an “activity system” — one that includes community, including its norms and rules of behavior. As evidenced in figure 2.2 below, activity theory looks at the interaction between the subject and his or her community, including the rules and norms of that community and ideas about tool use. Activity theory is predicated on the idea that the one's process of making meaning through the use of tools and sign systems is influenced by the historical rules and norms of the society in which one inhabits (Brown & Cole, 2002; Wells, 2004). To elaborate, activity theorists would not look at the norms and uses of a social networking site (e.g. Facebook) out of context, but rather consider the practices and norms of its use in the society and community studied. For example, my use of Facebook could be very different than another researcher's in Japan. I may choose to disclose more personal information about myself, my family, and my views on politics; however, my colleague may be more guarded, choosing to keep their feed to more professional postings. In order to analyze the difference in the cases of our use, one must also take into account our different cultures and practices in our respective societies. In sum, activity theorists believe that individuals cannot not be separated from his or her context as a unit of analysis (Cole, 1996). For

this research project, activity theory helps to account for the norms and rules of behavior that encompass college writing *and* online writing.

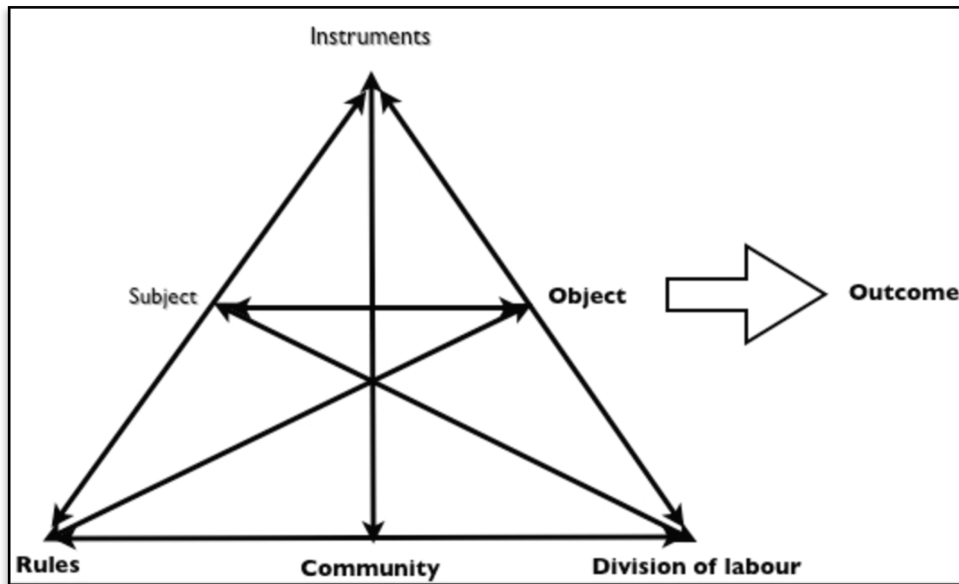


Figure 0.2: Activity Theory Model.

Engeström (1999; 2001; 2015) outlined five main ideas of activity theory. First, activity systems can only be understood and assessed in relation to other activity systems. As the above model documents, activity systems expand on Vygotsky’s triangle by including the rules, norms, and division of labor in a community. These systems are constantly in flux, as different historical actors are introduced with their own set of individual values and ways of operating in that system. Engeström argues that because the nature of activity systems is dynamic and changeable, we can only analyze them in relationship to one another (Engeström, 2001). Looking at the intersection, or the “contradictions” between two systems, helps one define the boundaries of each. The analysis used in this study looks at the intersections between the activity system of academic writing and that of digital and multimodal writing in and out of school. I argue that digital writing practices, both out-of-school ones where digital practices originated and in-school ones where those practices have been imported, consider the same activity system. I draw from Russell (2009; 2013) to contend that academic writing is also its own activity system governed by its own rules, norms, and outcomes. Ultimately, I claim that the two colliding activity systems (academic writing and digital composing) gave way to new understandings of the relationship between complex networks.

The second principal of activity theory is that of multi-voicedness. Drawing on the Bakhtinian notion of heteroglossia, multi-voicedness in activity systems suggests that communication is not static, but that all participants bring with them multiple speech and written genres that are informed by their own individual histories (Bakhtin, 1981). Both Bakhtin and Engeström maintain that while people operate within the boundaries of specific genres (e.g. creative writing, academic writing, technical writing) these systems are not static; individuals bring their own unique voices to the work that change over time (c.f. Bakhtin, 1981, Engeström 2001). Russell's extension of CHAT analysis to include genre adds another helpful layer to Engeström's framework (c.f. Russell 2009; 2013). Akin to this study, Russell situates his writing research in the university, attempting to mark changes in writing activity over time and across disciplines. For Russell (like Bakhtin before him) genres are not packaged speech systems, but rather they have become a way of composing that has been "routinized" over time (Russell, p. 40, 2009). Russell maintains that academic writing requires one to understand the rules and norms of behavior specific to the genre. Considering genre here is helpful as it reminds us that students and teachers come to the classroom with specific ideas about what "college writing" means; they also have preconceptions about composing with digital tools. Russell states, "newcomers to an activity must come to perceive how others are using tools and use them in similar ways to perform actions that coordinate with others' actions. In time newcomers may—or may not—operationalize those actions" (Russell, p. 44, 2002). As I show in Chapter 4, students' perceptions of the digital tools they used for composing were heavily influenced by how they perceived the nature and purpose of writing in college.

The third principal of activity theory is that of historicity: activity systems transform over time (Engeström 2001; Russell, 2013). Russell elucidates, "activity systems are dialectical. Change is not unidirectional, it is accomplished through joint activity, whether cooperative or conflictual, face-to-face or widely separated in space or in time" (Russell, p.56, 2013). This principal is useful to consider when looking at movements between and across genres. For example, when I was struggling to conceive and articulate what "academic writing" or "digital literacy" meant, it was helpful to remember that I was not attempting to isolate any one genre and the semiotic and stylistic choices encapsulated within it, but rather to address what occurred when those genre-influenced activity systems came together over the course of the semester.

The fourth principal of activity theory is the “central role” that contradictions play in learning and development (Engeström, p. 137, 2001). As Engeström (1999, 2001) notes, contradictions are not the same as conflicts but rather moments where one is confronted with an alternate view on a situation. Engeström states, “when an activity adopts a new element from the outside (for example, a new technology or a new object), it often leads to an aggravated secondary contradiction where some old element (for example, the rules of division of labor) collides with the new one. Such contradictions generate disturbances and conflicts, but also innovative attempts to change the activity” (Engeström, p. 137, 2001). In Engeström’s view, when two activity systems intersect, the “contradiction” that occurs leads to an alternate or “secondary” contradiction. In this “secondary contradiction” people change, and they even invent a new form of activity. In today’s parlance, we may refer to this as “disruption.” Like Vygotsky, activity theorists assert that development involves working through moments of contradictions. In this study, contradictions occurred when teachers introduced new composing tools into classrooms where students were already enculturated into a genre of academic writing; the contradictions were evidenced as students attempted to navigate their writing using these new tools.

The fifth and final principal activity is the possibility of “expansive transformations” (Engeström, 2001). According to Engeström, “an expansive transformation is accomplished when the object and motive of the activity are conceptualized to embrace a radically wider horizon of possibilities than the previous mode of the activity” (Engeström, p. 138, 2001). It is through such a “radical” transformation that students develop what Vygotsky termed “higher mental functions” (Vygotsky, 1978). In Vygotsky’s view, the development of higher mental function was a process of moving outside oneself (that which could be mastered through conscious imitation) to inside oneself (subconscious mastery). Leont’ev applied this notion when he described learning and development as a process by which people move from the “abstract to the concrete,” (Leont’ev, pg. 111, 1981) while Bateson described this process as “deep learning” or Learning III (Bateson, 1972). In Bateson’s view, in Learning I students learn the “hidden curriculum” or a way of performing in a classroom setting (Bateson, 1972). Indeed, in this case study, I document how students came to the classroom knowing the “hidden” rules, norms, and patterns of what it meant to write in college classrooms. In Learning II, students confront the contradiction (or “Double Bind”). According to Engeström, working through this contradiction

leads to Learning III “where a person or a group begins to radically question the sense and meaning of the context and to construct a wider alternative context” (Engeström, p. 138, 2001). In the following chapters, I show how the introduction of new tools pushed both students and teachers to think more broadly and creatively about how they compose and comport themselves in academic settings.

I found the idea of expansive transformation (or Learning III) also a useful way to think about how writing systems change over time. Depicted in Figure 2.3 is a suggestion of how we come to a “re-conceptualized” writing system in which two systems come together and *transform* beyond the scope of each. In this research study, I show the intersections between the genre of writing in the university (objective 1) and writing using digital media (objective 2). The product (object 3) clearly borrows from both systems of composing, but also reflects a new way of composing. By documenting these new approaches that students and teachers developed when using new tools in an academic setting, I visualize new opportunities for university writing to *expand* and include new literacy practices.

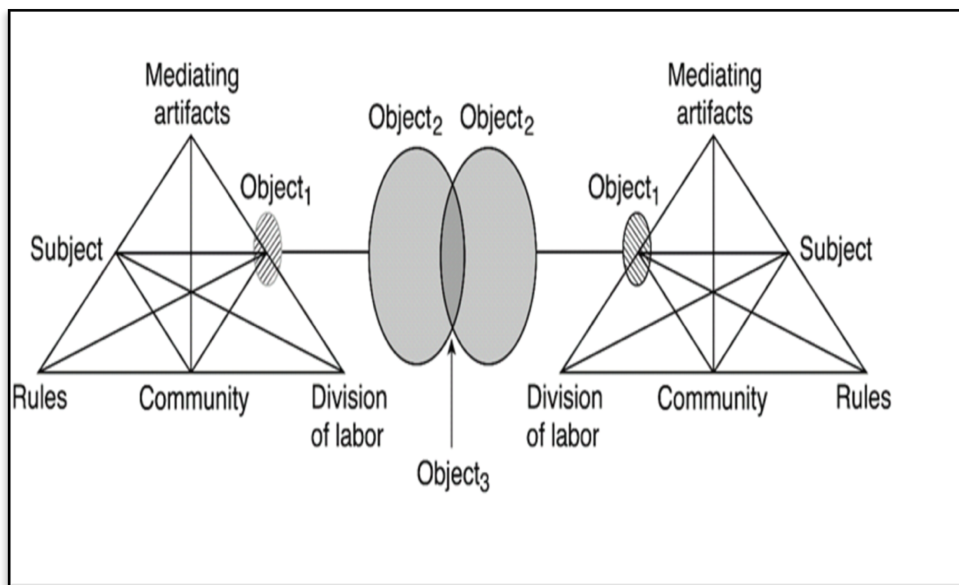


Figure 0.3: Engeström’s Model of Expansive Transformation. Taken from Wordpress (2013)

Ultimately, I hope that this work on new forms of writings using new tools in university classes may compel teachers, researchers, and administrators to help produce graduates who are literate in all forms of communication. As Selfe (2010) notes, “historically students would be

taught using all available means to communicate in productive ways — including reaching different audiences and for achieving multiple purposes” (Selfe, 2010, 1997). For digital literacy theorists, the goal is to have students become proficient in collaborative and connected composing practices, ones that require them to analyze and synthesize information gathered from the web (c.f. Mills, 2010; Ito et al., 2013). Yet, we will only help students acquire these skills if we begin to acknowledge and conceptualize the diverse and multiple literacies students need to consume and produce in the digital age. A push towards documenting expansive learning in activity systems is a useful starting point, one that could help reframe the assessment and curriculum strategies within the Academy.

2.2 Literature Review

This study is positioned within scholarship that chronicles how the proliferation of new technologies changes the way we compose texts in the 21st century and the learning environments that require practices. As explained above, I approach my research from a socio-cultural view of learning and development. In the following review of literature, I draw from scholarship carried out through the lens of socio-cultural perspective which dominate the field of digital literacy practices, while also reviewing research from the fields of Computer Mediated Communication, Teacher Education, and College Writing. Contained in this review are theoretical and empirical studies that outlines (1) the history of digital composing systems for educational purposes, (2) what it means to be literate in a digital age, including the skills required to teach digital literacies, and (3) approaches to reimagining writing for undergraduates in the 21st century.

2.2.1 New times, new tools.

Educational theorists and researchers have long been interested in the notion of digital composing spaces for educational purposes to help students create, share and collaboratively-generate new information (Jenkins, 2009; Cress & Kimmerle, 2008; Scardamalia & Bereiter, 2006; Habgood & Ainsworth, 2005). Researchers within the fields of human computer interaction and computer-supported learning, for example, have designed various online platforms for allowing students to interact online in ways that go beyond the familiar paradigms

(such as course blogs and threaded “forums”). Since the 1990s, researchers have experimented with ways of allowing students to collaboratively annotate texts, defined as “anchored collaboration” (Guzdial, 1997). The idea behind anchored collaboration is that it helps students see the text as a malleable entity rather than a static unit. Indeed, anchored collaboration is reminiscent of the Bakhtinian notion of heteroglossia, with multiple utterances (speech acts) cohering the unit as a whole (Bakhtin, 1981). The purpose of these early platforms was to replicate the types of collaboration students do in-person in an online environment, but also to draw upon the affordances of online tools to expand what students can do individually. This Vygotskian notion of learning from one’s peers, or developing with the assistance of others, was key to Scardamalia and Bereiter’s work on knowledge building (1989).

Other platforms have placed an even greater emphasis on the texts of students themselves. Scardamalia and Bereiter (Scardamalia et al., 1989) created a platform called CSILE (Computer Supported Intentional Learning Environments) to support what they called “knowledge building.” In the process of knowledge building students collaboratively create and refine a collective conceptual understanding, with individual knowledge an “important by-product” (Scardamalia & Bereiter, 2006). CSILE allowed students to participate in knowledge building by sharing and linking textual notes in a collaborative hypertext environment, highlighting certain notes with “epistemological markers” that indicated a particular note’s discursive role (Scardamalia & Bereiter, 2006). Later versions of CSILE, renamed Knowledge Forum, represented the relationship between student-generated notes as a network diagram (similar to a “mind map”) while also allowing certain notes to subsume other notes while creating a hierarchical structure. Though they lack some of the technical features of Knowledge Forum, wikis (collaboratively editable online documents) similarly allow students to engage in online knowledge building (Cress & Kimmerle, 2008). This helped set the stage for even more work connecting learners online.

This new world of web 2.0 allows people to share even more user-generated media. Now, armed with software for sound, video, and image manipulation, users can alter and combine media, creating a “remix.” In their theorization of remix culture, Knobel and Lankshear (2008) suggest that remixing is both an “art” (a certain set of aesthetic values) and a “craft” (a set of technical skills that a producer uses to combine media in order to achieve the desired effect).

They offer as examples a wide variety of online practices, from the creation of “machinima” (narrative videos made by recording play within computer worlds) to the more commonplace manipulation of photos via Adobe Photoshop and related software. As media theorist Lev Manovich observes, “remix” represents a general cultural logic associated with new media cultures; he suggests that artists (such as music producers) themselves no longer consider their own works as inviolable objects but actually expect that their work will be remixed (Manovich, 2005; 2001). For a text to be remixable it must be possible to take it apart and put its pieces back together again, combined with other pieces, creating something new. Manovich argues that new media objects lend themselves to this by virtue of their “modularity” (Manovich, 2001). A modular text exists as a collection of discrete parts that maintain their separate identities. A Photoshop image, for instance, consists of layers, and a web page consists of elements described by the page’s HTML markup: these layers and elements can easily be swapped in and out, making a certain type of remixing possible. Altering a JPEG, for instance, by replacing one person’s face with a different face may require careful “keying” of the text to intricately cut up the two images along with clever blending and filtering to make the mashup look natural. The notion of the remix points to the ways that online culture depends on relationships of intertextuality between texts. Within the fast-paced textual ecologies of the contemporary web, however, this sort of intertextual connection can link together a large number of texts which are all (more or less) remixes of each other. Lankshear and Knobel anticipate remix and circulation culture to have ever-increasing presence in both formal and informal composing practices in academic settings (Lankshear & Knobel, 2011).

2.2.2 Defining digital literacies.

Over the past decade scholars have struggled to define the strategies needed for students to compose in a digital world (Mills, 2010; Ito et al., 2013; Leu, 2015). An examination of recent scholarship for this paper found no one definition of digital literacies, but rather an extension of the concept of “literacies” articulated by new literacy theorists (Buckingham, 1993; Street, 1995; Leu et al., 2004). Lankshear and Knobel (2011) maintain that we can only understand new literacy practices within their social, cultural, and historical contexts. Like Gee, (2003) they argue that new literacy practices form their own discourse wherein individuals are identifiable as members of socially meaningful groups or networks. Indeed, with the rise of communication technologies, the types of composing practices students will need to draw from inside and

outside of the classroom to analyze and synthesize information from multiple sources needs to be addressed. Lankshear and Knobel (2010) argue that learners need new operational and cultural “knowledges” in order to acquire new languages that provide access to new forms of work, civic, and private practices.

Many believe that the proliferation of new digital tools enhances students’ abilities to work collaboratively with others to solve problems, analyze information, and generate semiotic material. Jenkins’ (2009) research on participatory cultures, for example, examines the forms and skills required to engage in this media-rich environment. His work on participatory learning connects to new literacy theory with its emphasis on the both the social and cultural habits formed through participation in online forums. According to Jenkins, (2008) forms of participatory culture include:

1. Affiliations: memberships in online communities such as Facebook, or gaming networks
2. Expressions: producing creative content such as memes
3. Collaborative problem solving: forums like GitHub or Quora
4. Circulations: sharing content between networks

Jenkins also outlined the types of new literacy skills needed in this digital world, including:

1. Playfulness: exploring one’s surroundings, gaming
2. Performance: role playing, taking on different online identities
3. Simulation: the ability to construct dynamic models of real-world processes
4. Appropriation: the ability to create and remix content from multiple sources
5. Multitasking: the ability to analyze and synthesize information found on the internet
6. Distributed cognition: the ability to interact meaningfully with digital tools that expand mental capacities
7. Judgement: the ability to evaluate the reliability and credibility of different information sources
8. Transmedia navigation: following stories across multiple modes of information to evaluate how that story shifts and changes

9. Networking: searching and sorting through information related to a problem or topic of investigation
10. Negotiation: the ability to move between different and diverse communities of people

Interestingly, the habits and skills that Jenkins outlines are not unlike those mandates put forward by the writing program that participated in this study, nor are they unlike those put out by the Common Core State Standards for Writing (CCSS.ELA-Literacy.RST.11-12.9) or the National Council for the Teachers of English's statement on "Professional Knowledge for the Teaching of Writing" (2016). From this, one can see that imparting these skills is a concern for both teachers and administrators across K-12 and universities.

To help guide teachers and educators, a consortium of education, literacy, and new media scholars recently amassed a design framework for incorporating new literacy practices called "connected learning" (Ito et al., 2013). Their work consists of this framework, accompanied by series of case studies, for how this connection of learning played out in classrooms across the US. For example, Ito and colleagues describe students like Clarissa, who become interested in a fan-fiction community. To become an official member of the site, Clarissa had to create a 25,000-word persona description that thoroughly outlined a character, including desires, race, history, and location (Ito et al., 2013). Her involvement and extensive writing in this fan-fiction group led Clarissa to expand her own writing abilities and expression in school; moreover, Clarissa was able to "imagine herself" as a writer (Ito et al., 2013). Examples like these help to illustrate the ways in which students' interests can help bolster their coursework. Instead of following an arbitrary curriculum, a connected learning framework asks educators to link home, school, and other peer contexts of learning to the classroom (Ito et al., 2013). The aim is "centered on an equity agenda of using new media to engage youth who otherwise lack opportunity (...) and seeks to build communities and collective capacities to create learning opportunities and seeks to advocate academic institutions to recognize and make interest-driven learning relevant to school" (Ito et al., p. 8, 2013). Similar to Jenkins' work on participatory cultures, connected learning looks for digital media to: 1) offer engaging formats for interactivity and self-expression; 2) lower barriers to access for knowledge and information; 3) provide social supports for learning through social media and online affinity groups; and 4) link a broader and more diverse range of culture, knowledge, and expertise of educational opportunities (Ito et al.,

2013). By providing designed environments, a connected learning approach advocates for classrooms that will be supported, interest-powered, and academically-oriented with learning needs that are integrated into the real world of work, civic engagement, and social participation (Ito et al., 2013).

This agenda compliments scholarship on reading and writing in the 21st century in its aim to document how students are using digital tools to produce and compose in the classroom, and what teachers can do to support them (Jewitt, Bezemer & O'Halloran, 2016; Selfe, 2007; Jewitt, 2005; 2008). Jewitt argues that the visual design of digital literacies offers students the ability to create their own path to composing (Jewitt, 2005, 2008); whereas old literacies allowed for one reading path (moving from left to right or right to left across text), a web page, in contrast, can offer multiple points of entry. Jewitt maintains that in order to define and teach digital literacies we need to focus on the affordances of different modalities and how they can be used together to make meaning. To do this effectively students also need to understand how to parse important and relevant information from multiple sources. While media allows students find new and more personalized ways gather and share information, it also portends a need for educators to help guide students to critically analyze the information received.

While many have focused on the ways in which digital literacies diverge or transcend old modes of composing, Donald Leu and his colleagues (Leu, Kinzer, Coiro, Castek, Henry & Ruddel, 2013) argue that new literacies build on foundational literacies rather than replacing them. For Leu, Kinzer, Coiro, Castek, Henry, and Ruddel, this distinction is important as it helps create practical frameworks for using new technologies in conjunction with already-existing practices. Like Gee and Hayes (2011), their work asks instead to see literacy in a digital age as ever-changing and flexible (Leu, Kinzer, Coiro, Castek, Henry & Ruddel, 2013). Similar to the work outlined by Jenkins (2008), Leu and Coiro (2013) a literate person is defined as one who can effectively judge how to draw upon the appropriate semiotic material to communicate a particular message at a particular time. This requires having the social and cultural wherewithal to strategically interpret information as it is sourced online. Simply put, in order to be literate, one must be an analytical consumer and producer of information.

Like Jewitt (2005; 2008), Leu and his colleagues see online reading as a process that requires new skills, as the reader must be self-directed and have the ability to, “identify problems, locate, evaluate and synthesize information” (Leu, Kinzer, Coiro, & Cammack, p. 1570, 2004). Most digital literacy researchers now agree that it is imperative to include, as a fundamental literacy practice, strategies for targeting and evaluating trustworthy sources (Leu, Kinzer, Coiro, Castek, Henry & Ruddel, 2013; Rheingold, 2013). The sheer amount of information found online demands a change in strategies required to interpret and discern information. In a new study released by Stanford’s History Education Group, a majority of the 7,804 students surveyed could not tell the difference between a credible news story and a “sponsored” news site (2016). Indeed, I witnessed this phenomenon played out in the psychology classroom observed for this study when, having been given access to new tools, students posted claims from psychology sources that were either false or grossly exaggerated. This required the professor to change his curriculum to help show the students how to evaluate a credible journal article. While the result—a lesson on evaluating trustworthy sources—proved beneficial, it was concerning to see students in a university classroom unable to distinguish between credible and false news sources.

We must also look at ways that literacy is changing in our globally-connected world, in part as an antidote to one-sided or lopsided information sources. While Leu, Kinzer, Coiro, Castek, Henry and Ruddel (2013) contend that in offering multiple ways to produce and consume information new technologies allow for more individualized and personalized literacy practices, others offer an alternate view. Silverstone (2007), for example, contends that literacy practices are no longer individual acts but require collaboration with others, often with people from around the world. In his theorization of the ethical use of media, he argues that corporate media outlets curate their content from a Western-centric, polarized lens; he notes, “the media trade in otherness, the spectacular and the visible” (Silverstone, p. 47, 2007). As we have seen of late, this results in the circulation of news media that caters to narrow audiences, and it does not reflect the multiplicity and diversity of voices from around the world. Silverstone argues that in our new media world, or “Mediapolis,” the prolific circulation of information will either help to bring people together or drive them further apart (Silverstone, 2007).

While digital media offers opportunities for students to customize their compositions with a plethora of semiotic materials, we must also recognize that their connectivity engenders traversing geographical, cultural, and social boundaries. For educators, it follows that we have a responsibility to teach students how to connect with others globally in order to engage in meaningful discourse. For Silverstone, this is a human-rights issue, with new media and social networking platforms at the forefront with their potential to increase awareness and access for people to share and communicate similar and different worldviews (2007). Silverstone contends that we don't always have to agree, but it is important that we allow for multiple voices and perspectives in the online public sphere. We must therefore find ways for students to communicate with others in local and global settings, traversing racial, cultural, and linguistic boundaries.

In their work on social networking with youth from around the world, Hull, Stornaiuolo, and Sahni (2010) look at ways that youth can develop “cosmopolitan practices” through interactions with other youth online (p. 86). In this new digital world, Hull, Stornaiuolo, and Sahni suggest a “reimagined cosmopolitanism,” one that includes “respectful dialogue and for the capacity to generously imagine others across aesthetic, cultural, historical, and ideological differences” (p. 87). In practice, Hull, Stornaiuolo, and Sahni connected groups of students from different parts of the world using a student-lead social networking site, Space2Cre8. Unlike public sites such as Facebook, Space2Cre8 is closed network for exclusive use in participating after-school programs. It offers opportunities for youth to develop online-only relationships with others both locally and globally (Hull, Stornaiuolo & Sahni, 2010). Students connected with other youth on the site, sharing—as one would on other social networking platforms—online profiles, messages, and other semiotic materials such as images or chats. These exchanges helped to foreground the necessity for sensitivity and attentiveness when communicating with others, but also illustrated the challenge of learning to communicate digitally across a range of differences (Hull, Stornaiuolo & Sahni 2010). Hull, Stornaiuolo, and Sahni (2010) argue for the importance of including an ethical dimension in teaching digital literacy practices.

2.2.3 Teaching digital literacies.

While there is a growing consensus that teaching digital literacies or “twenty-first century” skills are important for students moving forward in the new global economy, there continue to be pressures on educators as to how these skills are both imparted and evaluated in classrooms (Selfe, 2007; Jewitt, Bezemer & O’Halloran, 2016). In their review of the use of digital tools in public schools in southern California, Warschauer and Matuchniak (2010) found that teachers, particularly those in lower SES areas, were under such pressure to teach a set of standards that they had little time to experiment with new types of literacy practices. The lack of consensus among administrators, districts, and even legislators prevented more imaginative and generative literacy practices in the classroom. To be sure, the instructors followed for the current study had varying levels of autonomy about what types of online writing work was acceptable and required, resulting in differentiation in both willingness to use new writing tools and also methods of evaluation. In higher education circles, the change required to adopt and incorporate new writing practices has been stymied at both the institutional and faculty level. Hacker and Dreifus (2013) found that the specialization of disciplines over time resulted in faculty who rarely collaborate and work cross-departmentally, and had different ideas about what constitutes good writing. In a study of 2000 faculty across the United States, Taylor (2010) concluded that the university had become so accustomed to writing for one another over the last few decades that the methods of communication (e.g. types of writing) remained unchanged. In my research, I too found that teachers had specific ideas about the types of writing they expected from students, and these tended to vary from department to department.

Though Lea and Street’s (1998) research on “academic literacies” is almost two decades old (and there’s been a sea change in technologies for writing since then), it still provides insight into how university faculty view academic writing across departments, and how we can help students understand what types of writings are expected of them. Lea and Street worked across university campuses to document how students and teachers perceived writing and what kinds of feedback and scaffolds teachers offered to students in their courses (1998). They found that often faculty had a technical model of student writing, viewing literacy as a discrete set of skills that could be acquired or “fixed.” (Lea & Street, 1998). They instead proposed an academic literacies approach to evaluating and teaching writing in higher education which instead looks at the social

structures and type of knowledge valued in each department. By conducting interviews with students and staff, and making observations and reviews of students writing, Lea and Street discovered that teachers gave conflicting feedback that varied widely across disciplines. The researchers found that more often than not teachers did not articulate their expectations about the style of writing expected of their students, which left the latter confused and frustrated. Further, they contended that we must help students understand the nature of writing across genres, fields, and disciplines; and instruct them on how they can switch between these settings (Lea & Street, 1998, 2006). Ultimately, they argued the need to move away from the more traditional “skills-only” model of student writing in the academy to one that recognizes the different types of knowledge valued in each department—i.e., the cultural and contextual components of literacy practices in higher education (Lea & Street, 1998).

The idea of enculturation into the discourse of writing across different academic disciplines is closely linked to work on performance and identity studies in literacy education. In their work with the Stanford Student Writing Program, Fishman, Lunsford, McGregor, and Otuteye (2005) focused on how students saw themselves as writers in a variety of different writing programs across campus. The most startling statistic revealed that students’ confidence in their writing abilities diminished by almost 50% in their second year of college. During interviews, Fishman and Lunsford found that students struggled to identify themselves as writers in the academy because they could not see themselves as engaging in academic discourse (Fishman, Lunsford, McGregor & Otuteye 2005). The researchers concluded that the problem was social rather than technical (i.e., students knew *how* to write, but had trouble accessing their “academic” voice), and thus they turned to performance studies to help students overcome this barrier. Performance theory education, harkening back to Erving Goffman’s (1956) work on the presentation of self, helped students see the connections between writing, audience, and delivery. Adopting a character with an authoritative voice helped writers feel confident in their abilities to write strong academic prose (Fishman, Lunsford, McGregor & Otuteye, 2005). By focusing on performance, teachers were reminded that “embodying language” was a precursor to literacy acquisition, thus building ways for students to see and inhabit more “formalized” roles which can help them to feel confident to use a newly-accessed academic voice in their writing (Fishman, Lunsford, McGregor & Otuteye, 2005).

Considering composing as an act of performance with a pre-defined audience is even more essential for teachers to impart this digital age (Gee & Hayes, 2011; Warschauer, 2011). With the proliferation of new tools and platforms for sharing information, students' access to multiple and diverse audiences has grown. Herrington, Hodgson and Moran (2009) found that upon entering college, students were heavily influenced by a system that teaches standardized and formulaic text-centric writing to believe that they lack the ability to critically analyze and evaluate their work or identify the audience they're writing to. Therefore, students, who are accustomed to writing stock essays that perform well on tests (the five-paragraph essay), often struggle to understand and recognize different genres and styles when they enter college. This in turn leaves students ill-prepared to write for an academic (and often discipline-specific) audience. According to the authors, these tests, "distort the nature of writing as a social activity, a dialogue between reader and audience;" instead, they teach students to write according to tabulations: structure, sentence length, word frequency (Herrington, Hodgson & Moran, p.5 2009). This systematization of writing is not sustainable in a media-rich environment that requires scrutiny of data and the ability to compose for multiple and diverse audiences. It follows that teachers require time and guidance to help students formulate credible arguments that are supported by ideas and data from a variety of sources.

The National Writing Project with Devoss, Eidman-Aadhal and Hicks has been tracking digital writing and teacher readiness for the last decade (Devoss, Eidman-Aadhal & Hicks, 2010). They find that more often than not, instructors lack methods to teach students the rhetorical strategies necessary for writing in the academy or for introducing new writing tools (Devoss, Eidman-Aadhal & Hicks, 2010). Significant challenges for teachers include lack of training with tools to recognize shifting notions of text and to foster literate citizenship (Devoss, Eidman-Aadhal & Hicks, 2010). As articulated in the above definitions by Leu, Coiro, and others, literacy in a digital world is flexible and constantly changing; thus, we need teachers to have the resiliency and malleability to keep abreast of these changing frameworks (Leu, Kinzer, Coiro, Castek, Henry & Ruddel, 2013). Researchers from the National Writing Project acknowledge that this is a difficult task, especially when having to negotiate the (often antiquated) writing standards within institutions (Devoss, Eidman-Aadhal & Hicks, 2010). According to Devoss, Eidman-Aadhal and Hicks, these teaching strategies should include helping students understand the rhetorical nature of the course they are writing for, and "work

with form to cultivate strategic and flexible thinking” to develop strategies for composing in it (p. 46, 2010). The idea is that teachers need to help students have an intentional focus for their writing; they also need to have the tools and wherewithal to create a digital composition. However, this is not the same as understanding why you are asked to create it in the first place (Devoss, Eidman-Aadhal & Hicks, 2010). As I show in Chapter 4, teachers were more successful in transposing digital practices into the classroom when they gave students a frame for understanding for their inclusion.

The National Writing Project’s (2010) research concluded that teaching revision was a crucial step in helping students develop themselves as consumers and producers in this digital realm. In one featured case study researchers followed an instructor who used GoogleDocs to help students collaboratively write and produce scripts for podcasting. Over the course of the project, students continuously shared drafts, made revisions, and ultimately produced the podcasts as a team. Looking back, the instructor found that combining strategies of production and revision exposed students to more “generalizable strategies for digital writing inside and outside school” (Devoss, Eidman-Aadhal & Hicks, p. 30, 2010). Now that there are tools (like GoogleDocs) that enable students to see their own revision histories, and teachers can help students develop a metacognitive understanding of their writing processes. Thus, the revision process, long a staple in paper-based composing, continues to be key for helping a student compose using multiple modes in a variety of contexts (Devoss, Eidman-Aadhal & Hicks, 2010).

While teaching a sense of audience, rhetorical strategies, and composing across modes is key for teaching digital literacies, many university faculty members are beholden to old assessment strategies based on print-based literacies (Selfe, 2007). Selfe claims that historically, faculty were obliged to produce “literate graduates” (2007). They still are, of course, but Selfe notes that to be literate in the 21st century requires teaching strategies to compose in multiple modes (2007; 2015). Selfe acknowledges that college students are often put in the position of being a critical responder and audience member online, but they aren’t given opportunities to bring this implicit knowledge into the college classroom (2007; 2015). Over the course of her interviews with students, Selfe (2007) found that students enjoy writing about subjects and issues that matter to them—they are already doing this outside of classrooms on blogs, online forums, and in video so why not leveredge that. Selfe argues that in order to incorporate these skills we

need a reframing in the academy about the nature and purpose of student writing—one that acknowledges and incorporates other opportunities for students to make meaning in the classroom (Selfe, 2007).

Taylor (2010) imagines a university of the future wherein students develop their own paths of inquiry through writing and composing. In this future, the role of the student and professor becomes more of a collaboration. Such a changing dynamic would take pressure off of teachers to be the “sage on the stage,” and it would also allow opportunities for students to bring their own unique skills to the classroom. According to Taylor, universities should take a broader approach, where “mastery of subjects might involve students focusing on a particular problem or theme that compliments their chosen field (Taylor, p. 155, 2010).” Therefore, student composition may be longer and more substantial, with a focus on the quality of knowledge produced rather than a quantity of essays produced over time (Taylor, 2010). Taylor outlines a course taught at Columbia that brings together writers, artists, economists, and scientists to illustrate his idea (2010). The goal of the course was to analyze the value of the original and the copy, with the final assignment being a multimedia project that articulated the problem for an audience. Working collaboratively in groups of three or four, students learned together how philosophical and literary works help illuminate ideas of new media and popular culture; the instructors offered guidance and posed questions, but left students to guide their own work. The compositions produced were insightful and well-articulated. As I show in Chapters 4 and 5, digital technologies offer opportunities to stretch students’ creative and analytical thinking abilities. Examples such as these argue that such courses helped students think critically about the media surrounding them and also to use them in innovative and productive ways.

As articulated in the opening of this chapter, this study builds on work on new and digital literacies in the college classroom. In the following chapters, I’ll show the tensions and strains, but also opportunities and successes that students and teachers faced when working with new tools in their respective courses. Using activity theory, I document how the intersection of the different “systems” of academic and digital writing created contradictions in both student and teacher expectations of student productivity. Often these initial contradictions were met with uncertainty and confusion, and they were made more prominent by institutional pressures. Yet I will also show how, by working through these contradictions, students and teachers found

opportunities to *expand* their knowledge to include collaborative and multimodal composing practices. Ultimately, I hope to provide a glimpse into what the future of college writing in a digital age may be.

CHAPTER 3 : METHODS

“As we encounter each other, we see our diversity - of background, race, ethnicity, belief - and how we handle that diversity will have much to say about whether we will in the end be able to rise successfully to the great challenges we face today.”

- Dan Smith, 2010, p. 5.

3.1 Setting

3.1.1 The City

In order to answer my research questions, I turned to the city of Townsend, California, home to one of the largest and most prestigious universities in the state. Unlike other elite university towns, Townsend has a unique mix of city and suburban life. High above the cityscape are the Townsend Hills, which boast some of the city's most expensive and prominent real estate, while towards the Bay we see a varied mixture of condominiums, single-family dwellings, and student accommodations.

Due to high demand and low surplus of campus housing, the majority of students (roughly 76%) live off-campus, in Southside (or South of campus)¹. Walk down the main street between campus and downtown and you will see remnants of Townsend's glory days from the sixties and seventies when social activism and the "hippie" movement in Northern California featured heavily in the public eye. Indeed, the city still has many tie-dye, holistic medicine, and marijuana paraphernalia shops with many residents still working in them.

Townsend was, and is still, known for being at the epicenter of social change in the United States. Think of the iconic images of free speech movements and campus sit-ins, and likely Townsend will feature in many of them. In the sixties, the campus became famous for its protests against the war in Vietnam and in favor of the Civil Rights movement; in the seventies and eighties, its attention turned towards domestic civil partnership and raising awareness about AIDS. Since the time I arrived, Townsend has become known for the "Occupy" student movement and raising awareness for income and social inequality. Most recently, it has been a

¹ Data available on public website by Townsend's Office of Planning and Analysis.

hub of activity centered on immigrant's rights and providing safe spaces for the "Resistance" movements.

3.1.2 The School

It is hard to describe the city of Townsend without mention of the university -- the school continually ranks in the top-twenty universities in the world. Notably, it is the only public university in these rankings. Townsend prides itself on remaining true to its social activist mission, and part of its allure is this cosmic mixture of excellence and leftism. One of its most famed residents and chefs, describes it thusly: "I really appreciate the many neighborhoods of Townsend. There is still the butcher, the baker and the candlestick maker. And it has the University, which is the greatest gift, to my mind, to be close to it. It keeps the place alive".

Many of the students who attend Townsend are drawn to the school for its strong social justice roots and commitment to diversity. An excerpt from one of my student interviews illustrates the point:

I didn't really have the same problems I've had at my old high school. Being a person of color here it just seems a little bit different. I think just my classrooms [here] are more diverse. Sometimes I was the only student of color. And that made me think about it every day but here I just flow with a lot of different groups. I actually came here as a very, I would say I came here because I was really involved with social justice activist work. (Interview, Jansen, 03.03.16).

Like the surrounding neighborhood, Townsend University is home to a fairly diverse student body. According to the Office of Planning, approximately one in four students are white, with the next majority population being Chinese at 19%, and Hispanic at 10%; the remainder of the population is a combination of African American, Filipino, and South Asian. The diversity is unique for a number of reasons, but most interestingly because it differs from most other elite institutions whose student populations loom closer to 40-50% white.² Further still, close to 30%

² Based on public data provided from Harvard (<http://iop.harvard.edu/demographic-and-political-profile-fall-2013-survey>); Stanford (<http://facts.stanford.edu/academics/undergraduate-profile>); Columbia (<https://undergrad.admissions.columbia.edu/sites/default/files/classprofile.pdf>); University of Pennsylvania (http://diversity.upenn.edu/diversity_at_penn/facts_figures/), Vanderbilt

of all incoming students are the first generation to attend college from their family. While this is by no means a complete barometer for progressiveness, these figures indicate a commitment on the part of school to move towards a demographic that closely aligns with the state's.

While it is easy to be lulled into thinking that Townsend is not technically-advanced when hearing about its green roots, the reality is very different. Whether it's the school's close proximity to Silicon Valley, the newly opened MATRIX Center and Center for New Media (funded by some of the largest tech donors in the world), Townsend is often at the forefront of high-tech innovations. The university recently partnered with Google to host its email, videoconferencing, and calendar systems; and later an entirely new learning management system (LMS) hosted by Canvas. Thus, it was this unique mix of student populations - reflexive of the diverse and changing face of the state - and progressivism that made the school ripe for a study of technology integration in the classrooms.

3.2 The Classroom Spaces

I situated my study in three different student classrooms: Introductory Psychology, College Writing, and an Education Course (Literacy and Society). The courses were chosen to give the study a diversity of disciplines from which to understand how teachers and students interact with new tools. Given the different ways Social Science, Science, and the Humanities approach writing in higher education, I hoped to find both commonalities and distinctions between the classes. By inserting myself into these different fields, I sought to understand how different stances on teaching and learning resulted in the respective approaches to using new tools in the classroom. I also choose to employ a "within-case" analysis and a close reading of the College Writing. This class was particularly well-suited to a "within-case" study due to its small student size and level of instructor involvement. Here I hoped to gain a more intimate look at how digital literacies were introduced and integrated into a classroom (Goetz, & LeCompte, 1984).

Introductory Psychology. Dating back to Townsend's early baroque period, the Whorton Building is home the largest lecture hall on campus, Whorton Auditorium. With a seven

(<http://admissions.vanderbilt.edu/profile/#firstyearstudents>) and Princeton (<https://admission.princeton.edu/applyingforadmission/admission-statistics>).

hundred-student seating capacity, it is hard to imagine a professor acting like anything other than a "sage on the stage" in this theater-like hall (see figure 3.1). The vast space has echoes of its original construction, from the stadium-like seating to the staged theater lighting. The vaulted ceiling comes to a peak above the center stage, where there is a podium, cinema-size projection screen and surrounding sound system.

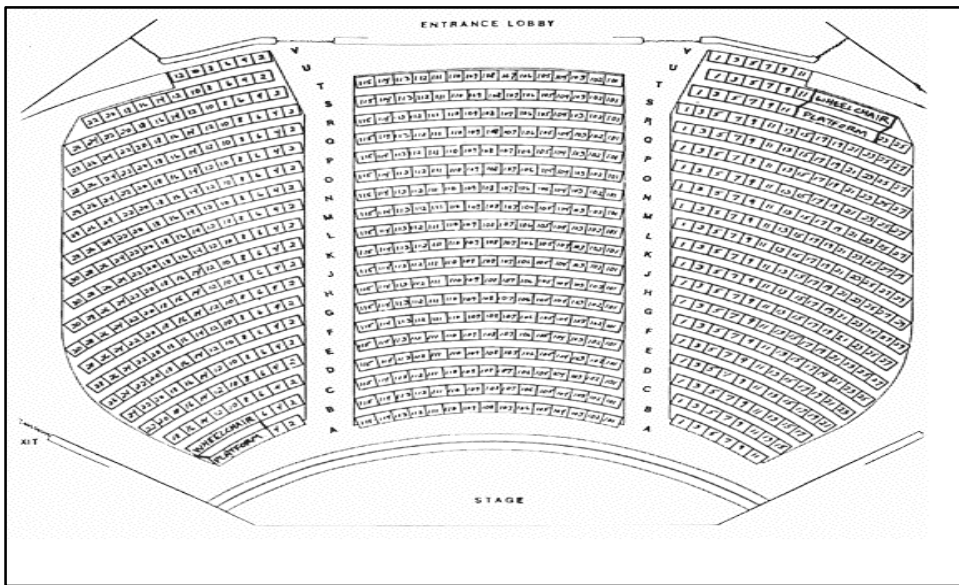


Figure 0.1: Picture of Whorton Auditorium

Professor Kittredge's class begins at noon, or rather, ten past twelve. Like most classes at the university, Introductory Psychology operates under "Townsend time:" classes start approximately ten minutes after their designated start time. In theory, this trend was put in place to allow students time to travel across campus between classes; in practice, this often results in students trickling in well past the allotted start time, as was often the case in Professor Kittredge's class. I would try to arrive to my observations early, and sit in the back of the auditorium to get an overview of the class flow. There I would see students trickle in well past its start time, often thirty minutes over.

After the first few classes, I began to see trends emerging in how the students situated themselves in the class: a significant majority in the first few rows would arrive early, while many latecomers filled in the back sections. Like many a modern university classroom, upon arrival the majority of students immediately opened their laptops. I estimated that for every

lecture (based on rough counting), the majority of students were online on a device (phone or laptop) during the entirety of Professor Kittredge's lectures. Yet, Professor Kittredge encouraged this online engagement; he always asked students to follow along with the slides that were available online, and even went as far as making all lectures available via podcast.

Walking around the classroom, I observed a mixture of online practices from the students during the lecture period. Some followed along with the lecture using the materials available through Professor Kittredge's course folder, while others readily perused the Internet - Facebook and Instagram were student favorites. As mentioned in the theoretical section, the students' online practices during the lecture mirrored the phenomenon that occurred in their writing, often merging university spaces with the social digital realm. While I offer no opinion here on the ramifications of the perusal of sites like Facebook or Instagram during students' "class time," it is interesting to observe the differences in acceptable practices, in terms of rules and norms, between large lecture and small seminar spaces. I would often pause and wonder how those practices might shift further with the increased introduction of online tools into those class settings.

Education 1B: Literacy and society. The small seminar space that houses Education 1B sits in Roberts Hall, which is located on the south side of campus. Built in 1965, the building and its classrooms resemble classic sixties architecture, which has been dubbed "Brutalist" by some art historians. In stark contrast to the ornate and art deco style that was popular at the turn of the century, Roberts Hall is bare and raw: concrete and windows make up the bulk of its visage. Inside there were valiant attempts to paint the walls with warm and inviting colors, such as blues, greens, and yellows, but the unpretentiousness of its exterior stands in opposition. The result is an odd mash-up of bare modernism in a pastel pastiche.

Though many of the classrooms in the building have little natural lighting, and thus harsh, ultraviolet lights are required to animate the space, the room that housed Education 1B (ED1B) was flooded with sunlight. Rarely does Adrianna, the course instructor, elect to turn the light switch; she instead opts for the blue hue of the Bay's morning sun to illuminate the classroom. The classroom tables and chairs were arranged in the same configuration for every class (see Figure 3.2). The long tables and chairs were arranged as a large rectangle, with

students and teacher facing each other at all times. At one end of the room was a large projection screen that was connected to a projector and speaker system, while the opposing wall had a basic black chalkboard. The difference between these "old" and "new" tools for visualizing course material was not lost on either teachers or students, and was often a source of discussion during class.

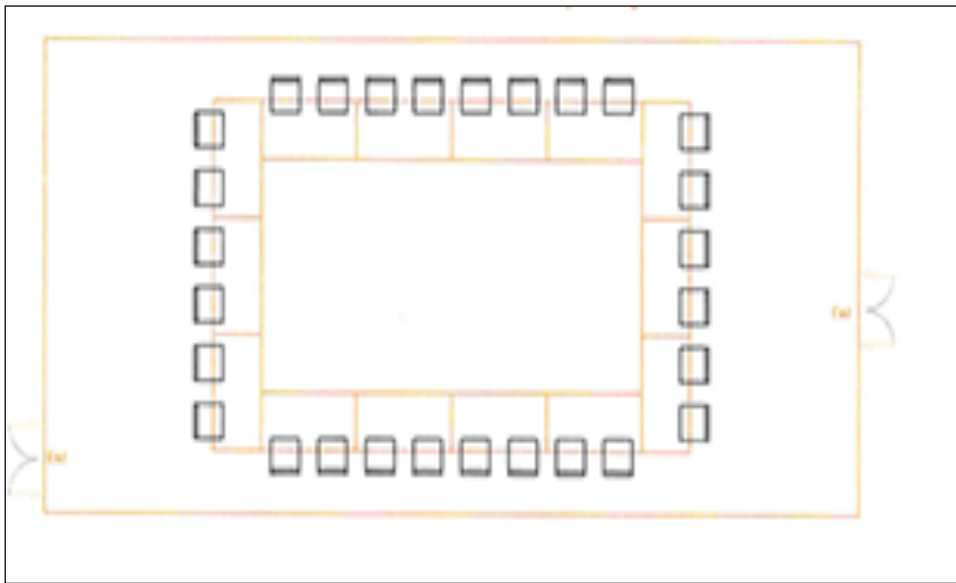


Figure 0.2: Class arrangement for ED1B

ED1B was scheduled to meet in-person at 10:30am on Thursdays. Unlike Professor Kittredge's large lecture class, it was obvious when a student came in past the ten-minute grace period. Most weeks, a majority arrived and were seated by official "Townsend time." Enrollment for the class was approximately 26 students and on any given Thursday, most students were in attendance. Akin to Introductory Psychology, students often carried laptops and were encouraged to take notes and follow along with Adrianna's lecture. However, unlike the students Professor Kittredge's class, I rarely saw students "surfing" the web. While I surmised that the conspicuousness of web-surfing may have influenced the students' desire to focus on the subject at hand, there was also an intimacy created in this classroom space that promoted inward-facing discussions.

College Writing 101. Certainly, the most personal classroom space I observed was the room that housed College Writing Tuesday and Thursday mornings. Unlike Roberts or Whorton

Hall, the building that was home to the College Writing classroom, Holdam, was new, constructed in 2006. The bulk of the building is home to both graduate and temporary faculty housing with one and two bedroom mini-suites populating the top floors. The bottom floors have both a few classrooms and facilities such as kitchens, gyms and meeting spaces.

The lower level of the building is where the ten classrooms of Holdam are located. Most are small, with capacities ranging from twenty to forty students. The classroom where College Writing 101 (CW101) convened had a forty-student capacity, but the instructor Ethan Durham only utilized half the room. Akin to ED1B, the tables were similarly arranged around a rectangle (see Figure 3.3 below). A projector screen dropped down from at the far right of the classroom, while the north and east-facing walls were fitted with blackboards.

Although it was located on the basement level, the right side of the classroom had windows on all sides, thus the room was bathed in natural light. The room itself was lit with modern, natural LED lighting, and the combination gave the room a warm, natural hue. The colors too reflected this cozy décor, with deep purples and light grays for walls and furniture. Unlike either of the other two classrooms, the ventilation in the room was calibrated perfectly—it was neither stuffy nor drafty.

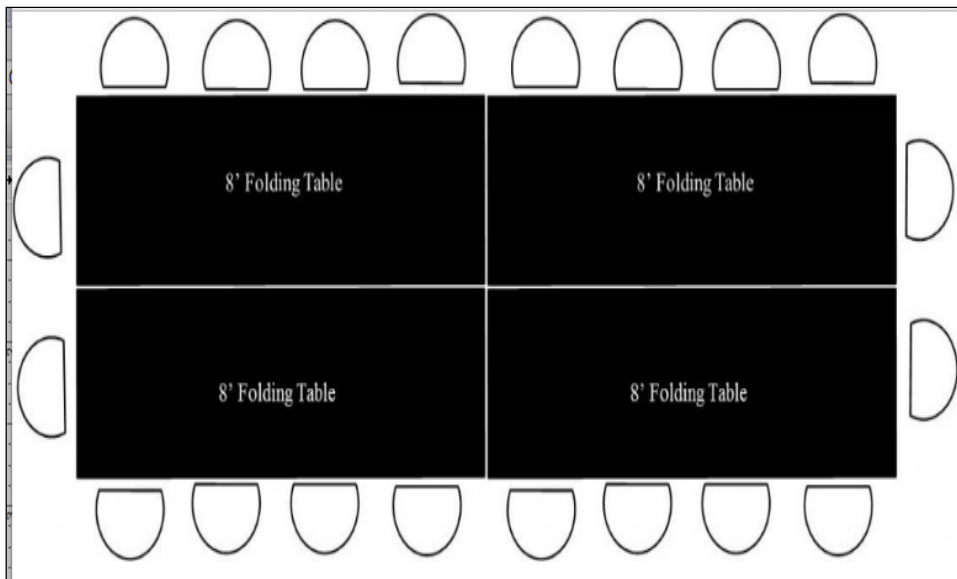


Figure 0.3: Classroom arrangement for College Writing 101

As only twelve students were enrolled in the course, it was difficult to situate myself anywhere in the classroom where I could remain inconspicuous. I often elected to sit at the back of the group's rectangle so as not to disturb the close-group discussions that took up the majority of in-class time. While the choice to bring a computer or tablet was elective in both Introductory Psychology and Education 1B, in College Writing 101 it was a requirement. With the exception of blackboard work, the students spent most of their time reading and writing online. The only other items atop the folding tables were drinks and various food detritus (since this was the first class of the day for all students, they often came to class with their breakfasts and snack items in tow). Although online work was promoted, Professor Durham explicitly forbade the perusal of out-of-class websites. Over the course of my observations, I never saw a student look at a social network site or over his or her personal email.

3.3 The Digital Tools

Collabosphere. In many ways, I have been preparing for this particular research study since I began at Townsend in the fall of 2011. In that spring of my first year, my advisor, Dr. Glynda Hull, some graduate students and I began brainstorming the outline of a tool that would allow students to collaboratively-compose with one another online. This work built off Dr. Hull's previous work on digital storytelling and youth-centered social networking, though this was the first instance of using a new tool within in-school classrooms. While most of Dr. Hull's previous research had taken place in out-of-school spaces (be they community centers or after-school programs), *Collabosphere* was our first attempt to situate ourselves in more formalized learning spaces.

Our first prototype built at the University was made available through funds from the Chamberlain Foundation (awarded to professional schools to encourage experimentation with online learning). This work was later extended via the Office of the President, specifically the ILTI initiative (Innovative Learning Technology), to take the prototype to scale and to incorporate it in an undergraduate education course to be offered across state campuses. Collabosphere features collaborative and multimodal composing and learning spaces, and it is intended as a space where students and teachers can collaboratively design and share knowledge across distance and modes.

1. “Assets:” digital artifacts including images, videos and sound files that are uploaded, tagged and stored in a public archive on the site
2. “Whiteboards:” digital compositions that use text with the option to include Assets uploaded by the author or others

As demonstrated by the chart shown in Figure 3.4, Collabosphere was created as a two-tiered composing space. Students first begin by uploading *assets* to the site; these can take the form of media, images, videos, sound files, or text. Students are able to both comment and tag their assets and store them in the *asset library* to make them easily searchable to other users. A *whiteboard* is a second-tiered composing space where students can upload their own or other assets into a media card (e.g. digital composition), which is made either individually or with others.

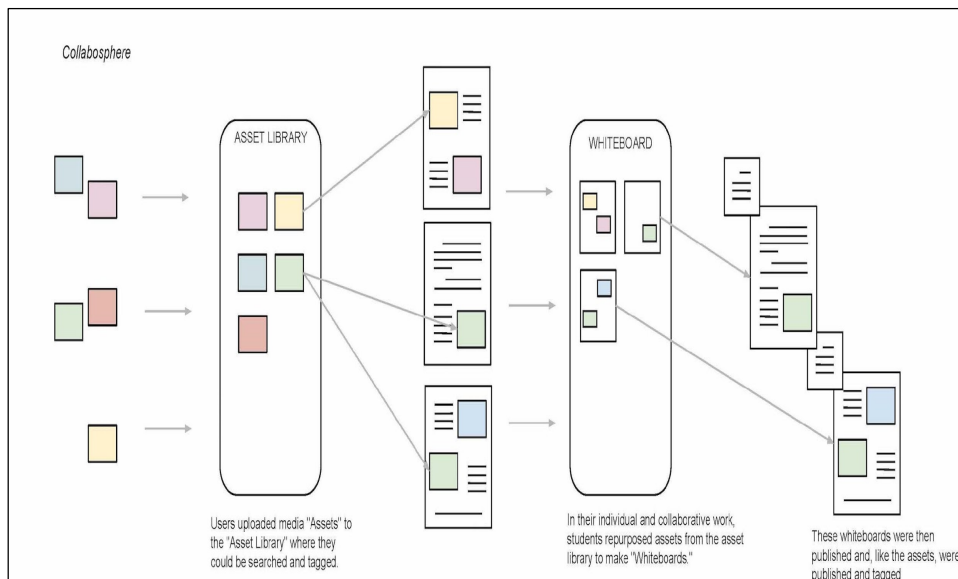


Figure 0.4: Diagram of Collabosphere Network

In the fall of 2015, Collabosphere was integrated into Townsend's learning management system (LMS), Canvas. This ability to access the tool within the university-sanctioned online course management system enabled the system to be used by any teacher who requested access. For our research team, this integration facilitated our system testing on a much larger scale.

Collabosphere, while remaining "closed" (e.g. only those with a Tolman.edu account that were signed up for the course could access the site), now had the potential for uses in any course offered by the state's university system, and through permission, beyond it. This access and availability opened the door for this research project and others occurring simultaneously. In this study, Collabosphere was used by students and teachers in the School of Education and Psychology.

Tumblr. Students in College Writing were asked to do all of their multimodal composing and commenting using the microblogging site, Tumblr. Founded in 2006, Tumblr is a social networking and blogging site for students to access and publish their compositions on a public-facing system. Unlike Collabosphere, Tumblr is public-facing and exists outside of the Canvas system. Ethan Durham explained that he felt Tumblr was a better fit for introducing digital literacies as the site's interface gave students pre-existing templates from which to create their multimodal postings. The image below illustrates a student Tumblr page from College Writing 101.

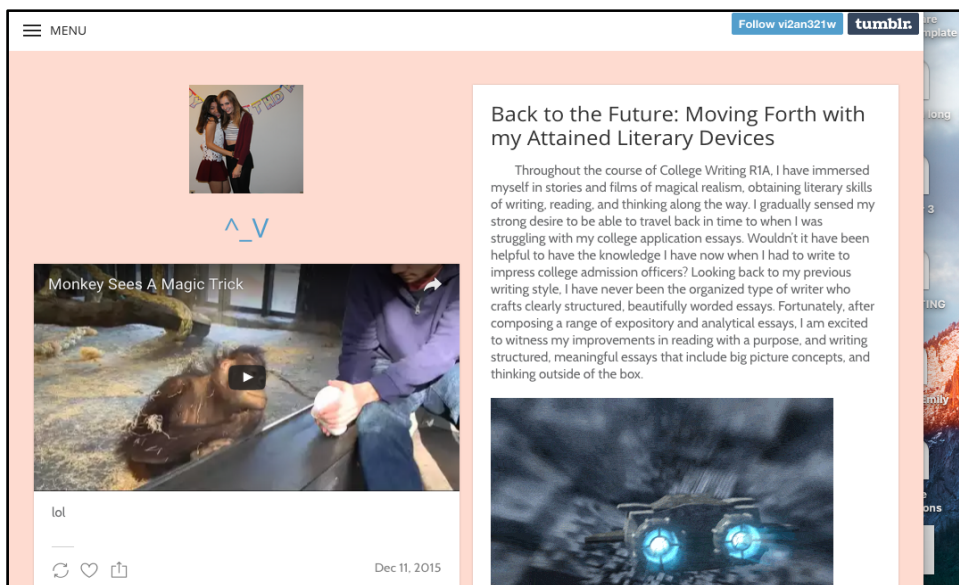


Figure 0.5: Screenshot of student Tumblr page in College Writing 101

Though he was given access to Collabosphere, Ethan instead opted to use Tumblr, a platform he was more familiar with and felt the students would feel more comfortable using, Ethan explains:

...and we chose Tumblr just because it's extremely low barrier entry ... and really the way that I've conceived it it's just like an artist studio central node where they put everything up there ... The great thing about the blog format as some creative flexibility but also lets them just visually see the plan; so, kind of sort of jogs to position. (Interview, January 28th, 2016)

Whether or not the pre-existing templates made for an easier transition towards multimodal composing I cannot espouse upon (though to be sure, it an interesting research question); however, there was certainly less outward angst expressed by his students on this subject.

3.4 The Participants:

3.4.1 Teachers

Gabriel Kittredge: Introductory Psychology. Gabriel Kittredge grew up outside of Austin, Texas. Tall and lean, he is quickly able to traverse the large stage over the course of his lectures. He says that teaching wasn't something that came naturally to him, but rather something he was keen to learn during his time at Townsend. Knowing that he wanted to pursue a PhD, he was drawn to Townsend in part to gain teaching experience. Gabriel explains:

I didn't really have much teaching experience before I came to Townsend, but one of the things that drew me to the program was that in order to get funding you would have to teach; so, I thought that would be something that I would enjoy doing. Some other graduate programs, private programs, private schools you're guaranteed funding just for doing research, but I wanted to teach and you do a lot of teaching at Townsend (Interview, March 1st, 2016).

While it was true that Gabriel was able to obtain a considerable amount of teaching experience, his techniques and the ease with which he approaches his chosen profession were traits he developed independently over time. Gabriel describes his first experience teaching at Townsend as something he was, "thrown into."

Indeed, many of the instructors and graduate students I spoke to in the department of psychology describe their introduction to teaching as something that they weren't adequately prepared for. Many went so far as to state that their advisors actively discouraged them from spending time on their teaching practice. Gabriel continues:

The teaching part of academia I think is really usually undervalued in a lot of ways, as you know, and so that's seen in a lot of different ways, but my advisor really had no kind of advice on how to teach. I don't think there were maybe two professors at the school who I was a graduate student instructor for who I thought were really good at engaging students. And one of them was the teacher of this psychology 300 class. And so I tried to learn from those professors and take their classes and see what they did and bring it into my own teaching. (Interview, March 1st, 2016).

This friction between what is valued at an institutional level and what is practiced in the classroom is one that we will see played out over the course of following the Introductory Psychology students and graduate students throughout the semester. The tension between expectations, thought, and practice is one that I emphasize heavily over the course of analysis.

Adrianna Antipov: Education 1B. Adrianna speaks with an animated, though punctuated tone and often pauses and smiles between sentences. She was born in Moscow, but moved to San Diego when she was five. She describes her childhood as "normal," but she was keenly aware of her English and Russian roots. Adrianna always felt as though she was traversing through the world analyzing the semiotic nature of language. She began her career as a student of psychology at UCLA, but came across Education in her senior year. She expresses gratitude for this juncture because she was unsatisfied with the field of psychology for not "putting her in direct contact with people in the world" (Interview, February 1st, 2016).

After receiving her B.A. Adrianna came to Townsend to receive a Master's credential in urban education so that she could gain experience working in high school classrooms. Adrianna describes this two-year program as "intense," having to both practice in a big institutional setting while also studying and preparing a Master's dissertation. Eventually she says, she just "burnt out" and moved back with her partner to San Diego:

The kids were amazing but by the whole thing cause I think (...) like creativity just seemed to get pushed out (...) the force of the whole system was so strong and the pressure and demands of us wanting to prepare kids for college was so strong that even though in my heart I know creativity can facilitate learning, that that's not really what we did. (Interview, February 1st, 2016)

Adrianna ran several arts and arts intervention programs in San Diego, working with youth to promote and develop their visual literacies. When she made the decision to return to Townsend to pursue her PhD, Adrianna was extremely interested to pursue her interests in visual literacies and critical pedagogies. Adrianna often describes her history as one of "interventionist" work, whether it was working with "disenfranchised groups" in urban centers in the east bay, or community art collectives in Los Angeles. Thus, she was "excited" to teach Education 101, as it promoted these theoretical and practical components with critical pedagogy.

Ethan Durham: College Writing 101. Ethan Durham grew up in the suburbs of Los Angeles and had, what he considered, to be a very middle-class upbringing. Teaching, he says, was something that "took him by surprise," discovering it was something he enjoyed, "when he was thrust into the role as a grad student" (Interview, January 28th, 2016). After graduating from the University of London, Ethan received his MFA from New York University, and it was there that he was first asked to teach and mentor faculty. Ethan explains:

It was sort of like a dual graduate program in that sense that it paid for my graduate work, but they were very interested in teacher development. And so, the head of the program was very invested in making sure that it was just this elaborate process, but also mentorship, but also you end up mentoring other people ... lots of observations where you watch other fellow teachers teach; master teachers, new teachers, and there was just so much creativity. (Interview, January 28th, 2016)

Ethan was part of this program at NYU for over five years, and he claims, "saw this departmental progression," towards teaching and learning with new tools. He often comments on how this program really prepared him to not only think differently about his approaches to writing but to also carefully consider how to introduce new forms of literacy practice to his students. Ethan says that he considers multimodal composing a "hybrid" practice that still has its roots in more traditional forms of writing. As such, he considers his role as an instructor to bridge the gaps between how college writing has historically been conceived and where he sees the field heading.

When he came to Townsend, Ethan explains that he was given "free reign" to design his College Writing course in a way that would best serve the students. Unlike the other Introductory Writing classes, College Writing 1B was designed to be an intensive, 6-unit preparatory course for students that were mandated by the university as needing extra assistance to help them develop critical thinking, reading, and writing skills. As such, Ethan explains that he thought very deliberately about how to incorporate newer digital writing tools:

So, I had to make sure that it was really carefully woven into the traditional literacy space. Think of it as a hybrid practice. That a lot of the work that they do I'd say in between classes digitally that is also generally rooted in very traditional composition practices. (Interview, January 28th, 2016)

As we'll see in later sections, these choices had implications for how the students used the tools in their classroom, and also how Ethan framed the affordances of multiple modes of composing.

3.4.2 The Participants: Students

College Writing 101. As mentioned previously, the students who attended CW1B were mandated to be there by the university because they were classed as "high risk," according to their entrance exams.³ This "risk" was often localized to their verbal abilities (writing and reading comprehension); thus, the intensive, six-unit seminar course was created to prepare the students to read and write in an academic setting.

There were twelve students in the course: three women, nine men, all first-year freshmen between the ages of eighteen and twenty. Of the twelve, six identified themselves as non-native English speakers, and the other six were self-identified as "student athletes." At Townsend, as at other higher education institutions, student athletes often experience additional challenges in terms of time management and attention divided between sports and academics. For example, two of the track students, Kyle and John, had approximately four hours of training per day, and would often start their days as early as 5:00 am. Not accounting for time away from school for

³ College Writing student selection information provided in interviews with Ethan Durham and corroborated by university staff.

meets and other competitions, these students were required to spend upwards of 25 hours a week on their extra-curricular responsibilities, without which, they would lose scholarships.

Education 1B. The students who comprised Education 1B were a varied mix of upper and lower classmen. While some were Education minors, many were taking the course to fulfill Townsend's American Cultures, or "AC," requirement. The courses that fulfill the AC requirement are ones chosen by the Academic Senate and “address theoretical and analytical issues relevant to understanding race, culture, and ethnicity in American history and society.”⁴ Thus, the course always attracts a wide and varied student body in terms of majors. Of the twenty-five students enrolled, two were freshman, four were sophomores, and the remaining were junior and seniors. There were eighteen women and seven men, from a variety of self-identified backgrounds including east and south Asian, Latino, Caucasian and African American.

Introductory Psychology. This large survey course attracts students from a variety of STEM-related fields including Biology, Cognitive Science, Psychology, Sociology, and Public Health. The majority of the two hundred and fifty-two enrolled students were first-year freshman (approximately 80%), with the remaining a mix of sophomores and juniors. There was an almost even split between women and men (one hundred and thirty to one hundred and twenty-two), with an array of demographics, with the majority self-identified as Asian. A majority of the students surveyed were taking the course to fulfill a university requirement, although some were taking the course purely out of interest.

3.5 Role of Researcher

In this study, I took the role of participant observer using case study as my methodology (Yin 2003). This choice stemmed from my own constructivist epistemology rooted in the belief that knowledge is socially-constructed (Crotty, 1998). That is, in order to understand why people behave, interact, and intersect in particular ways in these digital and classroom environments, I began with the belief that their processes for discovering and unearthing new ways of operating are influenced by the social and historical nature of that environment. In other words, I take a social-constructivist view of learning.

⁴ <http://guide.Townsend.edu/undergraduate/colleges-schools/chemistry/american-cultures-requirement/>

Framed within this paradigm, the research methods I employed involved “interacting with people in their social contexts and talking with them about their perceptions (Glesne, 2011, p. 8).” Given my experience using the Collabosphere in previous pilot studies, I felt confident in creating a “tightly-designed” study bound by a) space: undergraduate classrooms at Townsend; and b) actors: instructors and students in these undergraduate classes (Miles & Huberman, 1994). As mentioned previously, I also choose to employ a “within-case” analyses of College Writing 101 (Goetz & LeCompte, 1984). Although I chose to focus on College Writing as my primary case, the data from other focused observations helped to frame this “within-case” analysis. Indeed, it was the juxtaposition of the courses that made for a rich and complicated depiction of the College Writing case.

As predicted, the amount and type of data I collected were a result of the access and willingness on the part of the teachers and students to provide and reveal information. I was fortunate to have an already-existing relationship and friendship with Professor Kittredge, and thus the bond of trust necessary to divulge and reveal his thoughts and feelings about the course was in place. For the other instructors, I spent several weeks in advance of the study going to meet them for informal discussions and informational sessions about their respective courses and their prospective use of Collabosphere. This foundational work helped to build trust that enabled me to gain greater access to the online and offline coursework.

3.6 Researcher Confessions

Admittedly, I've had a considerable amount of experience interviewing people or getting them to speak “on the record.” Prior to coming to Townsend, I was one of the lead producers for the London Film Festival. Among my other duties, I was tasked to interview various writers, directors, and actors about their upcoming films and projects. While I had no formal training in interviewing, I found myself really enjoying these conversations with people on topics that they were passionate about.

I mention these prior experiences because they inform what I believe is my greatest flaw as a researcher: informality with interview subjects. Though I always began with a working script (see appendix A), my tendencies were to begin the conversation with an informal (and off the record) chat with each subject. Initially, I thought that this would help to put the subject at

ease, or make them feel as though they could be fully revealed in their interview data; yet, as I reviewed the transcripts, I began to notice that there were often gaps, or crucial questions that I missed that I later had to clarify over email.

While informality with research subjects is not uncommon (I reflect on those researchers who go to live and work with their research subjects), I often questioned whether this stance may have prevented me from being more critical of my research subjects. While I agree with Smagorinsky that there is a fallacy in assuming a “purity of research” in social science studies, I do believe that in order to provide an objective analysis of a social phenomenon, researchers assume a certain amount of distance from our subjects (Smagorinsky, 1995).

I also must acknowledge the agency I have as researcher to choose the type of data we present and how that data is presented. Again, I am reminded of my filming days when the final interview video was spliced together in a particular way to tell a particular narrative. Here, the story I chose to tell from the data was informed from my own unique editor's eye, and the subjects were vulnerable to those choices. Since it was the site of students considered “at risk,” I was even more mindful of this when choosing how to frame the data collected in College Writing 101. My goal was to use Friere's pedagogical framing—bringing those “from the margins,” to equal footing in an educational setting (Friere, p. 102, 1970). Like Friere suggested, I tried to keep in mind that my goal in this analysis was to present the subjects as “being in the process of becoming,” and that I could only capture a fragment in that process of transformation (Friere, p. 102, 1970).

3.7 Procedures for Data Collection

I began my data collection in January of 2016, gathering data from three different courses over a twelve-week period.⁵ I attended each course approximately once a week for an hour week,

⁵ I conceptualized my research study several months before my study began, in the fall of 2015. At this time, I was still unsure as to whether the Collabosphere tool would be ready in time for instructors outside of the Education 1B course to access it via Townsend's LMS. I had always planned to conduct a series of pre-interviews with instructors, but I had to wait until just a week before the spring semester began before I had a confirmed schedule of participating teachers.

and then scheduled interviews with teachers and students throughout the semester. Below is a timeline and the corresponding activities managed over a six-month period.

Table 0-1: Timeline and the corresponding activities

Timeline	Activities
December - January 2015	<ul style="list-style-type: none"> ● Finalizing study instruments including pre-surveys and interview questions. Working with technical services and research team to ensure instructors had access to Collabosphere prior to classes commencing on January 28th
January 12th, 2016	<ul style="list-style-type: none"> ● Access to Collabosphere granted for instructors
January 20th - 27th, 2016	<ul style="list-style-type: none"> ● Presentation of the study to students in classes ● Consent to participate in study forms dispersed ● Online student survey sent
End of January - early February 2016	<ul style="list-style-type: none"> ● Pre-interviews with all participating instructors and students
February 1st, 2016	<ul style="list-style-type: none"> ● Observations begin in all courses
Mid-March 2016	<ul style="list-style-type: none"> ● Mid-semester interviews with participating instructors and students
May 4th, 2016	<ul style="list-style-type: none"> ● In class observation period ends
End of May 2016 - early June 2016	<ul style="list-style-type: none"> ● Post semester interviews with participating instructors and students ● Artifacts collected

3.7.1 Field notes (36 typed pages)

I recorded all of my field notes on my laptop, which I carried with me to each classroom for observations. I began with a general observation protocol (see Appendix A), taking note of similar observations in each class such as ergonomics, student and teacher appearances, technological overviews, conversations, and any observable patterns or trends. As the weeks passed I noticed that my field notes, while detailed, did not include my thoughts and ideas as to

what was occurring in the classroom. Hence, in order to make these field notes give a "rich description" of the occurrences (Bogden & Biklen, 2003) I began to carve out 10 minutes at the end of every session to jot down my personal thoughts and feelings about what I had witnessed. I found that these small reflections helped to set a tone for the longer field note that I wrote at the end of each day, and they provided a much more descriptive conceptual overview of the course events.

3.7.2 Semi structured teacher interviews (n = 15)

Before classes began at the beginning of the semester, I invited each instructor to participate in formal and individual interviews over the course of the semester. I scheduled these interviews at a time and place of their convenience, though most of them occurred over video conferencing (Skype or Google Hangouts). I began the pre- interviews by asking general questions about their experience with teaching, with teaching writing, and with using collaborative writing tools in the classroom (see Appendix A). I began these interviews by asking the questions in order, as per my protocol, but also left room for more open-ended questions. In essence, I was trying to let the subject determine the flow of the interview, which proved to be a successful strategy given the richness of data collected from these sessions (Bogden & Biklen, 2003). Before the mid-semester and final interviews, I reviewed the instructors' previous audio recordings so that we could return to any hanging questions or interesting points of conversations from the previous sessions. For the final interviews, I asked the instructors to bring what they considered to be an exemplary piece of multimodal composition for discussion. The goal of the final interview was to help reflect on the process of writing and composing with these new tools over the course of the semester.

3.7.3 Semi structured student interviews (n = 20)

I first introduced the study to prospective student participants in January 2016 by presenting an overview of the study and my intentions with the research to each class. After this presentation, I sent an email to the students and asked that they message me directly if they were interested in being individually interviewed for the study. I let the students know that they would be compensated for their time and asked their availability for three interviews throughout the semester. From this initial request, I received approximately fifty emails from students in the

Education 1B and Introductory Psychology courses; I received no replies from the students in College Writing 101. My strategy for selecting students was fairly simple: I chose on a first come, first serve basis and tried to have an even split between men and women. I also tried to choose a range of students: those that had previous experience using online tools in classrooms and those that didn't.

Since I did not receive any responses from students in the College Writing Course, I made a direct appeal to the students again during one of my observation sessions. When this did not yield any responses, I approached a few students that I had spoken to in class directly. In the end, however, only one student agreed to meet with me for an individual interview. When I asked Ethan, he surmised that the students may be embarrassed by the perception that they were poor writers by dint of having to take the course. I, therefore, had to revise my strategy and attempt to have informal interviews and conversations with the students during class time. Additionally, I was able to collect rich and generative data from the student's own Tumblr blogs, which were updated daily. Thus, while I was unable to conduct many semi-structured interviews, I was able to gather enough of the student's own words to render a nuanced picture of the classroom.

3.7.4 Artifacts (n = 2000)

Throughout the semester, I gathered photos of the students and teachers during their class time. I tried to capture the group dynamics for the day (class setup), as well as any writings on the blackboard. I also collected all of the *Assets* and *Whiteboards* from Collabosphere and Tumblr pages produced in College Writing.

The following table illustrates my mode for answering these research questions.

Table 0-2: The Research questions and mode of analysis

Research questions	Data used for analysis
How do conceptions of writing in a digital age shift, converge, and vary across disciplines and	<ul style="list-style-type: none"> ● Transcribed semi-structured interviews with students and teachers and students across three sites <p><i>5 x instructors</i></p>

departments and across instructors and students?	<i>11 x students</i>
What opportunities and tensions characterize instructors' and students' writing practices with digital media/technology?	<ul style="list-style-type: none"> ● Field notes collected in class ● Transcribed semi-structured interviews with students and teachers and students across three sites ● Multimodal artifacts collected from Collabosphere analytic system
How are both individually and collaboratively produced digital and multimodal texts evaluated, especially those requiring the development of critical analysis skills?	<ul style="list-style-type: none"> ● Transcribed semi-structured interviews with instructors (with a rubric guide) reviewing student work ● 3 x main instructors ● Students' multimodal artifacts submitted for evaluation
What supports — social, technical, and institutional — are needed to incorporate new tools for writing and conceptions of writing into the college classroom?	<ul style="list-style-type: none"> ● Transcribed semi-structured interviews with students and teachers across three sites <p><i>5 x instructors</i></p> <p><i>11 x students</i></p>

3.8 Data Analysis

3.8.1 Finding the narrative

My first phase of data analysis undoubtedly began as I began to have conversations with peers about the trends I was witnessing in the classroom. I took cues from Bogden and Biklen (2003), who suggest that data analysis should be an ongoing process of reflection during the

process of collection. Luckily, I have been fortunate to be part of a supportive graduate student cohort, whose research interests and studies aligned with my own. Simply talking with my colleagues about my initial findings helped me think through better strategies for my ongoing collection and how I was thinking about the data. For example, it was a colleague who suggested that I spend the 10 minutes at the end of each class writing a reflection on my observation. Thus, in order to really get what LeCompte and Goetz (1982) would call “thick description” of the site, I had to spend time at the end of each week assessing where the gaps in my descriptions were.

Once I had collected all the raw data — field notes, audio recordings, photographs, and digital artifacts—I entered them into a case study database (Yin, 2003). The mode of storage I used to collect the raw data was on Google Drive, and thus for ease I chose to create a master database in this archive as well. I assigned each artifact in the database a numeric code, and logged the date of collection, course number, type of artifact, and subject code. This data map helped give me a holistic overview my study, and allowed me to begin to parse out the data and to systematically review it.

I then exported all of my transcripts and field notes into Google Docs so that I could take notes in the margins as I reviewed them. I began by reading through these transcripts, making comments as I progressed, looking for overall themes and patterns, and isolating the most “striking aspects” from the data (LeCompte & Goetz 1982). In this sense, I used general analytic reasoning as a means to work towards a “typological analysis” (LeCompte & Goetz 1982). Typological analysis is a type of deductive analysis in which the goal is to use an externally defined coding system to catalogue data (LeCompte & Goetz 1982). I then worked through the field notes, making notes of patterns, social choices, as well as environment features, and any in-class discourse from teachers and students that seemed to illuminate any particular ideas or trends in the classroom (Dyson & Genishi 2005). From here I wrote several research summaries covering the big themes and ideas and set up an initial meeting with my research advisor to discuss them. Simply talking through the data helped me to conceptualize patterns and methods for constructing narrative threads in the data.

Talking through the data with others, both individually and in group settings, and later discussing means of analysis helped “find metaphors” in the data (Miles, Huberman & Saldaña,

p. 282, 2013). As Miles, Huberman, and Saldaña (2013) explain, "the metaphor is halfway from the empirical facts to the conceptual significance of those facts; it gets you up and over the particulars en route to the basic social processes that give meaning to those particulars" (p. 282). Forming metaphors about the data helped me to re-insert myself into the research process by relating themes to my own known constructs of the world. Creating metaphors also helped me to find the narrative in my data. In other words, they were a way to situate the data in a larger narrative about literacy practices in a university setting—what is known, and what remains to be discovered.

3.8.2 Coding and elimination

Once I started creating conceptual boundaries, I realized that there was a good deal of data that I had to discard or set aside for future analysis. For example, I started with the intention of combing through all of the artifacts produced on the Collabosphere and Tumblr sites with a view to work towards a semiotic analysis, but then realized that I was more interested in analyzing the social and historical ideas about writing in the university (for which a detailed semiotic analysis was not well-suited). I therefore began to make choices about which data would be coded during a second-tiered analysis. I ultimately decided to use only those artifacts that instructors had selected as exemplary multimodal pieces and their corresponding interview data, and to reflect on the differences between more "traditional" academic writings and those produced in these digital mediums.

With a view to create a thematic coding system for the data, I followed Miles and Huberman's (1994) suggestion to segregate findings according to possible "themes, causes, and theoretical constructs" (p.70). From here I developed a thorough set of inductive "meta" codes and reviewed the data making notes on each code. I then scanned the data again, organizing it thematically. I alternated between the data analyzed in observations and interviews to develop a working hypothesis to discuss in the findings. As interviews were conducted with a view to help understand the observed phenomenon, I thoroughly scrutinized the data to see whether I had enough "hard facts" to support my hypothesis. I then set about "clustering" the data, grouping findings together to build a more comprehensive overview or pattern (Miles, Huberman, &

Saldaña, p. 292, 2013) Once these acts of clustering were complete, I wrote a structural outline for each chapter. The following chapters present the results of these analyses.

CHAPTER 4 : EXPANDING WRITING IN THE ACADEMY

Any other tool seems to really sort of get in the way of, it's hard for them [students] to learn. They're worried that they're not experts as teachers, but I think that in twenty years this isn't going to be debated anymore, ultimately. I think that the academy itself is changing. I think that scholarly writing is incorporating more modalities and more accepting of that. I think that pretty soon you're going to have college students who from a very young age were programming as one of the classes that they took. Even in the public schools, even as a core part of the curriculum. I think you're going to find that and so, with that in mind it seems impossibly retrograde to try and hold the line and say we're just going to work with textual forms with the exclusion of all others. (Interview, Ethan, 01.28.16)

4.1 Introduction to digital literacies in the academy

The framework by which we observe social situations, but especially those involving teachers and students, is key to understanding the dynamics of the classroom. As the above statement illustrates, teachers and students followed in this study faced conflicting ideas and rules about what constituted good writing in the classroom, particularly when introducing new tools for writing and composing. I begin this chapter with this excerpt from Ethan Durham, a writing professor working with many first-year college students in an intensive six-unit course. Ethan was in the unique position of being the expert in this study having worked with students and faculty across multiple disciplines in the department of writing, and having trained extensively on incorporating tools into the college classroom. Often when I would speculate on best practices, the future of writing, and training students to write in an academic field, I would turn to Ethan; our conversations and observations of his classroom gave me new insights about the future of college writing and what types of literacy practices we are asking students to participate in. I lead with this excerpt as a way of framing the “state of play” within the academy with regards to integrating new tools for composing in the classroom. As we’ll see, the approaches and uses by both teachers and students reflected this state of affairs, often fraught with tensions and misinterpretations; still, there were glimmers of the future of college writing.

The majority of this chapter, therefore, is dedicated to articulating a range of practices, ideological stances, supports and constraints both students and faculty faced when composing with new tools in the university. I document the different ideas students and faculty had about what writing is (and should be), the value added by digital tools, and the challenges faced by teachers around evaluating student work. I argue that the tensions both students and teachers encountered were in part due to shifts in literacy practices that our digital world has brought to the forefront, the collateral effects of which signify an emerging form of practice. I contend that these new forms of practice, habits, and positions towards digital writing that emerged represent what Engeström (1999; 2001) calls “expansive learning.” Again, Engeström maintains that “expansive learning is initiated when some individuals involved in a collective activity take the action of transforming an activity system through reconceptualization of the object and the motive of activity embracing a radically wider horizon of possibilities than in the previous mode of activity” (Engeström, p. 102, 2014). Here I maintain that the activity system students and teachers were operating in was one of academic writing, and that this system, bound by essayist literacy traditions, students came to the classroom with a prescribed set of thoughts and practices about what academic writing was (and what it wasn’t) and how to perform accordingly. Hence, when a new composing system (Collabosphere or Tumblr), one that was governed by an alternative set of rules and defining behaviors was introduced, tensions arose. However, it was through those tensions students and teachers began to “embrace” new possibilities for composing and “re-conceptualize” the future of composing in college classrooms.

In the opening section of this chapter I look at the different stances teachers and students had about what constituted “good writing” in the academy and their particular views on using digital and collaborative writing in their individual classes. This section includes interview excerpts from both students and teachers that document the gaps in understanding and their particular views on writing depending on context. I begin with interview excerpts from the teachers for each class, paying close attention to how notions of writing and using new tools differ across departments. I conclude this section with interviews from students, noting points of divergence between their views and those outlined by faculty. In the second section of this chapter I document different approaches to teaching and teaching writing in the university. This section contains interview excerpts, images, and observational notes that outline the particular ways faculty approached teaching, including their particular methods for scaffolding student

writing. I compare the different positions across departments, and I also look at how student numbers affect the teacher's abilities to support students in their writing.

The final section of this chapter looks at the evaluation of digital compositions. Here I alternate between interview excerpts from teachers about their evaluation process, followed by the student artifacts to which they refer. The purpose of this section is to look at points of convergence or "conceptualized" activities across departments, taking note of the ways in which digital literacies are changing learning environments. The teacher and student interviews at the end of the semester offered opportunities for reflection, and they also produced ways to address the gaps in their own approaches to teaching students these new composing practices. Ultimately, these reflections help to frame our understanding of the future of writing in the academy and what supports students need to build their new literacy practices.

4.2 What is good writing: chasms between departments, teachers, and students

Stephanie: Well so that's two very different questions I think. Good writing in the context of my last semester psychology grading was something that I could grade easily that followed rubric in order. So, it made easy for me to skim. They put all of the vocabulary words that I wanted to see there. They put them in there and where I expected them to be and yeah just I guess made it easy for me to grade. I found that to be good writing because I had to grade 75 papers fairly quickly several times three times throughout the semester.

Jen: That's a lot yeah.

Stephanie: Yeah. So, I just really appreciate; I wouldn't call it good writing. It was formulaic writing. (Interview, Stephanie, 02.01.16)

I met Stephanie on the first day of Psychology 101, when she and her fellow graduate student instructors (GSIs) gathered with Professor Kittredge after class. Cramped in a dark hallway I tried my best to convey the study purpose and what would be required of the GSIs should they choose to participate. Peering behind her dark-rimmed glasses, Stephanie listened carefully before asking, "how much extra time would we need to devote to this?" I tried to reassure everyone that no extra work would be required on their parts, and that the interviews

(three throughout the semester) would not take more than thirty minutes. Stephanie seemed relieved, but I still sensed some suspicion on her part. As I would later discover, her reservations were not unfounded, and that the time pressures that she and other GSIs felt over the course of the semester would greatly affect their opinions and the amount of time devoted to teaching writing in the classroom.

I lead with the above quote by Stephanie as it resonates with what other faculty said when asked how they define good writing. Quite often instructors, particularly those that had heavy student loads, would use words like “technical,” “analytical,” “clear,” or “formulaic” to describe what they considered to be examples of good writing in the classroom. As Stephanie’s statement attests, following a standard rubric made it easier for the instructors to grade several papers quickly, which was important given the other time pressures instructors were under. For the instructors of the psychology course, an emphasis on vocabulary and grammar outweighed considerations of style and synthesis of findings. Stephanie’s response also indicates a conflict between what she considers to be “good writing” and “formulaic writing.” She mentions that students who did well did not necessarily produce exemplary pieces, but rather papers that followed a code or style guide.

Expectations about student writing were often reinforced by rubrics, such as the one outlined below for Psychology 101. One can see looking over the rubric that the importance of analysis and comparisons are emphasized, along with the importance of highlighting findings. Upon closer inspection, however, the analysis and comparison requirements ask students to cite sources and summarize main findings in the articles outlined. While this approach seemed to be pretty typical in many science-based courses, it lacks some of the attributes scholars have listed as important in building twenty-first century literacies including modularity, collaboratively, and dynamisms (cf. Lankshear & Knobel, 2013). Instead the rubric and framing of writing in the class followed a pattern of old literacy models, ones that were singular, uniform, enclosed/bounded, stable, and linear (cf. Lankshear & Knobel, 2013). The stability and linearity is exemplified by the adherence to the students’ analyses of the text (or texts) reviewed, rather than making connections to either real-world or outside examples, including other forms of media. What’s notable, however, is the distinction between academic and mainstream media.

Clearly, there were discussions around trustworthiness and what were considered credible sources.

Assignment 2 Grading Rubric		
Requirement	Maximum	Earned
Analysis of Initial Finding (mainstream media)		
	20	
Described source and purpose of article (e.g., agenda or motivations; target audience)	10	
Summarized the finding and its importance	10	
Analysis of Real Finding (academic research)		
	20	
Cited original research article	5	
Summarized procedure and methods	5	
Summarized findings	5	
Summarized limitations	5	
Compare and Contrast mainstream and academic articles		
	20	
Commented on 2 important (non-trivial, non-content) similarities	10	
Commented on 2 important (non-trivial, non-content) differences	10	
Summary Slide		
	40	
Captured the main point of the finding	10	
Noted the key differences between the articles	20	
Slide was comprehensible and visually appealing	10	
DEDUCTIONS		
Missing name or SID	-10	
Grammatical errors or typos that made the writing unclear	-20	
Turned in late	-10/day	
Extra Credit?		
GSI discretion	10	
Student Name	Total:	

Figure 0.6: Rubric from Psychology 101

While the pressures of grading remained consistent across all three fields, the considerations of good writing varied in departments. In Education 1B, instructors followed an

alternate set of criterions. The below rubric paints a different description for “good writing” in the classroom, one that takes into account authorial voice and connections to the readings, while the categories of form and presentation are given the least amount of weight. Looking over this rubric, one can see that students are given opportunities to use artifacts (including images, sound and video) to convey meaning and “extend ideas” from the readings. The emphasis here is on students using critical thinking and analysis to interrogate readings from the class and apply those new understandings to their own work. We see here professors making inroads to teaching literacy skills that are “hybrid, plural, and multiple” (Gee & Hayes, 2011), and they are also encouraging the ability to synthesize ideas across multiple works and modes.

Evaluation Categories:

You will be assessed based on your performance across 5 key areas (total = 25 points).

Content (7 pts)

This category assesses the insight of the ideas you express textually and/or multimodally. Do you reveal understandings that you came to about your topic or insights that readers/reviewers appreciate or compelling tensions within your narrative? Did you include rich descriptions and details in your writing?

Connections to Readings (7 pts)

This category measures how deeply you connect your stories or artifacts to ideas from specific course texts. Does the story/artifact convey or complicate or extend ideas from the reading? Are these relationships articulated? Are the ideas deeply interrogated? Are quotations used effectively?

Authorial Voice (7 pts)

This category measures how well you assert your own personal style and voice as a writer/creator. Is there stylistic cohesion across the writing/designing? How well does this style help to represent important ideas?

Writing Form and Presentation (4 pts)

This category measures how well you execute your sentences and organize your paragraphs. Did you use grammar appropriate to the speaker/context? Are ideas/images clearly expressed and purposefully organized? Are the margins appropriate? Is the file formatted correctly and easy to access?

Figure 0.7: Rubric from Education 1B

Adrianna, the instructor for Education 1B (Ed1B) is animated when the discussion of new literacy practices come up. Vibrant and passionate, her eyes light up when asked about her

teaching practices and her thoughts about writing. Over the course of our interviews I watched as Adrianna grappled with teaching writing in the academy and her own ideas about creative expression. When I asked Adrianna how she prioritizes good writing in the classroom, she stated that she “puts ideas first:”

Jen: Yeah. So, it sounds like the primary mode of evaluation was on the content. How much of other things like sort of grammatical style and structure and also citations whether or not they’re citing properly? How much of that do you take into account?

Adrianna: I put that last.

Jen: Okay.

Adrianna: Unless it’s really; I try to put it last no matter what. I had students who were learning English as a second language and who had been in the country for a year and I would like in high school and I would dig to try to figure out what are they saying. You want to look at what they are doing well and so I put that last. I don’t disregard it because I think it could help maybe for students to know a couple things to work on but if it’s really affecting my comprehension of the paper then I have to obviously say that and I have to take that into account but I really try to go with ideas first. I try to see their thinking and then that goes second. (Interview, Adrianna, 01.25.16)

During our time together, Adrianna would continually reference that student’s ideas were more important than a particular adherence to form or grammar. Additionally, she stated that she is mindful of students’ particular backgrounds coming into the class—some were second language learners who were still trying to grasp the nuances of writing in English, while others had years of training to write academically. The ability to create an equitable form of evaluation is key for teaching digital literacies, especially in classes that incorporate multiple and global worldviews. Adrianna notes that she doesn’t “disregard” form and presentation, but rather that for her, good writing entails the ability to express deep learning. I found the message of deep and meaningful learning as part of the writing process to be consistent in the humanities and social sciences, even if there were disagreements about how those skills transferred to digital writing. Most of the faculty and staff I interviewed, including anecdotal conversations with chairs in other departments, agreed that the approach to writing in the academy had to change to reflect

interdisciplinary and multimodal scholarship. What was notable, however, were the gaps in understanding as to what this new writing would look like, and how teachers can scaffold activities into the classroom.

Certainly, the most insightful and informed opinions on good writing came from Ethan, who had been following the trends in writing practices in the academy for over a decade. Like Kress (2014) and Gee (2007), Ethan believes that good writing helps students to comprehend the rhetorical strategies needed for composing in the academy, but that it should also be reflective about their own writing processes. For Ethan, good writing helps to support what he hopes to be, “a liberal arts education does right:”

That it’s a more sort of intensified result of that which is to say they’re stronger critical thinkers, they are able to negotiate with the world around them and be better citizens of the world but whether it prepares it for a career in industry or just helps them grapple with the world this is all to the good. I will say though that I ask my students to do sort of reflective and sort metacognitive work after each essay and also at the end of the class. (Interview, Ethan, 01.28.16)

For Ethan, to write at any level is a tough activity. He often made the analogy to his students that writing was a “muscle” which required ongoing exercise. Yet for Ethan, the exertion wasn’t literal, it was mental. He asked that his students strive to be reflexive and interrogate their own work on a regular basis with their peers, believing that thoughtful analytical reasoning was key to transitioning into scholarly writing.

Across all three disciplines, faculty maintained that good writing required something “more” from the students. Many believed in the idea that writing in the academy had to reflect a level of interrogation and thoughtfulness different to what was expected in high school. While students also understood that writing in college required a different level of sophistication, they didn’t necessarily equate academic writing with “good” writing. Many of the students in this study expressed a deep desire to write about topics that they felt connected to, and that reflected a topic that was meaningful to them. One student, Adam, said that he disliked writing for his

college courses because the themes were without purpose. Instead, he preferred to write about subjects that were interesting to him, and for which he could choose the topic:

Adam: I consider good writing to be something that's engaging with the reader I guess; I don't know. I personally like more personal writings like if we had to write an essay in English I'd much rather prefer reading something that's like; some people try to use a lot of high vocabulary and things like that to try to make it seem more professional and to me that kind of takes away from it a lot.

Jen: Yeah.

Adam: Because then it's just kind of like trying to impress their readers rather than connecting with them. So, I kind of really like that personal touch to it. (Interview, Adam, 02.02.16)

During my first interviews with the students I asked them to bring in a work sample that they felt represented their “best” writing. More often than not, students brought in a blog post, a speech, or personal essay that resonated with them. Many of the students referred me to a small website that they used to distribute their own work— often connected to a friendship or interest group. These digital spaces allowed students to write and post essays that conveyed a certain message, often with a social purpose. For example, one student, Ana, showed me to a blog post that she wrote about sexual assault on campus. Ana mentioned that she was motivated to write this after reading about the conduct of a professor on Townsend's campus. Ana began by explaining how she approached this composing process online:

Ana: Well first of all it's very honest. So, I mean obviously I'm not going to write things that trigger people because that's not the point of this blog. This blog is for me to kind of reach out to people and let people know that there are people who go through these things. I'm also now involved in this club called The Triple Helix and every month we publish a magazine.

Jen: Okay.

Ana: And we write about whatever we're passionate about and I just became a writer in that club and now I'm going to write about; I'm passionate about

mental health so it will be a very different subject about what type of mental health I do. (Interview, Ana, 02.11.16)

For Ana, writing had to be connected to a topic or issue she was motivated by, but it also had to be one that helped connect her to her fellow students. For students like Ana, the digital space opened opportunities for expression and connectivity and a way to communicate with wider audiences. Many of the students found online networks that they could compose and share with others around mutual interests. These spaces seemed to represent the “participatory” cultures of learning that digital and media technologies offer to students and other writers (Jenkins & Deuze, 2008); here students felt emboldened to pursue sophisticated forms of writing that were connected to ideas around civic engagement and social action, ones that were markedly different to those they composed in their coursework.

What was striking from these interviews was the way in which students compartmentalized academic from creative and digital writing. Students expressed a divide between the kinds of writing students were expected to do in college, and those they engaged in online. For students, “good writing” was clear and concise, but it also had to be *meaningful*. One student, Kate, framed “good” writing as one that had a “sense of artistry:”

I guess they both should have some sort of an attractive quality or flow or something like that so that when you read it it’s not; actually I don’t know artistic writing could be they could have maybe if that’s their point but they could write it differently but yeah, I guess ...Sort of like a sense of artistry or something like that and I think with academic writing it’s more like okay your vocabulary is good or interesting vocabulary I guess and then sort of clear points in sentences and then I guess with artistic writing it could be a little bit different. (Interview, Kate, 02.11.16)

Kate asserted that her scholarly writing lacked artistry and poeticism, claiming that she was left wanting to express something “more” (Interview, Kate, 02.11.16). Over the course of these interviews it became clear that many students considered academic writing to be perfunctory— something they had to “do” to get a good grade. Rarely did I hear students talk about college writing with the same passion or excitement with which they discussed their online

writing. Students lamented that academic writing was too rigid, technical, and not easy to digest or comprehend. Instead they yearned to write with a sense of purpose and autonomy.

The divide between what teachers and students considered to be good writing may help to explain why faculty complain that students are “ill prepared” to write at an academic level (cf. Roksa & Arum, 2011). Perhaps it is not that students are unprepared, but rather that the autonomy they have and platforms they use to communicate outside of the classroom are better suited to what they consider to be expressions of meaningful discourse. At this juncture, we start to see the moments of contradiction between the digital and academic activity systems, with the former having been accustomed to writing for an insular audience around designated topics, and the latter for a wide audience around a variety of different topics. To meet the needs of both, we should look towards a future that values and teaches writing that is both connected to course content and suited to multiple forms of expression.

4.3 What is good teaching: conflicts across departments

Without exception, teachers in all three fields —psychology, education and college writing—faced numerous institutional pressures that affected how they taught and assessed students. Often these pressures stemmed from heavy course loads, teacher readiness, and most crucially, departmental expectations. In addition, there was also an immense amount of pressure put upon instructors by the students themselves. Specifically, over the course of my interviews with teachers from Psychology and the School of Education, I heard teachers express concern over how much the students valued good grades, and wanted detailed guidance as to how to achieve them in their courses. Stephanie, the graduate instructor in Psychology says she was surprised at the amount of instructional support students needed:

Stephanie: I was really surprised last semester how much instruction or clear direction undergraduates want. It was very straightforward but we had a few papers and they wanted a lot of direct instruction regarding papers. And I mean it’s just their grades are very important here.

Jen: Right.

- Stephanie: And there's an overwhelming sense of feeling like they need to have very good grades.
- Jen: Right.
- Stephanie: And, so they want to follow instructions to the T.
- Stephanie: It was just like show me what needs to be done for my role and validate my experience and then get out or let me go early.
- Jen: Oh right.
- Stephanie: It was always the expectation.
- Jen: Right.
- Stephanie: Whereas I feel like here there's a sense of me being an information provider.
- Stephanie: But that's why I had to tailor everything so much and make it so informal but I feel like there's almost more of a sense of that here in that these students are paying for this instruction and so I need to deliver the knowledge or the grades or whatnot to justify that.
- Stephanie: It feels a little more like I'm beholden to the students a bit more to help them and to prepare them.
- Jen: Right.
- Stephanie: I feel like it's more on me to prepare them to get good grades here.
(Interview, Stephanie, 02.01.16)

Stephanie was confused as to why the students needed so much guidance, particularly when it came to writing. Stephanie disclosed that she was frustrated that students were not better prepared to think and act independently, but rather wanted an explicitly specific template of how to get an "A" in her class. Also, it is interesting that Stephanie's concern that the students were "paying" for a top-tiered education, and thus, she was beholden to be an "information provider." In his work on tracking student satisfaction in universities over the last five years, Taylor (2010) concluded that rising tuition costs and lack of critical and independent study leads to a

“commodification of the education.” Because students were aware of the amount of investment they (or their families) have put into their education, they expected a good return on the investment. This lends credence to Stephanie’s statement that “students are paying for instruction” and therefore she must “deliver” the grades. To further complicate this situation, Stephanie and her colleagues were often not given support from their graduate advisors, and were often explicitly told not to devote much time to their course teaching. One advisor went so far as to “lecture” a graduate instructor that any time spent on teaching was time she was not devoting to her research (Interview, Jessica, 01.29.16). I found this message to be consistent within the Psychology department, where graduate student instructors were given little training and support for their teaching work.

The idea that research is prioritized over teaching is not wholly unsurprising. Hacker & Dreifus (2013) found that the push towards research and publication has exponentially increased over the past thirty years, even in community colleges or schools that pride themselves on being “teaching universities.” In order to maintain ratings and rankings, instructors are pushed to remain competitive in the field of research, often at the expense of their students (cf. Hacker & Dreifus, 2013). Gabriel, who prior to becoming a professor was a graduate student in the school of Psychology, mentioned that he learned how to teach in spite of his graduate advisors:

I taught as a graduate student instructor and that mostly involved having three hour long classes of 25 students each that are used to supplement the primary instructor’s course and so we were kind of just thrown into that. I feel like I did learn some things from that class about ways to not just lecture for 50 minutes but then it’s been just a lot of trial and error and I think there was some things I naturally did that worked really well in the beginning of the semesters ... but the teaching part of academia I think is really usually undervalued in a lot of ways as you know and so that’s seen in a lot of different ways but my advisor really had no kind of advice on how to teach. I don’t think there were maybe two professors at the school [Psychology] who I was a graduate student instructor for who I thought were really good at engaging students. (Interview, Gabriel, 03.01.16)

Gabriel was cognizant of the pressures that the graduate instructors were under, and thus tried to build a support network for his team. While the instructors affirmed that they had a sense of comradery between themselves and with Gabriel, they were still mindful of their time and resource pressures. Since the students were not his direct advisees, Gabriel’s ability to change

their departmental norms was limited. Gabriel and his student instructors had to work within their own institutional constraints which continued to prioritize research over teaching.

Perhaps unsurprisingly, Adrianna, the instructor from the School of Education, reflected on her teaching and teaching practices quite differently. Many of the instructors from the school of the education came to the program with extensive teaching experience in K-12 and other settings. Adrianna taught at Oakland High School, which she claims left her well-equipped to handle the pressures of teaching in any environment (Interview, 01.29.16). In some ways, Adrianna stated, coming to Townsend was “easier” because she “didn’t have to worry about classroom management,” but rather focus exclusively on the students and their needs (Interview, 01.29.16). Instead of feeling fraught, Adrianna expressed excitement when her students come to her and ask for help, stating, “I love when people come and ask for help. I would sit with them for an hour, one-on-one, and help them work through their ideas and outline their papers” (Interview, 01.29.16). Although Adrianna was not allocated extra time or funding to work with her students (most instructors were paid for ten hours a week to cover in-class instruction, preparation, and student support), she always extended herself if students wanted help with their writings.

In my observations of Adrianna, I would watch as she spent time working individually with students and in student groups (Fieldnotes 02.18.16 – 04.21.16). Never content to stand at the head of the classroom, Adrianna would move around, using gestures and making eye contact to create a sense of inclusion with the students. Further, Adrianna would often seek students out who she felt were struggling or falling behind with their coursework. Rather than feeling ashamed of the time she extended to her pedagogy, Adrianna was supported both by her department and her cohort. This freedom allowed Adrianna to spend time reflecting on her own teaching practices and how she could better assist students in her classroom.

Ethan, too, devoted a considerable amount of thought and effort on his own pedagogical work, which began when he was a graduate student instructor at New York University. This graduate program facilitated teaching and mentorship in the art of writing to other graduate students and faculty (Interview, 01.28.16). Ethan maintained that this was unusual, and that many of the incoming graduate students to the Departments of English and College Writing at

Townsend are given very little preparation to teach students how to write at an academic level (Interview, 01.28.16). According to Ethan, there were also different views within the Department of College Writing on whether and how to teach with digital technologies. In his own training with faculty, Ethan maintained that faculty was confused about the value added by introducing new tools:

So even though we're moving rapidly ahead in some ways I think there's still always a culture of skepticism of weariness. I've done some workshops within the department in which people said quite rightly it's exciting to have all of these different tools that you could use but it's also we do so much already and how do you know what makes sense? And so I think and this sort of goes to what your project is. I imagine that as you start to develop these tools that you must run into a certain amount of reluctance of some sort of skepticism because it's another thing to learn and try to figure out how to adjust the pedagogy to sort of enable it. (Interview, Ethan, 01.29.16)

The skepticism of online tools by people in Ethan's department was not unlike those expressed by faculty across many departments. In their review of the last ten years of online learning in higher education, Allen and Seaman (2013) found that although faculty use of online tools is increasing, a sizable majority (60%) of faculty are still reluctant to introduce new digital tools into their coursework. Allen and Seaman found that faculty remained unconvinced that using new tools in the classroom enhances student learning. This, too, seemed to be the consensus of faculty and administrators in the Departments of College Writing and Psychology, who sought more verifiable evidence that students needed to incorporate new tools in the classroom.

The students interviewed for this study also retained a healthy sense of skepticism over Collabosphere and Tumblr in their classrooms, and online tools more generally. Their opinions on the benefits of online learning were decidedly mixed. Many students saw the possibility for tools to enhance their course experience, while others worried that the computer would "replace the classroom" (Interview, Ana, 01.29.16). A majority of concerns centered around the idea that incorporating new technologies would make the classroom less interactive and personal. One student, Asha, revealed that using online tools would make the university feel "less like a home:"

One thing I'm a little concerned about is that students are not going to think of the university as like a home anymore. They're not going to think of this place as a place to go every day. Maybe they'll just see it as an option or a place that they don't have to go to or some place that oh I don't want to go ... And a lot of times that's the case because of how stressed out we get but a lot of the professors actually nowadays do the whole lecture online so most of the students don't go to the lectures and even discussions sometimes when you miss it you can kind of catch up online and I think that's good for some people who have mental or physical disabilities but a lot of times people get lazy and just don't go to class and then they catch up later and I just think that's the whole experience of the university and college life in general has a little deteriorated from that just because I just think college is a very interactive experience and it's a very like personal; you have to interact with other people kind of deal. (Interview, Asha, 02.11.16)

Although Asha was very a very prolific blogger—using writing outside of the classroom as a way to express herself and connect with others—she did not want her college experience to be diminished by the proclivity of some professors or students to rely on online tools for teaching. Her expression that the university was her “home” indicates a physical and emotional connectivity to the classroom space, one that she felt could not be replicated online. Asha's sense that online “deteriorates” the college experience was echoed by many in her cohort, who expected their college classrooms to be both personal and safe spaces. Further, it indicates a chasm between what students do to stay connected, engaged, and productive outside of their studies, and what they believe classroom practice to be.

Students' angst towards using new tools was symptomatic of the expectations they had about the purpose of teaching and learning in the college classroom and how that environment should be structured to meet their needs. Whereas many students expressed excitement and expertise in using new tools for writing outside of academia, they were tempered in their approach to using them in school. Not all students felt this way as some expressed that they have learned from using collaborative and multimodal tools how to work in groups, while others liked that they could see their classmate's ideas about weekly topics (Interviews, Jaylan, Yuri and Monica, 02.11.16). Yet most saw the classroom as a sacred space, one where they could connect with students in person, under the guidance of a teacher who was a more experienced guide.

This disconnect, or difference in expectations, of what is expected of teachers and what students expect from their classroom experience is compounded by the proliferation of tools used for reading, writing, and sharing online. For teachers, their beliefs on teaching and teaching writing were colored by the amount of resources they devoted to helping their students, and the support from other faculty in their departments. Faced with heavy course loads and pressure to research, graduate student instructors in the School of Psychology had little time to engage with new teaching tools, or to help students navigate their use in the classroom. Conversely, student teachers in the School of Education had access to existing departmental resources and support to incorporate new ways of teaching with tools, which made their transition into practice much easier. However, sensing both a need and a trend toward more dynamic learning spaces, all faculty expressed had a desire to experiment with classroom spaces—both online and offline—to engage students, even if it went against existing departmental norms. The struggle was in the most effective way to transition them into their courses.

The gap between old and new ways of teaching were only intensified by the institutional push to use digital tools in courses at Townsend. Although most faculty realize that old methods for teaching and learning in the university are becoming increasingly outmoded, they haven't yet (or had the support to) conceptualize what a "new" classroom might be. The pressure by administrators and outside funders to use new tools places extra burden on teachers, be they tenured faculty or graduate instructors, to use new tools without a methodology for integrating them thoughtfully into their coursework. The "conflict," as Engeström defines it, for teachers and students, is represented not only by the tension between offline and online, but also how to frame a classroom space where teachers can facilitate meaningful discussion using new technologies. Students and teachers come to the classroom with preconceived notions of the rules, normative behaviors, and goals of the classroom space; if we change the game, we need to help them understand the new rules. Hence, as we introduce new systems with alternative ways of operating, particularly those that are collaborative and require shifting notions of literacy, we need to help both teachers and students navigate and articulate the new learning outcomes.

4.4 What are Good Artifacts: Understanding and Evaluating Digital Compositions

One tenet that ran through all of my interviews with students and teachers was that of shifting notions of evaluation. All teachers were cognizant that Townsend students expected to perform at a high level, and therefore receive grades that reflected that. This resulted in increasing pressure to give students high marks, even if there was no clear and transparent method for doing so. As Stephanie reminded me, “I feel like it’s all on me to prepare them [students] to get good grades here” (Interview, 02.01.16). The pressure instructors felt was intensified as the teachers in the School of Education and the School of Psychology incorporated Collabosphere into their classrooms. For example, Adrianna had been using Collabosphere in her classes for over six months, yet continued to struggle with how to assess her students’ whiteboard compositions. Even though Adrianna had a background in visual design and art practice, she felt “confused” about how to grade students’ digital compositions in an academic environment. Adrianna explained:

But I think they were; it’s a hard thing right because they’re supposed so I think I’m confused about it because we’re supposed to kind of evaluate them holistically. They’re supposed to be using these visual tools but we’re not giving them any training in visual tools. Some people might be more artistically inclined than others, more visual. This is clearly beautiful. So I tried to evaluate them on the content. How well did their assets, their images illustrate and the text but it’s hard because my tendency like soon as I look at John’s and I would see he would love like he would put really positive comments on some Whiteboards that had very, very little text and I have this reaction. It’s hard to not; this is just me being really honest it’s hard to not think even though it’s crazy because I study visual literacy.

Jen: You’re actually a great person to evaluate these right because you’ve got that background both in writing and visual literacy.

Adrianna: Yeah but I’ve also been raised and have taught in the system and it’s really hard not to think if a person has one sentence oh they didn’t...

Jen: Put effort into it?

Adrianna: Put effort into it or how am I supposed to really know what they’re trying to communicate. So, I think if we’re using it to evaluate we need to know what we’re looking for whether that is we come up with it together or that something that the developers of this thing decide but I think it needs to be really clear the same way that you assign anything to students you show

them examples. Like right now we've been asked to show strong examples but we've never come together as a group and discussed what is a strong example. And I think that there is; of course, there's going to be variation but I do think there should be some kind of measure. They're not all going to look the same. The same as the autobiographies they had a rubric but the other example I was going to show you is totally different. (Interview, Adrianna, 01.26.16)

Adrianna expressed that she was “raised in a system” that taught her to privilege printed text, the same system that helped her to grade and evaluate student work. While she supported and even favored the use of digital tools to create multimodal artifacts, she lacked the framework for both their measurement and production in her course. Adrianna admits that she favored Whiteboards that were visually compelling, but lamented that she had no room in her curriculum to incorporate visual design. Further, she professed misgivings that teachers in her cohort did not adhere to a shared rubric or common “measure,” which made it difficult to grade student work in a fair way.

While the lack of a common rubric made it difficult for instructors to evaluate students' digital compositions on par with their text-based essays, almost all I spoke to maintained that an adherence to a pleasing visual design impacted their assessment. Over the course of the semester, there were explicit and implicit tensions between evaluating student work based on text content and its overall visual impact. Most instructors felt as though students who produced aesthetically-pleasing multimodal works put more “effort” into their work, but felt as though they could not assign higher marks based on this criterion. Like Adrianna, the instructors had been taught to privilege and ultimately evaluate print-based literacies in the college classrooms, while also appreciating the importance of introducing new literacy practices into their curriculums. The difficulty for instructors was attempting to evaluate both text multimodal design⁶ along similar grading norms.

Students too, were reluctant to use digital media in their long-form essays (however, almost all produced digital media for regular assignments) even if they were given the option to do so.

⁶ Ethan's class proved to be the exception, which I'll discuss in the following chapter.

When probed, many of the students I interviewed confessed that they were worried about how they would be graded on these assignments, since they had no previous experience using digital and multimodal tools in the classroom. One student, Eva, said she instead preferred to take the “safer route” when composing her essay:

Eva: But in terms of allowing us to be creative, allowing us to do other sources of media I feel like there wasn't enough push in that direction.

Jen: Right.

Eva: It was just kind of an alternative option and because of that it was very hard to even get started or just finish it all the way.

Jen: Right.

Eva: Because there has never; never in my life have I ever been graded on a media essay type.

Jen: Right, yes.

Eva: So, I don't know what the standard is. One of us supposed to present and I felt like there wasn't necessarily enough examples for me to go off of. I only saw two or three. Or even some college classes they don't find that having media as a filler almost.

Jen: Right, yeah.

Eva: It's almost always looked down upon.

Jen: Interesting.

Eva: So, it was a lot harder to incorporate it.

Jen: Mmmm.

Eva: And it was a lot harder. It would be like how do I connect with both a piece of writing and the video together. I never saw a connecting branch and a lot of the time Adrianna was just like oh just do what you want to do. Be creative. Answer the questions but it just seemed really hard or really incomplete to me.

Jen: Right.

Eva: So I'd rather take the safer route. The route that I know I'm going to type a nine-page paper and then I'm going to submit it rather than I'm going to do some with paper and some of it oral. (Interview, Eva, 03.16.16)

Here Eva clearly expressed the concern that she didn't know what the "standard" was for multimodal evaluation, nor did she see any "examples" to serve as a guide. As Russell reminds us, it takes time for students to figure out the norms, patterns of behavior, and goals of a new genre (Russell, 2009). Until the parameters of that system are defined, students will continue to struggle to discern how best to approach and navigate these new digital media terrains. However, these conflicts indicated "emergent" literacy practices that activity theorists recognize as the seeds of a new system. To review, as two activity systems merge, new practices emanate as the community begins to articulate new norms and rules, behaviors, and goals. As indicated in the above interview these *expansive learning* environments take time to cultivate and for users to adapt new ways of operating within them.

As the semester progressed, the instructors who assigned multimodal compositions developed new strategies for evaluation. Gabriel found that he had to calibrate his use of Collabosphere in the classroom in a way so that students felt comfortable using it, one that had a clearly defined set of parameters (Interview 06.01.16). In the beginning of the semester, Gabriel gave students free reign to post whatever asset they deemed appropriate for public consumption; inevitably, though, Gabriel found that his students were posting a lot of "pop psychology" pieces, rather than substantive articles (Interview 03.17.16). Rather than dismissing the digital tool, however, Gabriel used this experience as a teaching opportunity—one that helped students to verify credible evidence on multiple websites. Gabriel also learned how to structure the tool's use in a way that best served the students' learning and development, reporting, "as the class progressed I realized this was kind of the approach that I thought would really best serve students was to allow them some sort of personal expression in a way that would reinforce the course concepts (Interview 06.01.16)." This liminal space between creative expression and critical thinking is one that instructors cultivating digital literacy practices learned to operate within in order to feel comfortable grading student work.

Gabriel also began creating templates for students to use that would model the type of artifact that he was looking for. At the end of the semester, I asked each instructor to reflect on his or her assessment process, and to review with me what they deemed to be “exemplar” digital compositions. Gabriel chose several pieces for us to review, including the asset depicted below in Figure 4.3.

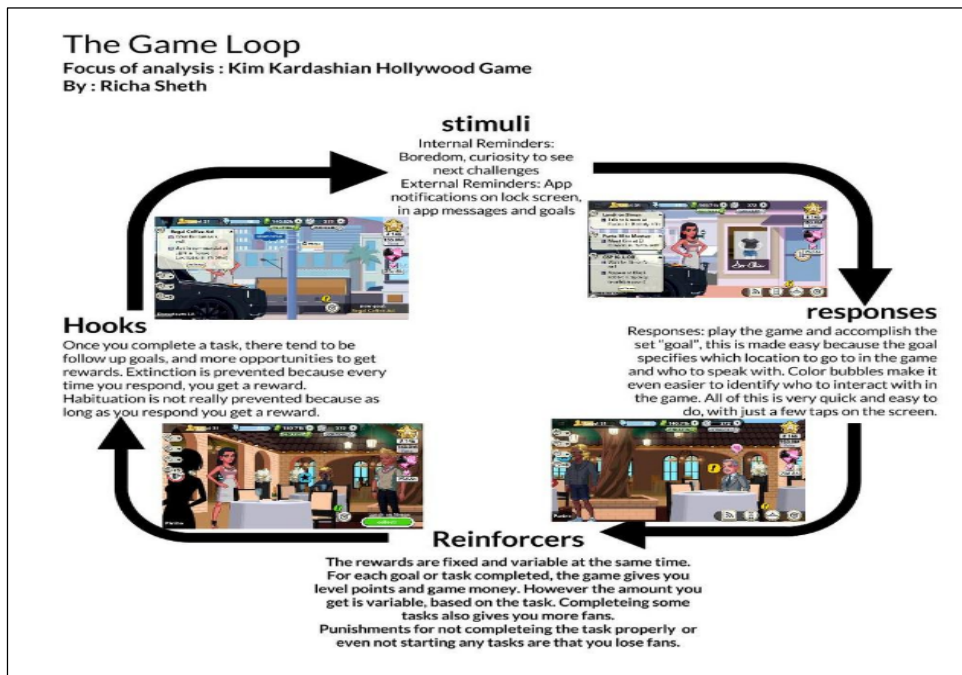


Figure 0.8: Student Asset produced in Psychology 101

For this assignment, Gabriel had all students choose a favorite mobile game or app and produce an artifact that depicted its machinations per course material. Gabriel chose this artifact as it was both visually pleasing and adhered to some principle of design, while showing a sophisticated understanding of the class material. The writing is clear, but so are the visual representations around an idea. Gabriel stressed that having the students produce artifacts, rather than the traditional lecture blog, was a way for him to assess that they understood the course material and helped to share it with their peers:

I think it worked well in the sense that it helped students reinforce the lecture content. They were able to and a lot of students looked at other students work before doing their own to kind of make sure they were on the right track and understood the parameters of the assignment and what these concepts were and the really nice thing about it too was my lectures were cramped for time but also the exams too. So, I didn't have to put

anything about the game loop on their exam. This was the way to assess their knowledge and understanding of the material. So, it was nice to be able to offload some forms of student production in this way. (Interview, Gabriel, 06.01.16)

For Gabriel, producing digital compositions in this class served to reinforce critical media practices, which included the circulation of artifacts with other students. Having never used digital composing tools in his classrooms before, Gabriel had to evolve along with his students. Rather than being an “information provider,” Gabriel proved to be a facilitator, enabling students to discover the affordances of these new tools to create, share, and repurpose information.

Gabriel believed that tools like the Collabosphere benefited students by putting them in situations where they had to work collaboratively. Additionally, Gabriel felt that the public and visual nature of the space meant that students took a more proactive stance towards their own learning. When I asked him why it was helpful to review and collaborate with others, Gabriel responded:

I think it (a) encourages them to put more effort into it. I think there's some pride about having your peers read your work publicly that will help students put their best foot forward; (2) I think students really can learn from other students whether it's wow that's a horribly written sentence and this is why it's horribly written or oh that's a really cool idea and something I hadn't thought about or oh that's a really interesting experience that they had. Or a really cool graphic came across. I think the more I teach the less I want to be the one delivering ideas and kind of the more I want to be just facilitating students on this discovery for themselves. And I think one way to do that is to open up other avenues where they're working collaboratively or seeing their work being done. (Interview, Gabriel, 06.01.16)

Gabriel's response to Collabosphere use suggests a socio-cultural theory of learning that underpins many tools that promote digital literacies (Gee, 2003, 2005; Jenkins, 2009). By offering public spaces, we leverage students already-existing skills and proclivities to learn and share information with one another online (Gee 2005, 2007; Rheingold, 2012). As attested in interview excerpts within the first section, students are already doing this work in public spaces outside of the classroom: composing in ways they consider to be “meaningful.” The key for educators is to

connect these “meaningful” compositions to “classroom” work in a way that supports the goals and needs of both teachers and students.

Digital tools that focus on visual literacies also offer teachers a new (and sometimes simpler) way to gauge student learning. Adrianna found that by looking over the digital compositions, she was able to quickly discern whether students had understood the course concepts from the week. Adrianna said that the graphics, combined with text, made it much easier for her to review the plethora of compositions that students produced on any given week:

And so, as an evaluator I’m just thinking about it like okay I could have read a reflection and I’m thinking multimodality why? I could just read a reflection and I would understand and I think it would be fine. This helps me especially because I have to grade so many in general. It’s kind of like at a glance I can look and see the visuals like if you look at Asset A I’m like okay she learned something about language. (Interview, Adrianna, 05.26.16)

Both Gabriel and Adrianna noted that having students produce weekly digital multimodal artifacts instead of written blogs made the speed at which they could evaluate these pieces faster. Adrianna said for teachers, the amount of work required to read through the blog posts and discern whether the student understood the material was considerable. In this case, since she “read” the images swiftly, Adrianna was given a high-level overview of how the classroom interpreted the content, which, in-turn, helped guide the following seminar. Concurrently, at a micro-level, Adrianna was able to promptly and often astutely evaluate whether an individual student had grasped a key idea. Looking at a student’s asset, such as the one depicted below, gave Adrianna “a really quick overview of what she [the student] got from the course” (Interview 05.26.16). In this case, Adrianna noted that the student still held onto traditional views of classroom learning, as articulated by the way she depicted an “ideal classroom.”

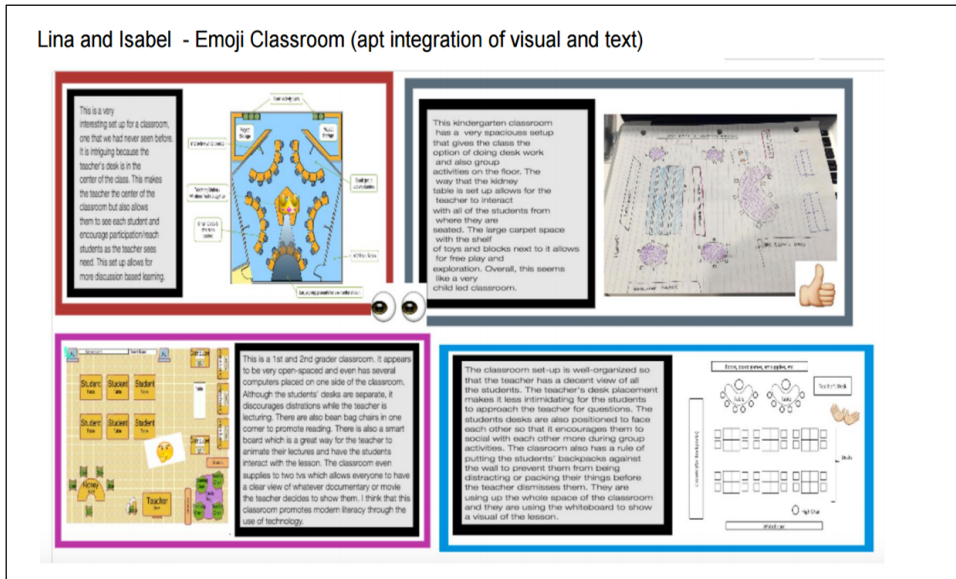


Figure 0.9: Student Whiteboard from Education 1B

Like Gabriel, Adrianna found that, at its best, producing the digital compositions allowed the students to synthesize the course material in a compelling way. Adrianna and Gabriel described the “best” multimodal assets as ones that incorporated both image and text. Both instructors felt that images alone could not represent the students’ understandings of the often complex subjects; rather, they needed to have the image and text work jointly for the composition to be considered sophisticated:

I used the images almost as like a base line. It is very instantaneous. I see right away I’m like okay she got it and then but it also is like there is something to get. ... But then I definitely move to the text for depth. (Interview, Adrianna, 05.26.16)

As mentioned, Adrianna was not working from an existing rubric, but rather attempted to articulate through our interview sessions her own criterion for evaluation. Though they operated in different classrooms, she and Gabriel came to remarkably similar conclusions about what makes a digital composition successful: adherence to design combined with succinctly-phrased text. Not only did this synthesize serve to reinforce their course concepts (including, for both, critical and analytical thinking), they also believed that students would ultimately benefit by reviewing each other’s work. Thus, even without a “connected learning” framework, by dint of using this

collaborative and digital tool in the classroom, these teachers were supporting a curriculum that was production centered, openly-networked, and visible across all learner settings (Ito et al., 2013).

The idea that the visual and public component to these assignments helped students to know whether they were “on the right track,” was echoed in the interviews I conducted with students. Several expressed gratitude for the ability to look over their peer’s assignments, which ultimately helped them gain new insights that transferred to their work:

I really liked the whole idea of having part of class online actually because if I don’t understand something quite well I can look at other people’s and be like oh I didn’t really think about it that way and kind of go off of that. (Interview, Jess, 03.27.16)

Jess and others found it helpful to see another’s point of view, which in turn provided a starting point for her own composition. Many students explained that they found many of the course readings difficult to comprehend, and having this public space gave them opportunities to see how others interpreted the work. Hence, the ability to view other’s artifacts helped students to both conceptualize course ideas and provide design inspiration for their digital artifacts. Even when there was no explicit instruction to review each other’s work, simply introducing a public space to display their visual artifacts gave rise to new forms of knowledge production and information gathering.

Students also communicated that they enjoyed working collaboratively with others in the digital and classroom spaces. One student Gloria, mentioned that she “saw herself changing” through exposure to other opinions online:

Yeah. I see myself changing a lot through getting exposed to different assets or opinions other people provide. Before I think I lived in a little bubble where I thought oh my opinion should be right in some way but then after getting exposed to these Ed classes or other socioeconomic related classes. I feel like oh I could be completely wrong sometimes. (Interview, Gloria, 03.16.16)

Here Gloria stated that she felt as though she “lived in a bubble” before being exposed to different ideas. Indeed, one of the potentials of tools like the Collabosphere is to give students the

opportunity to collaborate and share ideas with others from around the world. While the nature of the readings offered in Education 1B gave opportunities to reflect and share on a plethora of diverse topics, the public exposure to visual artifacts offered another forum for discussion and observation. Adrianna often mentioned the digital artifacts in class, which provided yet another opportunity to review and reflect students views of the curriculum. While some students do not enjoy sharing their thoughts and feelings aloud to their peers in class, digital tools give all students opportunities to connect and share using whatever mode (image, text, or sound) they feel adept at communicating in (Danet & Herring, 2007; Warschauer, & Meskill, 2000).

The collaborative nature of the digital tool also enabled students to develop new working patterns that mirrored their in-class machinations. Both Adrianna and Gabriel had students work together in groups during class sessions doing projects or activities related to course topics (Fieldnotes 02.18.16; 03.16.16; 04.02.16). This offline work tended to reflect what was happening online, but with the added benefit of using images and sound to elucidate and reinforce meaning between groups. Students mentioned that this group work helped them to work through ideas that they found particularly difficult or nuanced:

Eva: I really liked the whole idea of having part of class online actually because if I don't understand something quite well I can look at other people's and be like oh I didn't really think about it that way and kind of go off of that and also the collaborating. I don't know I think kind of like you get to meet more students that you wouldn't have met otherwise so I kind of like that also.

Jen: Yeah. Yeah I think that overall it's a big part of my learning in the class just because I don't know. I can't really just sit down and read something and get much out of it rather than collaborating with other students or doing projects or having differences in class helps me understand the material more rather than just sitting there and reading it.

Eva: I think it's a good way to summarize pretty much what we learned that week. It's like a shortened version or like a visualized version because it's usually; it kind of looks more like an outline or sometimes we contribute part of our own life for experiences into it and it just kind of like brings them together I guess in a way. (Interview, Eva, 03.27.16)

Here, Eva noted that she “gets more” from the readings when working in partnership with others. The notion that one can expand one’s learning by working with others speaks to the heart of socio-cultural activity theory (Cole, 2009; Engeström, 2001). Students work through difficult or contentious issues in partnership, with others helping to support or challenge their existing beliefs. Eva cited that using digital tools also helped to “contribute part of her own life experiences,” into her analysis and understanding of core ideas. The ability to introduce personal artifacts into these multimodal compositions helped to leverage the potential of digital tools to build participatory learning environments (Jenkins, 2009). The key for educators, like Adrianna and Gabriel, is to facilitate these learning opportunities by providing safe and open spaces for students to work within.

Eva additionally stated that she looks at the visual artifact like a “visual summary.” Indeed, when I interviewed both students and teachers, many used words like *outline*, *summary*, or *sketch* to describe the work being done online (Interviews, 03.01.16 – 06.01.16). The combination of images and text on the Whiteboards and Assets, such as the one produced in Psychology 101 below, helped students to synthesize and summarize what were often dense and complicated ideas.

GUNS AND VIOLENCE By: Ilian H. Herzi

Summary of Psychology Today Article:

- Holding a gun decreases mentalization (the ability to communicate emotionally) and therefore leads to violence

Summary of Research article findings:

- Building and holding a gun increases testosterone and may increase aggressiveness
- Research article = "Guns, Testosterone, and Aggression"

Key Differences:

1. In mainstream article, no evidence to support that increased testosterone decreases mentalization and thus promotes violence
2. Mainstream article did not specify how small the sampling size was (only 30 people)
3. Focuses of the article
 - a. News article: purpose was to highlight how inhibited mentalization can cause violence
 - i. Thus guns can cause violence

Figure 0.10: Summary artifact produced for Psychology 101

In Figure 4.5 the student uses images and text as a means to articulate the difference between two psychology articles he read for class and compare the two on quality and depth. The overall composition was considered to be “successful” by the instructor (Interview, Gabriel, 03.01.16) in its ability to portray a clear and informative recap of the weekly assignment. While I offer no semiotic analysis of the artifacts in this paper, it became clear that the ability to blend images and text in a digital forum helped students move beyond what the text could do on its own.

Although the potential group learning was seen as an advantage by most instructors, some students expressed difficulty in initiating an online collaboration with their classmates. In Education 1B, students were tasked with finding a partner to work on their weekly compositions. These assignments called upon students to seek out a partner to work with whose online work for that week you found interesting or intriguing. While in theory it should have been easy for students to reach out for others to work with (a requirement for everyone in the class), in practice students expressed that finding co-collaborators was difficult:

Gloria: And honestly the most difficult thing about doing the homework is that a lot of people don't do it early.

Jen: Right.

Gloria: So, then, half the homework requires you to either collaborate or comment or message another person and half the time I'm like no one gets started until Sunday. I think it's mainly just this course because there's no real group project. We have to find our own people and it's usually like find someone who's Whiteboard inspired you this week and a lot of people don't make the Whiteboard until Sunday.

Jen: I see right.

Gloria: And, therefore, other people's time management affects my time management. I think this is unique to the course because this course weekly asks you to work with someone else whereas many other courses don't. This course in general seems a lot more collaborative so you have to talk to another human being and get their input and a lot of the times I also

felt like it was rushed and there's also been times where it's like I can't find a partner. (Interview, Gloria, 03.16.16)

Gloria acknowledged that she enjoys the collaborative nature of the course, but the reality of other student's busy schedules impacted the effectiveness by which this group work was done. The stress of "finding a partner" was prominent in almost all of my student interviews when the subject of collaboration came up. Not only did it affect a student's ability to manage their workloads, it also impacted the quality of work and types of collaborations that occurred. Students often asserted that starting work right before the deadline meant that they had no time to produce work together. Instead, they often delegated the workload between themselves:

Rowan: Yeah and the way we usually do it or that it goes about; I guess it's not much collaborating. It's like talking and making one thing together. It's more of like I do half of it and then they do half of it and then whoever does the second half turns it in.

Jen: How do you know or do you decide that between yourselves who's going to do what?

Rowan: Yeah we pretty much decide who does what from the beginning because there's a little chat room on the side of the Whiteboard and then we would just; the time that we're both online then we would talk about it and then because a lot of the times our schedules don't really match up so then if I was working with somebody they would be like okay I'll work on this and then they'll be like okay then I'll work on this and we just kind of work on it in our own time and then if I finish before the other person then I would say like okay I've done my half so once you're done you can go ahead and turn it in and then yeah. (Interview, Rowan, 03.27.16)

While these types of task-delegation dynamics are not unusual for group work, many students found them unsatisfying. Although they achieved their goals (the completion of the assignment), students often felt the collaborations both lacked substance and did not fully meet the

expectations of the course. Although most students expressed a desire to create meaningful partnerships to produce their work jointly in Education 1B, the practicalities around initiating and sustaining these collaborations prevented them from doing so. The struggle as we move forward is to imbue students with new norms for working on collaborative online projects when time and habit often thwarts these efforts.

As articulated throughout this chapter, we see several points of intersection between the historic and well-defined systems of writing within the Academy. Teachers observed in this study came to the classroom with particular ideas about what constituted good writing, which were based on both their own teaching experiences and departmental norms. By contrast, students yearned for a writing practice that was meaningful and personalized, akin to the work they performed outside of the classroom. With the introduction of new digital roles for composing, teachers and students followed in this study looked for ways to take advantage of new ways of writing that met the needs of both within course boundaries. The “conflicts” that arose resulted when both teachers and students tried to “fit” these new literacy practices within an already-existing and primarily text-based academic system. Teachers struggled to define “good writing” within the scope of the activities using new tools, while students felt as though they were navigating blindly in uncharted terrain. As the semester wore on, however, students and teachers began to carve out ways of working both individually and collaboratively using Collabosphere. These new emerging practices, resulting from the intersection of two intersecting activity systems, seem to fulfill Engeström’s definition of “expansive learning” practices. In the following chapter I offer a glimpse into a course where “expansive learning” became a reified concept, and where the seeds of new digital literacy practices began to bloom.

CHAPTER 5 : DESIGNING FOR DIGITAL LITERACIES: A CASE STUDY OF COLLEGE WRITING

It's 9am on a Monday, and the tiny basement classroom where College Composing 101 is taught is hushed, save the sound of gentle tapping on the keyboard. At one laptop sits Marcus, a nineteen-year old freshman track star, updating his latest Tumblr posting. He is summarizing his latest essay on P.T. Barnum, and the blog is littered with pictures of the showman's sideshow performers and pachyderm. The instructor Ethan paces the room somewhat anxiously, occasionally peering over the students' shoulders and answering questions as he can. This will be the student's final blog entry before submitting their end-of-year portfolios for assessment. The aim of this portfolio is to reflect a large scope of their writings, including both critical and personal essays, some with multimodal components. Although Ethan has been the instructor of record, the portfolios are submitted and assessed by a group of his peers throughout the UC system. They are submitted anonymously, so the instructors grading them have no idea from where the student and instructor heralded within the UC. For these students, passing the course is a must if they are to move forward in their undergraduate coursework. The stakes are high for them, but also Ethan, who is up for contract review at the end of term. While the pressure is immense, Ethan tells me he feels that he has prepared the students for this final hurdle, which involved a constant and consistent focus on building their digital literacies. All that's left to do is get them to the finish line, and hope that the effort proved successful.

- Reflection from College Writing, Fieldnote, 04.20.16

Over the last several years we have seen many attempts across college campuses to revamp courses to make them more “innovative” or “relevant” for 21st Century learning (c.f. Allen & Seaman, 2013; Palloff & Pratt, 2013; Roksa & Arum, 2011). Some have taken the form of Massively Open Online Courses, or MOOCs, while others have opted for a "hybrid" course

structure. In many instances, the aim of the restructure was to broaden the access of these courses to a wider and more diverse range of students (Cruz, 2012; Scida & Saury, 2013). Such was the case made for MOOCs, whose purported, goal espoused by many a college administrator, was to bring the promise of higher education to the masses (Lewin, 2013; Ahmadi, Jazayeri & Reppenning, 2011; Scott, 2011). The thinking was that since MOOCs were often free to take, they would open access for people that would not otherwise have access to a top-tier university education. In reality, the dream of the MOOC fell short for a number of reasons, but in particular because they often failed to identify the affordances of digital tools and students' needs in using them (Konnikova, 2014; Watters, 2015).

In the aftermath of the MOOC revolution, college administrators have looked at departmental, as well as at individual, levels as to how to experiment with new tools when it comes to updating college instruction, and college writing in particular, we still have a lot to learn about what works and what doesn't (c.f. Selfe, 2007; Ito, Gutiérrez, Livingstone, Penuel, Rhodes, Salen, & Watkins, 2013). Questions such as: what ways do technologically mediated classrooms offer opportunities for students with different skillsets to engage and perform writing? How do we assess writing composed using alternative mediums across multiple disciplines? Also, in the cases of students that are profiled in this chapter, how can technology be introduced in such a way that compliments academic literacy rather than hampering it?

The following chapter illustrates by way of a singular case study one instructor's attempt to integrate the full complement of digital literacies—using text, image, sound, and video in a networked, internet-enabled environment—into a college writing course. I open with an overview of this particular writing course, the course goals, instructor Ethan Durham, and the student body. I offer an acute focus of Ethan's particular pedagogical stance and approach to digital literacies. This is comprised of student artifacts and informal interviews conducted over the course of the semester. The second section details Ethan's process of teaching and imbuing the students with different tools, strategies, and techniques for writing in a variety of modes across disciplines. In addition to interview excerpts and observational notes, I provide examples of student work that highlight what Ethan termed, students' "thinking moves" and a meta-awareness of their own writing processes. These examples support the idea that digital technologies prove beneficial in building students' critical thinking and analysis skills, while also

giving them ways to visualize their own process over time. The last section of this chapter gives a contextual and practical overview of Ethan's own approach to digital literacy assessment, including examples of what he considered to be transformational moments for students when using new tools. Here we will see how Ethan structured the end-of-semester portfolio that made the rules of genre, academic writing, and multimodal composing clear. I argue that by illuminating the "hidden rules" of the classroom, students were able to build confidence, take risks and develop a variety of techniques for writing in an academic citing (Bateson, 1972). I maintain that Ethan's diligence and framing of digital literacies helped to ease some of the "tensions" around the intersections of the historical activity system of college writing and writing in a digital realm (Engeström, 2001); the result was a new and transformative process for both students and instructors. By highlighting this process in this case study, I hope to provide insight into the future of college writing, and possibilities for expansive learning using digital tools.

5.1 A Semester of Magical Thinking: Setting the Scene for College Writing 101

Ethan Durham sits before me in his smartly-tailored button up shirt, jeans, and canvas 'Vans' shoes, his sandy blond hair neatly coiffed in a neat youthful cut. In many ways, his attire is exactly how one would imagine an English Professor and writer to look - relaxed, friendly, yet stylish. As we sat in our research office in Townsend, Ethan expressed excitement at taking part in my study, and I was immediately struck by how poised Ethan was in his approach and also with his openness in discussing his own teaching practice. Unlike other interviews I'd conducted with college instructors and administrators who were using new technologies, Ethan seemed at ease with the purpose and intention of using new tools in the classroom. His explanations for using tools—be they Tumblr, Google Docs, or YouTube—was always in sync with his beliefs about the future of writing in academia and the types of teaching practices required to impart them. As I would later learn, Ethan had spent many years training and developing his innovative approach to teaching writing, one that lent itself well for this particular course and the students it served.

My choice to follow Ethan Durham's college writing course was not accidental; he had come recommended to me by a colleague in Townsend's Center for Teaching and Learning as someone who was doing innovative work with digital literacies. Indeed, in these initial

interviews with Ethan, I found myself surprised (and impressed) with the diversity of approaches he uses in the classroom, including approaches towards assessment and framing of digital tools. What was more striking was that Ethan was operating in these experimental and innovative ways with students that would have at one time been listed as “remedial” by the university. Ethan explains:

Ethan: So really what happens is a student as they’re coming from community college or transferring or from high school they end up taking some kind of a writing placement and that’s across the entire Townsend system and there’s a whole norming process by which we come in on like a Saturday and we’re assessing these, scoring these writing samples.

Jen: Hmmm.

Ethan: The students who come to the College 101 the six-unit course are mandated to take this particular kind of class.

Jen: Right.

Ethan: It comes out of a tradition that used to be called Subject A where there’s this notion of what is remedial writing. But the university doesn’t feel that with the high caliber of students that there is really a need for remedial writing.

Jen: Right, right.

Ethan: But we have a number of writers who are multilingual.

Jen: Right.

Ethan: Who grew up with multiple languages in the household who came to the U.S. at a key age in language acquisition and so their verbal skills are extraordinary and their math skills are amazing but their fundamental disjunctures in terms of critical thinking on the page.

Jen: Right, right.

Ethan: And in addition, we serve a variety of other students. Student athletes who are really sort of having writing classes for the first time or just other students who for one reason or another never quite had the foundation of writing that were needed. So, six units is deliberately designed to be a standard writing class and also this extra component that we won’t call

remedial but we will say has more reading, more writing, and more in-class time to really sort of focus on developing that muscle. (Interview, Ethan, 01.28.16)

Ethan's approach to teaching with new tools would have been bold under any circumstances, but made even more so by the student population that he was tasked to prepare for academic writing. Students come to Ethan's class often come from a variety of different backgrounds, many who have struggled to read and write in scholarly or academic environments. Often, students told me or expressed in blogs that they "struggled to read" or had "trouble" making coherent arguments (In-class conversations, Saul, Regan, 03.14.16). Ethan, however, not only expected them to read and write using traditional text-based forms of communication, but also using a variety of digital and multimodal means. This reiteration that the students were capable of "performing literacy" in college using a variety of different tools helped to grow and expand students' perceptions of themselves as writers (Fishman, Lunsford, McGregor & Otuteye, 2005).

Ethan's course was broken up into four separate units, which culminated in an online end-of-semester portfolio. Each unit focused on a different perspective and media analysis of the overall course theme, "Magic, Tricksters, and the Extraordinary Ordinary." For example, the first unit had the students reading short stories and passages on Magical Realism, with a focus on evidence (summary, paraphrase, quotation) and reflection (argument, analysis, significance), while the second section included stories from the New Yorker and sustained engagement on text. The final part of the course involved students working from an entire text, David Gold's novel about a nineteenth century San Francisco magician, "Carter Beats the Devil." According to Ethan, the purpose, of course, was to give students a wide range of materials to work from, each connected by the theme of Magical Realism. In his words, the goal was to, "immerse ourselves in stories of Magical Realism, weigh how illusionists fool their willing audiences, explore the rich thrill of superstition through interviews and personal essay, and read a novel of a San Francisco magician at the turn of the 20th century. Along the way, [the students] become stronger writers, readers, & thinkers, creating a range of expository and analytical essays while engaging with texts and films" (Syllabus, 01.09.16). Ethan explained to that he organized his

course on topics that were also of interest to him, emphasizing that it was important to be as engaged with the pursuit of an idea as the students were, as it helped create an environment that centered on critical and analytic thinking in a variety of different modes.

The idea of creating a cohesiveness for the course while moving through different genres and modes was intentional. Ethan reiterated numerous times that introducing and reinforcing multiple modes often helps to “set the stage” for the work that students would be doing over the course of the semester. For students working at the intersections between different types of activity systems (academic writing and digital literacies), having a grounding theme or project helps to contextualize and normalize the activities and types of thinking around literacy that was unfamiliar (Russell, 2013; 2009). As illustrated in the previous chapter, students often felt stressed using new tools, as though they were being asked to do “extra work” without context of the genre or affordance of the new technology they were working within. Without context, students had a hard understanding the “rules, norms, and goals” that operating in a literacy-based activity system requires (cf. Russell, 2009). Providing a foundation around a common theme helped to ease students into experimenting with literacy practices, especially ones designed to support new forms of writing. Hence, the semester of ‘Magical Thinking’ enabled Ethan to introduce various mediums and modes of composing to the students and continue to build their repertoires of practice in the college classroom.

While the theme of magic helped to frame the practice of ongoing critical enquiry, Ethan’s choice to use Tumblr also provided the cognitive and literacy thread for students to both experiment with multimodal composing and continually review and revise their work. Originally, Ethan and I discussed using Collabosphere for this class, but he explained that he felt more comfortable using Tumblr. When probed, Ethan explained that Tumblr was a better choice to introduce digital literacies:

We chose Tumblr just because it’s extremely low barrier entry ... I conceive it it’s just like an artist studio central note where they put everything up there. So maybe they’re writing down notes in class, they’re trying to annotate a story, they’re finding images that feel related that they might make use of. Another student maybe will give you something different perspective. Sometimes they’re taking pictures of their notes right or work that happens on the board. And the reason for that is somewhat pedagogical which is that; let me just show you this [brings up student Tumblr page, see Figure 5.1] So what you have

is a reverse chronology of the things that her final portfolio and you can work your way backward from final drafts into earlier drafts, into earlier ideation because it's important. One of the portfolio requirements is for them to have a kind of meta-cognitive letter in which they say this is how I'm developing and this is how I know. So to have it all here in one space is self-fulfilling to visualize it. The great thing about the blog format as well is that in some situations a multi-tiered, multi-column format gives them not only some creative flexibility but also lets them just visually see the plan; so kind of sort of jogs to position. (Interview, Ethan, 01.28.16)

According to Ethan, Tumblr gave students a point of entry into writing with digital tools, one that was easy to navigate. He explained introducing the tool early in the semester and requiring its use throughout helped students to become proficient not only with its workings, but to see how their own writings evolved over time. For Ethan, it was imperative that students were able to visualize their work over time in order to develop themselves as writers and editors. Ethan also stressed that to effectively evaluate multimodal work, he too had to see the students' progression over time. Tumblr provided a great platform to do so, because it recorded each draft in a scrolling form. Thus, Ethan and the students could easily review their work over time. When reviewing student work from previous semesters, Ethan was able to articulate the process of revision from first drafts to final projects (see Figure 5.1 and 5.2 below).

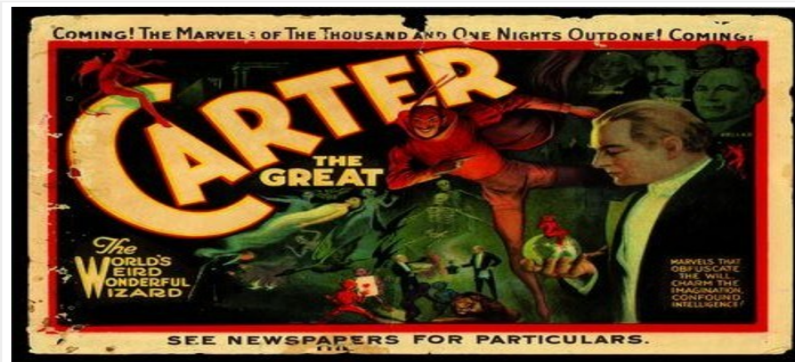


Figure 0.1: Amani's First Blog Posting on Tumblr

December 10, 2015

0 notes

The Endless Search for Affection – The Downside of Success in Carter Beats the Devil



One of the adversities of a successful career in the spotlight is sometimes an oppressive loneliness evoking misery. The danger of achieving overwhelming popularity is that it also distorts self-awareness. In his literary detective novel, *Carter Beats the Devil*, Glen David Gold emphasizes the irony of a growing solitude of the world-famous magician, Charles Carter, as he achieves huge success in his professional career. The constant internal conflict between his passion for magic and his combat against loneliness consumes him, and yet it also facilitates his gradual self-awareness that assists him in overcoming his affliction. Gold uses multiple literary devices, such as vivid imagery, complex structural choices, and rich narration to

Figure 0.2: Amani's Last Blog Posting on Tumblr

Here Ethan referenced Amani's first draft by way of both style and structure; in this piece, Amani's use of complex sentences, analytic reasoning, and multimodal artifacts were limited. Further, Amani often failed to back up her statements with evidence from the text or other works. By the final essay, however, Ethan was able to chart Amani's progress, both in visual and text-based literacies, and also her critical thinking skills. Ethan could point to text excerpts and the piece's overall design as evidence of this developmental path.

The process of charting development was important for Ethan's own evaluations, but also for the students to understand their own writing patterns. Several students mentioned that in using Tumblr they were able to see and revise their own writing over time. One student, Geoff, asserted:

This course has exponentially improved my ability to self-review my writing while attempting to analyze it from an outside perspective in order to eliminate mistakes that many students, including myself, often overlook when viewing their own work. (Tumblr feed, Geoff, 05.03.16)

While the process of self-revision is not a new practice for college writing teachers, the use of digital tools to help students visualize their process was. In this case, we can see how the decision to use digital tools helped to create a truly “twenty-first century literacy environment, where the ability to “understand the power of images and sounds, recognize and use that power, manipulate and transform media, distribute them persuasively, and to easily adapt them to new forms” was stressed (New Media Consortium, 2005). Rather than adding to the different types of transmedia navigation (the ability to analyze and compose between multiple forms) students were already engaging in, the Tumblr feed helped to complement and enhance students in-class practices. In other words, the in-class literacy work was connected and embedded to the students everyday practice of using images, sound, and video to communicate and curate in everyday life.

5.2 Thinking Moves: Scripting, Practice, and Play in College Writing 101

5.2.1 Rigorous playfulness

Over the four-month period following Ethan, I was continually surprised by the intensity and amount of work he asked of his students. One phrase that Ethan used to describe his approach to teaching college writing was that of “rigorous playfulness.” Over the first few observations I noted the amount of writing that students were doing in the classroom and in their blogs. Each day would begin with announcements and feedback, and that would be immediately followed by composing work for long periods of time. Ethan acknowledged that this was “exhaustive” for many students, but that he felt that the volume was important to help train students how to write in an academic environment.

On average, about 40-50% of students' in-class work was spent composing in one form or another, usually either on the computer or at the chalkboard. A typical scene would run as follows:

Ethan stands at the front of the room before the overhead projector. Today students are continuing their work on the New York Times article, “The Unbelievable Skepticism of the Amazing Randi.”⁷ Ethan asks the class to consider the author’s point of view, *why does the author care whether people are fooled?* Ethan instructs the groups of students to come to the blackboard and write out sections from the article that focus exclusively on the science. He asks students to pull out five to six sections from the articles. Students get up and approach the chalkboard. One person from the group carries a laptop to pull up the online article. They start to write at the board. [See Figure 5.3 below] (Fieldnote, College Writing, 02.15.16)



Figure 0.3: Ethan and students work at the chalkboard in College Writing 101

When questioned, Ethan explained that having the students get up and move around the classroom was practical: it was a three-hour class and he wanted to keep them awake and alert. Yet, he also maintained that moving between different modes of communication—digital and

⁷See references article: http://www.nytimes.com/2014/11/09/magazine/the-unbelievable-skepticism-of-the-amazing-randi.html?_r=0

physical—helped to bring a sense of fun and joy to the classwork. Ethan expanded on this idea in an interview, claiming that his goal was to create a class “where they [students] were learning all the skills that they needed but also engaged by the rigor ... this playful rigor is I guess the core principle I try to enact” (Interview 04.14.16). This idea also complimented Ethan’s course theme: by focusing on Magical Realism, hucksters, and entertainment, he hoped to balance the amount of effort students were expending with elements of fun and fantasy.

Ethan also used the metaphor of “writing as a muscle” to explain his approach to writing to the students (which seemed quite apt for a class wherein over half the students were athletes). While I had not before considered writing as an act of *conditioning*, it became clear that this is exactly how the Ethan and students interpreted it. Ethan stressed that it’s a “metaphor that suggests something that we tend to know right intuitively which is that if writing is ... a learned skill and it comes from a lot of reading and writing and we know that from the very beginning students tend to be more willing for the first month and a half to put in a lot of work” (Interview, 04.14.16). Indeed, if one looks at studies that measure academic performance and output in writing, we see a correlation between the amount of reading and writing that students are asked to do, and their performance on critical thinking assessment improves (Roksa & Arum, 2011). For example, in their study of over twenty-three hundred students across twenty-five schools throughout the United States, Roksa and Arum found that when faculty increased students’ reading and writing requirements to over forty-pages of weekly reading and twenty-pages of semester writing, student scores on the College Learning Assessment (CLA) exam, which is designed to measure skills like critical thinking, analytic reasoning, and written communication, improved dramatically (Roksa & Arum, 2011). Their research corroborates the idea that students perform better when they are expected to in similar types of “rigorous work” that Ethan expected of his students. Even though his students were “mandated” to take a writing course that required more support, Ethan expected a level of seriousness and professionalism that surpassed many of the other classrooms I observed over the course of this study. While students followed for this study did not participate in the CLA, Ethan noticed progress — both in composition work and in class discussions — in the students’ critical and analytical thought expressions over the course of the semester.

5.2.2 Scripts for success

Since I was interviewing dozens of students and teachers for this overall study, I would often have gaps in my observations when these were scheduled. During one initial pre-interview period, I was away from Ethan's class for over a week. When I returned the following Tuesday, I observed the following scene:

Today students are focusing on how to post questions to their classmates. Students are paired up in groups of two, with the tables all facing one another, in a circle. Ethan asks the students to comment on one section of the text of the New York Times article about how to "debunk" skeptics of magic. The students have read that day. Ethan asks students to question the article, and look for passages that they can debate with their fellow classmates. After ten minutes of working in pairs, Ethan asks the students to discuss their findings. One student, Maria, mentions the bias against Randi. There is a long pause. Another student raises his hand, and begins his retort with, "yes, but." Ethan stands at the center of the classroom, like a conductor, and helps to guide the discussion along. (Fieldnote, College Writing, 02.09.16)

I found the dialogue odd at first, almost forced: why were the students moving the conversation along in such a weird and artificial way? The conversation continued in this manner, with periods of long pauses and Ethan moving the conversation forward by reminding them of the conjoining phrases. The conversation would stop and start, with Ethan coaxing students with different words to move the conversation forward. Students shifted in their seats, or looked down at their computer, clearly uncomfortable with this dialectical process.

Scenes like this one were repeated over the next few weeks. Ethan seemed at ease with the process, and claimed that he was giving students different methods to use in both writing and discussion. He explained that in giving students a concrete set of tools to work with, including an arsenal of phrases and strategies to both help synthesize their discussions and their writings, they would eventually be able to unconsciously draw from these resources. Ethan acknowledged that his students also found this work oddly structured, but they continued to reinforce the scripts so the processes became "self-guided" for them. Ethan asserted his belief that scripted work was a way for students to form "muscle memories" around writing by repeating a process so that it becomes an unconscious act. Ethan's analogy of "muscle memory" was reminiscent of Alexei

Leontev's theories of learning and development using activity theory. In Leontev's view, learning and development was a process of moving from the "abstract to the concrete" (Leont'ev, p. 110, 1981). More precisely, as students move through the process of appropriating the rules, norms, goals, and tools of an activity system they are able to move from conscious work to unconscious understanding of the expectations and goals and perform accordingly. Like Leont'ev, Ethan knew that by bolstering these norms and tools students would eventually be able to draw upon these resources without conscious effort. Through reinforcement, Ethan believed that his students would eventually be able to fluidly compose in a variety of different contexts for a variety of different audiences.

While Ethan stressed the importance of giving students practical scripts to work from, I also observed him emphasizing genre and affordances of particular tools students were working within. For example, when students were outlining their portfolios, Ethan tried to make explicit the genre of academic writing students were working in (as evidenced in the following fieldnote):

Ethan had the whole group look at the blog, which is projected on the screen. He asks what they notice about the Table of Contents first. Students bring things up like color, organization. Ethan glosses their comments and points out things that they might want to do for their introduction. He mentions at some point that he is not allowed to edit their introduction; it is all on them. Geoff agrees and brings up the use of pictures. Ethan agrees and notes how image is used here: both as evidence and as an interesting element. The next activity is to review the introduction itself of one student from last year. Ethan reminds students that this genre, the introduction to a portfolio, is to a particular audience (tired, grumpy College Writing folks) who want to know that "you got this" when it comes to writing. It is a persuasive genre. He asks them to think about what they notice as he reads the first paragraph. (Fieldnote, College Writing, 04.05.16)

Time and again Ethan would remind the students of the expectations required from different genres and styles of academic writing, multimodal composing, and personal essays. In the case of their final portfolios, Ethan impressed the technical requirements of the piece as well as providing space for individual and group feedback for the students' own analytical writing. Rather than feeling heavy-handed, Ethan's choice to scaffold the expectations of genre seemed

both practical and helpful. In the previous chapter, we heard excerpts from students who felt anxious or nervous about writing in different genres, so much so that they refused to “take risks” using digital literacies. Conversely, teachers felt that their students wanted too much “hand holding” when it came to their writing assignments, with several instructors expressing a desire for students to also to become more independent in their own working practices. Ethan, however, had an alternative tactic. He felt that by being explicit in structures and working practices, students would be better prepared to become “critical and independent thinkers:

So, I try to be upfront in saying that while I want them to be prepared in a variety of genres that the larger goal is for them to be critical, independent thinkers that will carry; it’s this kind of muscle that carries them through college that carries them out into the larger world and so last week when we were talking about transferability and how problematic in some ways that idea is. I think there is some truth in explicitly telling students and reminding students that this skill is absolutely vital and that if you can see the patterns regardless of the kinds of information you’re getting right whether it’s an advertisement or a New York Times article or looking at some debate or documentary or a novel that you’re just much more powerfully equipped to handle how to respond to it right and how to work your way through it. (Interview, Ethan, 04.14.16)

By giving students an outline and structure for writing across particular fields, Ethan believed that he was “equipping” students to become proficient writers across modes in any discipline. This strategy proved to be effective in both building students’ confidence and helping to identify the affordances of different modes of communication. Towards the end of the semester, I began to find evidence of students becoming more confident and proficient in their writing. Many students noted that through writing, by using the techniques Ethan provided, they were able to see and work through problem areas. Stella writes:

Prior to this College Writing class, writing was a scary sight for me; I constantly found it difficult for me to approach a writing task with confidence. However, with taking this College Writing class, I learned that writing is a muscle that has to be exercised—the more one writes, the easier it becomes to write. Through identifying the areas I needed to work on in order to become a better writer, such as term and concept repetition, syntax, and clarity, and big picture ideas, I was able to recognize my weaknesses and work on them with every essay. In high school, I was taught to follow the conventional 5-paragraph method (writing an essay that includes an introduction, 3 body paragraphs, and

a conclusion). As a result, I came to Townsend with that same mindset, that all essays had to follow that rule. Now, I know that writing is a process, the work that is put forth before writing is just as important as the work that goes into writing an essay. With the help of Professor Durham and his reflective terms like “and so” and “and yet” and along with writing techniques practiced in class, I have acquired new skills to strengthen my writing and re-learn what it means to write a well thought out paper. (Tumblr page, Stella, 05.05.16)

Stella’s post suggests that rather than hampering students, the structure and pace of Ethan’s class helped students move beyond “five paragraph essay” and focus on “big picture ideas.” These representations of meta-cognitive and structural shifts in understanding of academic writing using digital literacies seems to indicate the type of expansive learning moments that Engeström referred to in his theorizations on activity systems. To recall, Engeström noted that “an expansive transformation is accomplished when the object and motive of the activity are conceptualized to embrace a radically wider horizon of possibilities than the previous mode of the activity” (Engeström, p. 138, 2001). In their blog posts, students reveal how their perception of themselves as writers, and their approach using digital tools, shifted throughout the semester. As Stella attests, she was able to visualize the writing process in a new way; or rather, “embrace a wider range of possibilities” than she had previously imagined (Engeström, p. 138, 2001).

5.2.3 Designing for design

The design and pedagogical approaches that made way for these expansive moments were calculated. Ethan often repeated that his strategies and course design were intentional - he wanted to give students the freedom to find their own writerly voice. During our mid-semester interview, I asked Ethan how he felt the students were doing; and specifically, the progress they had made using the concepts and techniques he’s introduced. He stated:

Part of what I think is interesting is there are measurable gains and then there’s sort of intangible gains by the weakest students. (...) And we’ve been slowly charting through the

forms, through in class work different kinds of different themes, different literary techniques, interesting passages. So, the challenge for them is how to pull it all together. So, what we did last time and this time was to do board work in teams where they could start to replicate some of those thinking moves on the board and then I had them write in class to sort of extend that a little bit with their own work.

Jen: Right.

Ethan: And so if you look on bCourses [class website] I posted something today which was essentially the in-class exercise and it's this announcement titled how to build in our connected concepts for a longer essay.

Jen: Yes, I saw the announcement yeah.

Ethan: Yeah and all it really was, was I started with oh I don't know eight concepts that we've been talking about and encouraged them to just build relationships between any three and the trick to this to figure out is it doesn't really matter which three they choose.

Jen: Right.

Ethan: They're still able to create an interesting essay out of any combination.

Jen: Right.

Ethan: It's the power of them sort of thinking.

Jen: Right.

Ethan: Thinking is what we're looking for. And so, in terms of their ability to master academic discourse in the process of analysis and not simply just stating evidence, right? That's an entire cultural shift. So I see their progress through the writing they do on the blogs and the writing they do offline but it's a slower curve. I'm still waiting for that final turn to happen.

Jen: Right.

Ethan: Which generally happens around this time where they're putting together the awareness of the kinds of stuff they're expected to do and the fact that

they really do have this pattern that reasserts itself and they can see what that pattern is. (Interview, Ethan, 04.14.16)

By mid-semester, Ethan could see that his students were starting to “build relationships between the concepts.” The idea of making these connections between different modes and cultural discourses are the kinds of strategies educators seek students to make in 21st century learning environments (cf. Gee & Hayes, 2011; Jenkins, Ford & Green, 2013). As Ethan asserts, his students underwent a “cultural shift,” which enabled them to see to the connections between course concepts scripts, strategies, and sourcing of evidence. The result is a transformative learning experience that helps students conceptualize academic writing in a new and meaningful way.

Designing a classroom space where students are at the center of the learning process requires discipline and the perception of students as creative and agentic beings. Over the course of my interviews with Ethan, he would often refer to his students as “creative, skilled, versatile learners.” With the exception of the first interview (wherein I asked him about the students’ backgrounds), Ethan never referenced the students’ particular mandate to be in College Writing 101, but rather always positioned them at the center of creative change. This stance is well-aligned with Gutiérrez and Jurow’s (2016) avocation of social design research as a way to re-position students as designers in the learning process. As they note, “Traditional design-based research sets the aim of developing new visions, theories, and technologies for teaching and learning that might transform existing institutions, but they generally work inside existing institutions, engineering their own environments to see what is possible, but do not take as their purview the work of transforming institutions. . . . In social design experiments, social transformation is sought by creating a significant re-organization of systems of activity in which participants become designers of their own futures” (Gutiérrez & Jurow, p. 4, 2016). While Ethan did not cite social design learning explicitly, his framework for the reorganization of pedagogical practices in the classroom and his commitment to training both existing staff and incoming graduate students resonates with this line of work.

This type of designed environment also relies on students to learn from and work with each other. Throughout the semester, some of the most powerful learning moments I observed in Ethan's class were through an orchestration of peer-to-peer learning. Ethan balanced the writing students were doing in-class with group or pair work. A typical scene would run as follows:

Ethan had the students work in groups of two for the assignment. When it was time to switch partners, Jeremiah thanked his partner profusely and said he felt much better about the assignment. It was time to discuss Trevor's story, which was on his girlfriend's rituals to prepare for track meets and the link to religion he found there. Jeremiah read this story aloud from the Google Doc it was written in from the MacBook Pro. He commented and affirmed the content of the story as he went. At one point, Ethan listened in. The story at that moment was a series of questions and answers taken from the interviews that Trevor had included. Ethan stopped them to see if he was reading the interview or the story; Trevor clarified that it was the story itself but that he was going to try harder to weave in the quotes, rather than having them blocked off like they were. This story didn't have any pictures or other semiotic resources in it. The two discussed what might be some good images to go with the story, such as a meme of Tim Tebow and the Bible verse he is most often quoted saying/aligning with (not sure which on that is but it opens this kid's essay), white 'Air Jordans,' actors, and hair ties (as this was one of the things that his girlfriend needed to feel prepared). It appeared that many of these images were in the blog used at the beginning of class that Trevor had already found and curated many of them. The pair and Ethan ended this round of workshopping with a discussion of "unexplainably" which Trevor used in his paper. Ethan asked him to explain what he meant; when he did, he used a different, more accurate construction. Ethan underlines that in saying it out loud and in talking with a partner, a lot of things can get worked out. (Fieldnote, College Writing, 04.05.16)

As this account of Ethan and his students' interactions suggests, Ethan spent a good deal of time scaffolding interactions between students. At first, his interjections in the group work seemed intrusive—couldn't the students be left to work of their own accord? What I realized, however, was that giving the students options and access to scripts and norms for working in groups helped them to expand and transform their own digital composing practices with one another. Finding strategies to help students work in pairs on their multimodal projects was particularly helpful, as students were able to easily find and share images, videos, and other

semiotic material with each other. Even students who did not engage with the digital blog component of the classroom found the peer-to-peer sharing extremely beneficial:

Sometimes when you read it I think there's a really rare chance for you to be like oh okay I made a grammar mistake as opposed to understanding that oh your idea isn't clear to someone else. Your idea makes sense to you because you wrote it that way if that makes sense and it just; what I said is especially for a writing class where you have to be graded it's essential that you have someone else look over it for you. (Interview, Lucas, 03.06.16)

Leveraging the students' abilities and proclivities to learn and work with each other was a key component in Ethan's course. He would often stress to the students that learning to compose using digital literacies requires one to learn to compose and edit collaboratively. Peer-to-peer work also linked to Ethan's requirement for students to iterate and revise their essays on an ongoing basis. Unlike most of the other classes I observed, Ethan believed that revision was a key component to learning to write in a digital world, and thus, structured student essays accordingly. Rather than expecting them to turn in a "finalized" version of each essay, Ethan asked students to submit drafts, which were then revisited and edited, often in partnerships. As Lucas mentioned, "it was essential" for students to share work with others to see if it "made sense." Structuring these partnerships then helped students who were unfamiliar with the collaborative writing process feel confident in their abilities to share, circulate, and recraft each other's works.

5.3 Assessing for Success: Multimodality, Blogging, and the Final Portfolio

5.3.1 Strategies for assessment

Across this study, one of the common themes for instructors attempting to use digital tools and multimodal composing was that of assessment. As documented in the previous chapter, instructors often felt conflicted about grading multimodal assignments without a departmentally agreed-upon rubric. Instructors expressed tension between the way they were taught to compose (primarily text-centric) and the new systems that they were asking students to compose in — ones that relied on various semiotic materials to express meaning. Further still, instructors

expressed discomfort in grading student work that relied on design without teaching them methods of design-based learning.

By contrast, Ethan made clear his expectations and understandings about the visual component of the compositions from the beginning of the semester:

I think that design is crucial and that ultimately one way of reframing design so that the bias isn't placed on what some people would be concerned about as a kind of cosmetic; purely cosmetic issue. Design falls for me under the same conceptual category as structure right ultimately that we talk a lot in my class about how your choice of structure, your choice of design, your choice of placement where one thing goes with another these are analytical acts as well right? How you select that evidence, how you guide us through it, how we approach it – it should be a meaningful act as well.
(Interview, Ethan, 01.28.16)

For Ethan, the visual is not a separate occurrence but rather part of the overall structure of the composition, an “analytical act.” As such, Ethan felt that it was his responsibility to prepare them for how the composition would be received by both professor and peer. Ethan’s approach to assessing these compositions was not unlike the methodology outlined in Hull and Nelson’s 2005 piece, “Locating the Semiotic Power of Multimodality.” In it, the researchers argued that using multiple modes in compositions was not an additive process, but rather one wherein the composer pulls together the appropriate mode to signify meaning. The product, therefore, is not the “sum of its parts,” but should be evaluated in its entirety. Hull and Nelson use the term “orchestration” to describe this process arguing, “through each mode, meaning contributes to the overall thesis ... Through the orchestration, the viewer experiences something qualitatively different than what was possible through each mode individually” (Hull & Nelson, 2005). By explicitly referencing and helping his students understand the affordances of different modes of communicating, Ethan gave his students opportunities to orchestrate their compositions in unique and powerful ways.

Over the three months observing Ethan, I witnessed the versatility he had when helping the students pursue a subject or a line of enquiry. He would pause from working on a New

Yorker article on a certain topic, switch to a video documentary, and next to a radio interview. Showing students how to pull evidence from different modes of communication awakened them to the possibilities of writing and composing in a digital world. Stella’s interview reminds us that most students were taught to write the “traditional five paragraph essay,” and thus were unfamiliar with different strategies to seek and evaluate evidence from different digital outputs. Modeling the type of work, the ability to work through multiple platforms, and the modes that present this evidence in a visually compelling way gave students a pathway to experiment, play, and ultimately reframe their own notions of writing. The following portfolio from Aria is an example this experimentation (see Figures 5.4 & 5.5)

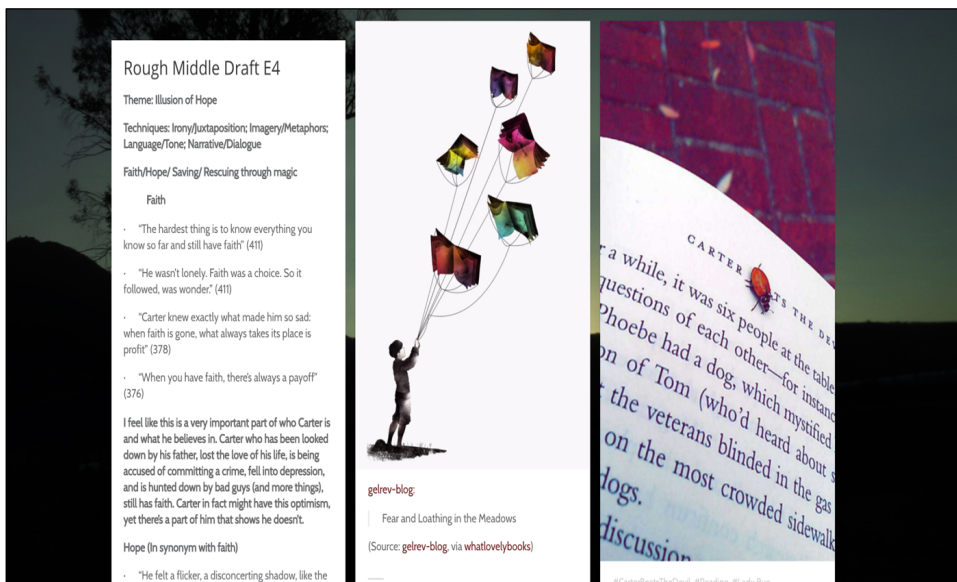


Figure 0.4: Excerpts from Aria’s Tumblr Page

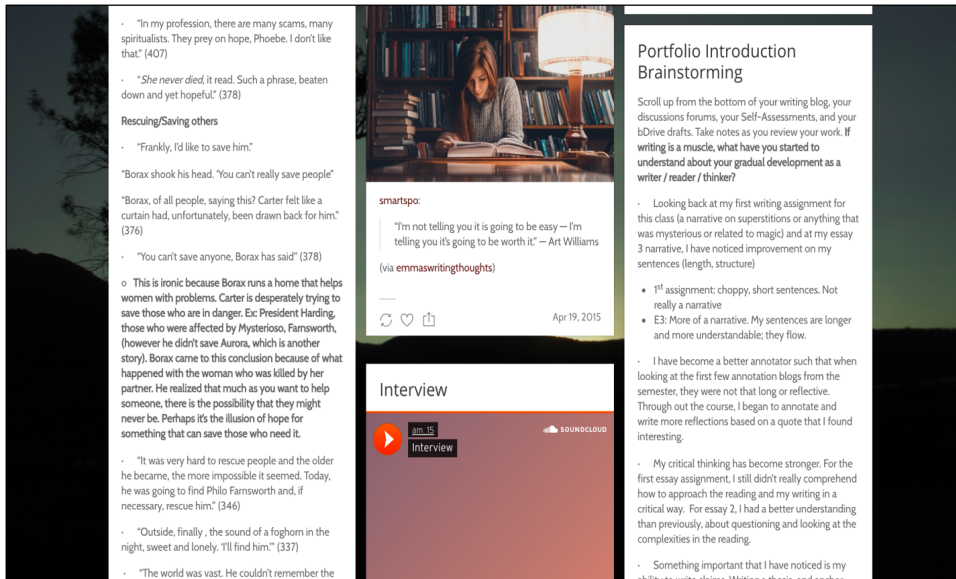


Figure 0.5: Excerpts from Aria's Tumblr Page

Here we see Aria using different types of evidence—images, sound, and video—to recount her transformation as a writer in College Writing 101. Aria stated in her blog that she was working towards her “critical thinking” skills, which have transformed over the course of the semester. Aria uses images, sound, and video to support her claims and musings on composing and the course discussions. In these expositions, Aria revealed meta-awareness of her own reading and writing process.

What most impressed me about Ethan’s pedagogical approach were his strategies and rubrics for assessing and reviewing digital and multimodal compositions. As articulated in the previous chapter, without a core rubric, teachers and students struggled to understand the core properties of a “good” multimodal composition. In this course, Ethan made clear the expectations, but also gave students room to define their own measures of success. Ethan explained:

I do have the core rubric. I also sometimes will add to that rubric by talking with the students. What would be a strong paper? What would make use of it? Well not a paper but what would make a strong multimodal composition? What do you think? Seemed like

good criteria. And usually one of the interesting things that they come to; not at once but kind of gradually is the idea that images and sound and other kinds of modalities have to contribute in more than just a kind of glancing way and that they usually deserve to be analyzed themselves right. So, when a picture just kind of gets dropped in versus someone taking the time with written text to sort of analyze what it's function is and how it contributes and that I think is a nice sort of recent turn with the students becoming more aware of the need to weave the different pieces in with analysis to sort of anchor it I think for those multimodal aspects. (Interview, Ethan, 01.28.16)

Akin to putting students at the center of the learning process, Ethan also had his students at the fore when creating evaluative measures. Collaboratively, they worked through strategies for evaluation. This process helped students to develop their own writing styles within the agreed-upon parameters.

5.3.2 Transforming moments

For instructors, tracking individual student's transformative learning moments is both difficult and time consuming (Cizek, 2010; Johnston, 1997). Often it requires an attentiveness to detail that many instructors, including the ones followed for this study, did not have time for. Ethan, however, was in the advantageous position of having a small number of students for several hours each week; therefore, he was better able closely monitor individual progression and development. For our final interview, I asked Ethan to reflect on any of his students' "breakthrough moments"—in particular those that involved the use of digital tools. Ethan recalled one student, Pieter, who found working with digital tools on the multimodal pieces transformative.

Pieter's family immigrated from Soviet Armenia when he was quite young. Although he was successful computer science student at Townsend, Pieter admitted that he struggled to compose essays in English. Ethan recalled that Pieter's first two essays revealed a tension between different texts and his own work; as if there was no "glue" holding his piece together. Pieter's multimodal essay (see Figure 5.6), however, proved to be a turning point:

The breakthrough for him was his multimodal piece. He [Pieter] remembered his parents talking about how they used to; really their courtship involved going to Bruce Lee movies in Soviet Armenia and so out of that spun this wonderful piece in which he was very fully integrating and analyzing images. He found a black and white image of this sort of central square and he said I could've and I think he says in the essay I could have chosen a color piece but this is always how Soviet Armenia feels like when it's described by my parents. So [in the piece] he's making all of these moves and it's a kind of reflection that he wasn't making really in the first two essays and so it took all the easy essay. They [some evaluators] assume it's the easier essay just because you're; but you're doing all these complex skills including interviewing people, leveraging, trying to select that evidence, going out into the world and finding video and audio whatever anyway. But it was around that essay where things started to really turn and so when he dove into his fourth essay which was this long foreign piece about the novel he said he was starting to be able to see the pattern. And it absolutely changed the way he approached drafting, revision, gathering evidence. He understood it. Once I broke it down in sort of a core schematic way based on my extremely limited programming skills. (Interview, Ethan, 06.15.16)

Martial Arts, Secret Movies and Soviet Regime

Imagine a world where speaking about the martial arts is prohibited, where kung fu books, movies, and practice lessons are censored by the governmental agencies. While it may not seem like a big deal to us, to my parents, the ban represented much of what they found frustrating in 1980s Soviet-ruled Armenia. The government considered martial arts to be a form of aggression towards the authorities and community, which was the main reason for their extreme decision. During these years, my father was in his twenties and lived under a strict socialist regime. When I was young, he always told me various stories about authoritarian rules, which seemed to me absurd and intimidating, since I was born and raised in the newly independent democratic Armenia, where people have right of free speech and feel safe under the governmental laws. One story in particular that has always intrigued me: my parents' rebellious ritual of watching the forbidden kung fu movies together in secret.



Because of these stories, when people speak about Soviet Union, this image always comes to my mind as a reminder of harsh rules and extreme prohibitions. I think of Soviet Union in black and white, which represents the uneasy and hard life of people under the Communist Party dictatorship. Even in this picture, one can see how the statue of Lenin oversees ordinary people, showing the tendency of the authorities to watch over ordinary people every second.

Figure 0.6: Figure 5.6: Excerpt from Pieter's Tumblr Page

Having the space and freedom to chart his students' movements enabled Ethan to see their progression and expansive learning process. While reviewing this piece Ethan noted how intentional use of the black-and-white photo helped Pieter to reinforce his imagining of his parent's history in Soviet Armenia. Through careful review, Ethan recognized how Pieter's choice in imagery helped to "orchestrate" an overall thesis for his work.

Pieter stated that by opening himself to the possibilities of writing with a variety of different modes, he was able to make the connection between his work as a computer science major and that of a writer:

As a computer science major, I often find surprising parallels between programming and academic writing in order to find and fix my problems in essays more effectively ... The overall structure of an essay is similar to that of a computer program. At the beginning of a program, one defines various variables and states the algorithm, like a short summary and thesis in the essay's introduction, which one plans to support with functions later in the program. The transition sentences are equivalent to the helper functions, which are designed to connect two different parts of the program together, enabling it to work consistently. Finally, the sentence level clarity could even be thought of as function optimizations, which make the program faster and more reliable, ensuring the smooth flow of the software. (Pieter, Tumblr Blog, 05.04.16)

Figuring out the different “codes” in composing helped Pieter better understand himself as a writer, and also showed him how to construct his pieces in a way that made sense to the viewer. Pieter's choices to include different modes to evoke a feeling and sense of setting revealed not only an awareness of genre, but a competence in using the digital form. In his articulation of transformative learning environments, Engeström stressed that people must work through their own internal and external contradictions to re-conceptualize an activity system with new rules and behaviors (Engeström, 2011). In this case, one can see how Pieter moved beyond his understanding of writing as purely logocentric to one where all modes of communication were considered and used to both make meaning and connect to audience.

Pieter's shift in making connections between academic writing and programming affirmed Ethan's approach in teaching students to become literate in all forms of communication. Ethan felt that writing teachers have a responsibility to prepare students to work across modes and literacy boundaries:

I think in some ways once they're already aware of the digital writing process and making it an actual part of their process they're halfway there and so incorporating other modes video, audio, gifs, animated gifs maybe involve sort of more minor gains for those essays and for the final work products that they present that aren't explicitly multimodal right for the essays that don't demand leveraging video interviews and clips and whatever

but I also think I don't know there's something intellectually dishonest about asking a student to do some of the things of a blog but then trying to pretend that all the other aspects that exist in the real world shouldn't happen in their writing right. I think we're not really preparing them to be extremely digitally literate if we say only use this one aspect because it's the only aspect that we've used in scholarship for a very long time. It seems incredibly limited. (Interview, Ethan, 06.15.16)

Ethan stressed that there is something “intellectually dishonest” about asking students to write in the academy without incorporating the full spectrum of digital literacies. Ethan believed that by offering choice and highlighting the affordances of different tools, this helped students’ leverage what they were already doing in the “real world.” Students’ abilities to move beyond the intersection of activity systems (the “real” world of school and the “digital”) suggests Engeström’s theory of expansive learning. By incorporating and making explicit all the rules, norms, and expected outcomes of these systems, Ethan helped the students move towards a broader and more nuanced understanding of what writing was and how it could be re-conceptualized anew.

Ethan also felt a strong responsibility to guide students through their own metacognitive process as writers in College Writing 101. For their final portfolio, Ethan asked his students to make reference to specific points in their blog posts that signify “turning points” in their development as academic writers. All blogs were organized by a Table of Contents and links to four of their five essays (see Figure 5.7 below). Each student was able to revise each piece before submission and exclude one essay from the final portfolio.

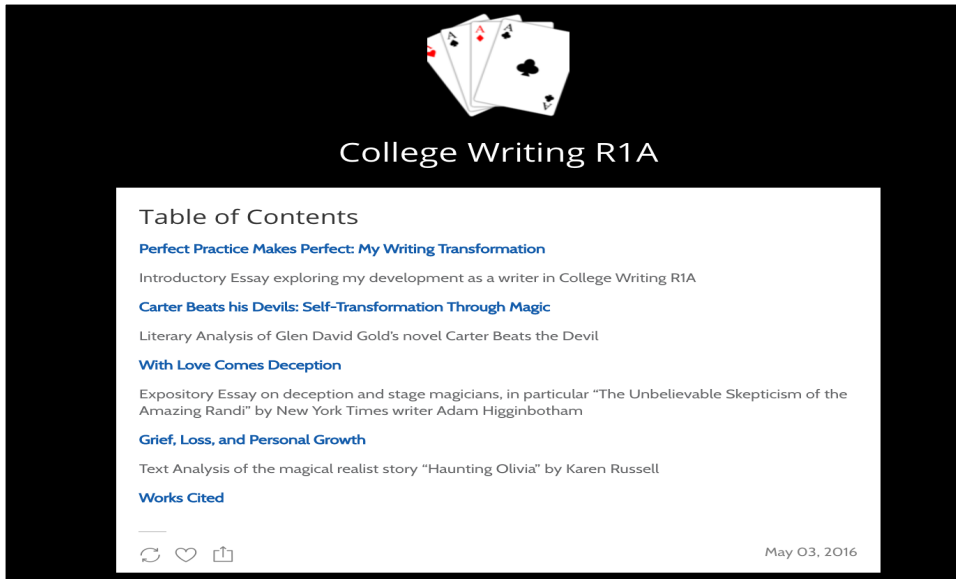


Figure 0.7: Table of Contents to Geoff's Final Portfolio

When reviewing these final portfolios, Ethan highlights Geoff, whose personal essay articulated and documented a clear process of development in the course:

This course has exponentially improved my ability to self-review My writing while attempting to analyze it from an outside perspective in order to eliminate mistakes that many students, including myself, often overlook when viewing their own work. My most common fault that I discovered throughout this semester during self-revision was the repetition of words and conceptual phrases being used multiple times in my essays ... I eventually found that from my frequent pattern of repetition, stemmed my more detrimental deficiency of making insignificant claims that failed to dig beneath the superficial plot of a text without providing my own self-assessment and comprehensive analysis. This course provided me with several methods aimed at creating deeper more intuitive claims that, through questioning my own thoughts and ideas, further developed the analysis of my themes. One of the methods that I chose to use the most in order to deepen my writing was the phrase "and yet" following the analysis of a quote to improve my own argument by understanding and answering a question that a reader may have about my claims. For example, in my analysis of our full length reading, Carter Beats the Devil, I used this method to describe how the main character's own motives unknowingly lead to his own destruction: "And yet, when Carter ultimately finds a partner, his success in magic unknowingly creates a barrier in their relationship resulting in a lack of honesty and intimacy resulting from the secrecy surrounding magic (180)." Literary transitions such as this were essential in the development of creating my own claims which reached

further into the underlying themes behind a text while guiding my reader through my paper in a complicated, and at the same time, more efficient way. (Tumblr page, Geoff, 05.03.16)

The first passage underlined provided a link to Geoff's reference of "methods aimed at creating deeper and intuitive claims," specifically, a posting of his in-class work on the chalkboard (see Figure 5.8 below). As mentioned, Ethan tasked students to write out evidence murals on the chalkboard which were either passages from a text or from the student's own work. Sometimes this would take the form of actual passages from text, and others chalked images or passages from students' Tumblr postings. Geoff referenced the board and group as a way for him "dig deeper" and critically analyze his own writing. The second underlined passage also links to Geoff's board work (see Figure 5.9 below). Here, one can see Geoff's brainstorm visualization that helped him think through the final portfolio. Underneath the capital "T" on the board we see his three main thesis statements. Adjacent to these statements are passages from the text followed by his own analysis of these passages. The arrows pointing to each of the different sections on the board helped Geoff to "improve his own argument" by noting how each of the different passages came together. Ultimately, the Tumblr feed gave students the ability to track their own progress and development over the course. This was key in helping them develop an awareness and identity as writers but also make connections between different semiotic materials.

These postings are exemplars of Jenkin's (2013) new literacy skills required of this digital age including:

Appropriation: the ability to create and remix content from multiple sources.

Multitasking: the ability to analyze and synthesize information found on the internet.

Distributed cognition: the ability to interact meaningfully with digital tools that expand mental capacities.

Judgement: the ability to evaluate the reliability and credibility of different information sources

Transmedia navigation: following stories across multiple modes of information to evaluate how that story shifts and changes.

Networking: searching and sorting through information related to a problem or topic of investigation.

In creating a course design wherein students were not only exposed, but rather carefully (taught) the affordances of tactile and digital literacies and how to use them, Ethan helped students acquire techniques for composing in the 21st century.

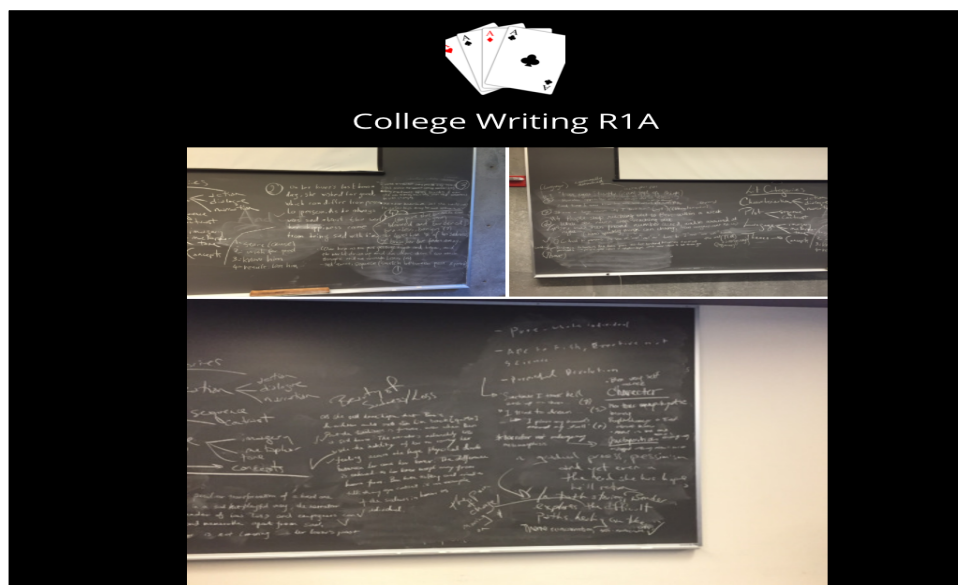


Figure 5.9: Snapshot of Geoff's Board Work on "Questioning" on Tumblr

CHAPTER 6 : CONCLUSION

“Oral language is our original gift. Written language came along much later. Digital media later still. For centuries people identified the breath with which we speak with the spirit or the soul and the language they spoke with their unique humanity. Written language froze that breath, allowing it to travel far and wide, allowing the growth of cities, empires and institutions. Digital media have unfrozen it again, creating a voice that travel far and rapidly among everyday people and, for good and ill, challenge the power of experts, empires and institutions. What will happen? Only the future will tell.”

- Gee and Hayes, 2011, p.5

In their 2011 book, *Language and Literacy in a Digital Age*, Gee and Hayes muse on the future of writing and reading in today’s connected, complex, and global world. They see literacy from a social-historical perspective, and meditate on the many gains and losses that new technologies have brought humanity over our many millennia on this earth. The digital world, they argue, “offers hope” that we can leverage our interconnectedness to not only solve problems, but that it can also be where the social or “affinity spaces” allow us to discover new forms of composing and ways of communicating with each other. On the one hand, it is easy to feel Pollyanna-like about the possibilities of digital technology to expand our horizons, and in the classroom, to have the potential to create expansive learning environments for our students. Those who study and immerse themselves in educational research have seen the transformative effect they can have on learning environments and are therefore optimistic about their potentials (Jewitt, Bezemer, & O'Halloran, 2016; Ito, et al., 2013; Gee & Hayes, 2011). Yet, as the opening excerpt by Plato reminds us, each new technological advance is often met with trepidation and confusion by those who are not directly immersed in their development. In the case of our schools, this fear is accentuated by the many internal and external pressures that teachers and administrators face around preparing our students to be literate in today’s world (Cruz, 2012). Unable to portend the future, many fall back to historical academic writing constructs that rely

solely on print-based literacies. Rather than assuming a seamless integration of new tools for composing into the classroom, educators must now carefully consider the conflicts that inevitably occur when we ask students and teachers to operationalize and conceive of writing in the digital age.

The purpose of this dissertation was to open a window and glimpse into how instructors, across disciplines and at a variety of different career stages, were incorporating new tools for writing into their classrooms. It is arguably one of the first dissertations to chronicle the use of new composing tools, including Collabosphere and Tumblr, into college classrooms and offer insights on how the composing practices were both articulated and assessed. In this sense, I offer this empirical work to help scholars reflect on the both the “gains and losses” that writing with new tools in academia portends. I situate it against the theoretical work that reflects on the affordances of new tools and the types of skills that students will need to learn and develop in a 21st century world (Jenkins, 2009, 2013; Russell, 2009, 2013; Ito, et al., 2013). In this study, I aimed to give a holistic portrayal of each classroom, and the dynamics between teachers and students, teachers and their departments, and how they responded to working and composing using new tools. I offer these vignettes to help orient scholars to the state of digital literacy and lessons to help guide future empirical work on digital literacy in the academy.

6.1 Discussion of Main Findings

Activity theorists and social-design researchers remind us that classroom dynamics are made up of a complex web of social, structural, historical, and object-driven forces (Engeström & Sannino, 2010; Gutiérrez, 2008; Russell, 2009; Scanlon & Issroff, 2010). Historically, the system of academic writing supposes that students come to the classroom with a well-defined idea of what academic writing is and how to compose accordingly (Russell, 2009). In this study, teachers and students had competing notions of what “good writing” was, which were often at odds with the goals of the particular classroom and differed from department to department. For graduate student teachers in the School of Psychology, good writing had been clear and concise, easy to read, and grammatically and structurally correct. Teachers lamented that they were overwhelmed with the amount of writing that they had to grade, and thus wanted students to strictly adhere to the guidelines they gave for academic and scientific writing. This adherence to

academic writing was often in conflict with the introduction of Collabosphere by the course instructor. The graduate students claimed that they just didn't have the time to use or oversee composing in this digital space, nor were they supported to do any additional pedagogical work by their advisors. This lack of departmental support and heavy student load hampered graduate student instructors from experimenting with new and different tools, and which deferred the majority of work using new composing tools to be guided by the course instructor, Gabriel. Conversely, the graduate student instructor in the School of Education had both support and relative freedom to use the Collabosphere in her classroom without restriction. Rather than focusing on structural or grammatical challenges, Arianna looked at the "big ideas" and concepts in her students' work. Additionally, Arianna's student load of twenty-five (a third of her colleagues in the school of psychology) meant that she had more time to dedicate to supporting and articulating new composing practices to her students.

In both instances, however, there were conceptual differences to how both students and teachers conceived of "good writing." For students, good writing and academic writing were often at odds with one another. Students expressed a desire for writing to be meaningful, and connected to ideas or issues that they cared about. They often eschewed academic writing in its formulaic construct and adherence to rigid rules. For many of the students, good writing was something done out of school, often in online spaces such as blogs or websites. These platforms provided students vehicles to express themselves to both local and global audiences. Here we see examples of the types of "affinity spaces" and "participatory learning" that Jenkins and colleagues refer to in describing the work of new literacies. In these spaces students were able to share work that was meaningful to them, which was often very different to the work they produced at school.

The different values that teachers and students placed on composing helped to explain some of the disjuncture between what each considered to be "exemplar" writing. Even when new tools were introduced, most of the teachers followed in this study still relied on traditional text-based essays and guided prompts to facilitate student work. This created a chasm between students' proclivities towards new and meaningful composing practices and the pressure to produce academic writing. Over the course of my interviews, the reaction towards digital composing tools was decidedly mixed—some teachers and faculty embraced their usage—while

others remained unconvinced. In their review of the last ten years of online learning in higher education, Allen and Seaman (2013) revealed that although faculty use of online tools is increasing, a sizable majority (60%) of faculty are still reluctant to introduce new digital tools into their coursework. Allen and Seaman found that faculty remained unconvinced that using new tools in the classroom enhances student learning. This too seemed to be the consensus of faculty and administrators in the Departments of College Writing and Psychology, who sought more verifiable evidence that students needed to incorporate new tools in the classroom.

With the exception of Ethan, there was also considerable confusion on the part of teachers as to how to go about grading digital and multimodal work. While the use of tools like Collabosphere encouraged students to produce work that included images, sound, and text, there was no guiding rubric for teachers in the School of Psychology or Education to help evaluate these pieces. Left to their own devices, instructors often defaulted to assessing student work based on visual aesthetics and an adherence to text. While these evaluative measures were not faulty, they caused angst for teachers who were not explicitly instructing students in the visual literacies. Indeed, scholars such as Cynthia Selfe and Carol Jewitt argue that teaching 21st century literacies should also include visual literacies, helping students to consider the affordances of each mode and the overall design of their compositions (Jewitt, 2005, 2008; Selfe, 2007). Most instructors acknowledged that a design-based curriculum would have been useful, and discussed the possibility of creating one for future semesters.

The lack of a common rubric or guidance also proved to be a barrier to students using new tools. Students in the School of Psychology and Education expressed confusion and concern over the use of new tools because there was no standard by which they were writing to. Many had never used digital composing tools in the classroom and were unsure on teacher expectations or how they would be graded. In other words, students were befuddled as to the goal or overall purpose of writing in this digital environment. An adherence to receiving excellent grades additionally compounded students' reluctance to experiment with online tools. Students expressed that they were focused on achieving high marks in their respective courses; thus, without guidance, they defaulted to writing using "traditional" text-based forms that would help them successfully cross that bar. Though many students maintained that although they thought

that the idea of collaborative and multimodal writing was interesting and important, they wanted more structure around the integration of digital writing tools into the classroom.

Ethan's approach to teaching with digital literacies proved to be the exception, which was hardly surprising given his experience and training teaching with multimodal composing tools. There were other reasons for Ethan's success in teaching digital writing, not the least of which was the small class size and number of hours with students per week. Unlike the other instructors, whose course loads varied from 25–75 students, and who spent on average an hour and a half with students, Ethan had twelve students for six hours per week. Because he had the time and focus, Ethan was able to guide his students through the process of writing in a collaborative, digital, and multimodal environment. Part of Ethan's strategy was to introduce the writing tool (in this case Tumblr) "early and often" so that students could begin to feel comfortable and confident in their use of it. Ethan also introduced a rubric, which was done in conjunction with the students at the beginning of the semester. Ethan took deliberate care to put his students at the center of the learning process, positioning himself as more of a "conductor" of the classroom. Here we see examples of Gutiérrez and Jurow's (2016) research on social design experiments, wherein students take an active role in forming their own classroom practice.

Ethan's techniques for teaching with design-based literacies involved heavy repetition and a consistent focus on writing. Students spent the majority of their in-class time consuming media in a variety of different forms — from news articles, journals, films, podcasts, and blogs. Students also practiced composing both online using digital artifacts and at the chalkboard using images and text. At each stage Ethan made explicit the purpose and strategy for each exercise, which ultimately helped students to develop a metacognitive awareness of their own writing process. This metacognitive development was complimented by the students' use of the site Tumblr. The format of the site enabled students to see their progression over time, enabling them to reflect and consider how their own writing had evolved. Ethan's pedagogical approaches were in sync with the calls of new literacy scholars to carefully integrate digital literacies into the classroom. For example, Leu and others contend that because new literacies are constantly changing, we need teachers who are open and flexible and can "orchestrate" a teaching environment (Leu, Kinzer, Coiro, Castek, Henry & Ruddel, 2013). With practice and understanding of the different affordances, literate individuals will be those that can effectively

determine the combination of tools to suit their needs. Ethan's class was a good model for orchestrating this process of development towards digital literacy in classroom settings. Students were able to have both transformative and meaningful learning experiences because of his approaches to teaching and the situating of multiple composing practices.

6.2 Theoretical Implications

This multi-sited empirical study on digital composing in college classrooms used activity theory as a frame of analysis to show how contradictions between two historically-situated activity systems (academic writing and digital writing) led to moments of expansive transformation. The work complements Engeström's work on activity theory and expansive learning, which remixed and reimagined in a variety of different scenarios (Engeström & Sannino, 2010). Most the early research on activity theory involved working within large institutions, be they hospitals or factories (Engeström, 1997; 2004). Later, educators working from a sociocultural perspective have found activity theory is a useful way to view intersectionality, or the outcomes of systems coming together (Gutiérrez, 2008; Russell, 2009; Scanlon & Issroff, 2005). Engeström and other activity theorists do not use the term intersectionality, but rather "contradictions" to describe the different points at which two systems engage. Referring back to the diagram from Chapter 2 (see figure 6.1), we can see the overall framework that helps to expose how and why transformative moments occurred in all three sites. For example, Ethan's class began with the loose structure of writing in an academic setting (Activity System 1 on the left). In this system, students came to the class with particular ideas of how to write (the five-paragraph essay) in purely logocentric terms. The rules and norms of behavior in this system had already been circumscribed by the academy using modes of evaluation that privileged text and individualized learning. Concurrently, Ethan introduced a second system (Activity System 2 on the right) that included multimodal and digital literacy practices, and made explicit this helped students practice the different rules, community norms, and tools of this system. Even though the intersection of these two systems were sometimes fraught with tension, the ongoing practice at the mediation between these two systems enabled students to become academically and digitally literate.

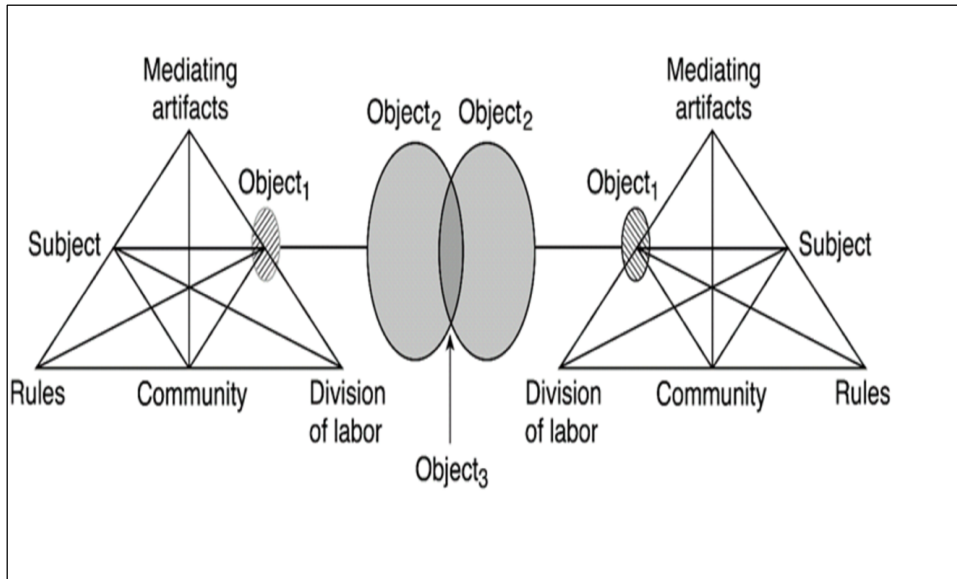


Figure 0.1: Engeström's Model of Expansive Transformation. Taken from Wordpress (2013)

The defining feature of this study is that in its attempt to document expansive learning moments, instances, and processes, it offers both a practical and theoretical framework on the future of college writing. Here we witness students and teachers on the precipice of adopting new forms of composing, both internally and externally, which were often fraught with tensions about what the ultimate outcome would be. The external conflicts manifested in confusion about the practicalities of working with digital tools in academic systems that still favored more traditional, text-based literacies. Over and above certain technical limitations, there were problems faced in defining working habits and new forms of communication in both peer-to-peer and student-to-teacher dynamics. The internal conflicts were reflected in pressures around the students and teachers struggle to understand the affordances of new tools, and similarly how to excel in their usage of them. Yet as Engeström reminds us, these conflicts are often indicators of a new activity system emerging, or the seeds of expansive learning. As Engeström notes, “in expansive learning, learners learn something that is not yet there. In other words, “the learners construct a new object and concept for their collective activity, and implement this new object and concept in practice” (Engeström, p. 74, 2010). Across all three sites, I observed how students and teachers were “constructing” new objects from working with these new tools, figuring out new

ideas, roles, and rules for digital literacy practices. Far from being constrictive, these processes, when supported, enabled a freedom from the old forms of learning in the academy.

Recently, Engeström and others have argued that old modes of teaching just do not serve in this 21st century environment (2010) because they are predicated on a notion of learning wherein the outcome of learning is already determined. These static teaching constructs will not conjoin to a digital and global world that is mobile, global, and rapidly-developing. As Leu et al. (2013) remind us, new literacies are constantly changing and therefore our notions of teaching and learning with them must change accordingly. By definition, expansive learning assumes that because one cannot predict the eventual outcome of the learning process, one cannot have a pedagogy that is fixed to scaffold it (Engeström, 2010). Creating environments that allow for expansive learning requires flexibility on the part of teachers to adapt their pedagogy and amend their curriculum at any given time. It will also require a shift on the part of students to be more determinative of their own educational path. They must be prepared to acclimatize to different composing scenarios and take risks in their own work.

Ethan's case was particularly revealing because the conditions of his classroom – the space, time and flexibility he had with his students – meant that they began to have transformative learning experiences. Here we see a teacher that understood that students needed to understand the “rules, norms, and behavior” of both activity systems (academic writing and digital writing) to develop new forms of composing with digital tools. By providing students the foundation for using digital tools, working collaboratively with others, and understanding their own writing processes, Ethan's students began creating new and innovative ways to write in an academic environment. Crucially, this development also included the ability to think critically and analyze media across a variety of different settings. This combination of expansive learning and analytical thinking laid the groundwork for these students to utilize their new literacy skills in a variety of different settings both inside and outside the university.

6.3 Implications for Future Research

We still have a considerable amount to learn about the integration of digital tools and digital literacy practices in the academy. There were several factors that impeded student progress using new composing practices in the classroom, including different ideas about what constituted good writing and how to assess digital work. I show that students and teachers come with preconceived notions of the rules, normative behaviors and goals for writing and succeeding in college classes. Hence, as we introduce we introduce new systems with alternative ways of operating, particularly those that are collaborative and require shifting notions of literacy, we need to help both teachers and students navigate and articulate the new learning outcomes. To begin with, we need to help teachers understand how to tap into students' desires to communicate ideas and concepts that they are passionate about to public audiences. Indeed, one of the potentials of tools like the Collabosphere is to give students the opportunity to collaborate and share ideas with others from around the world; however, these opportunities need to be in sync with both institutional and departmental expectations of learning outcomes. The key here is for educators to connect these "meaningful" compositions to "classroom" work in a way that supports the goals and needs of both teachers and students.

Similarly, we also need more resources for teachers to understand how to teach with digital literacies and effectively evaluate students' development when using them over time. As we saw in the case of the psychology and education courses, even when teachers had an express desire to use new tools, there was still confusion and uncertainty as to how to incorporate them into their curriculum. Conversely, the study of college writing revealed the enormous opportunity students have when their learning is facilitated by an instructor who is explicitly trained in using and evaluating digital literacies. Students were able to develop different habits of mind and expand their literacy practices in a meaningful and transformative way. Yet these occurrences were not happenstance; Ethan had years of training and professional development in order to orchestrate his classroom to support these learning experiences. Hence, in order to truly transform the ways we think about and teach with digital literacies, we need to provide instructors deep and rich supports for them to do so.

In addition to resources for professional development, we must attend to the amount of work required of instructors when they introduce new forms of writing to the classroom. As this study showed, integrating new composing tools and assessing student output is time-consuming. Instructors who were already contending with heavy student loads and limited resources, and they did not have the time to invest in additional methods for student learning. As such, if we expect teachers to incorporate new and dynamic technological tools, we must also consider the amount of additional work required to integrate them meaningfully.

This study showed that, ready or not, we are moving towards a brave new world of composing in the academy. This future will no doubt involve the incorporation of multiple new literacies and literate practices. The future of new literacy practices compels educators to take stock of the affordances of new modes of communication and think deeply about how we prepare students to engage with work inside and outside of the university. The work of creating environments that are at once dynamic, rigorous and grounded in best practices for developing expansive learning of digital literacies is difficult, and will require coordinated efforts on the part of faculty, administrators and students. It will require more studies like these to understand what is working and what isn't, and instructors who are willing to experiment, accommodate and adapt to new literacy practices that are constantly changing. Yet the payoff – that we may teach and learn new ways to receive and share meaningful information with others in local and global communities – is also so great. For now, that future is yet unwritten.

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Appendix A

Student Interview Protocols

Interview Questions:

Education history

1. Tell me a little about yourself.
2. How did you come to take this class?
3. I'm interested to hear about your background... How did you come to Berkeley?
4. Can you tell me a bit about your major? What other classes are you taking?
5. Can you talk me through this particular class you're taking? How do you prepare?

Teacher stances on writing

1. What do you consider "good writing"? How do you prepare to write a paper?

(Look over their piece of student writing)
2. Why do you think you did well on this paper?
3. What do you think is the value of being able to write well in school and work?

New tools

Part of the research we're looking at is how teachers use and incorporate new tools in the classroom.

1. What's been your experience working with new and/or digital tools in the classroom?
2. In what way do you see new tools shaping university classrooms in the future?
3. Do you use new tools for writing outside of the classroom (blogs, collaborative writing, etc)?
4. What do you think new collaborative writing tools offer in terms of writing in a university setting?

Experience with digital

I would like to know more about your previous experience in using online course platforms.

1. Have you ever taken an online course?
2. Why or why not?
3. What do you see as the advantages of online learning?
 - a. What are the drawbacks?

4. You spent a few weeks meeting in--person in group sections before using the online platform.
 - a. Could you describe a typical week's activities?
 - b. Did you make friends with other students in your section?
 - c. Did you experience any difficulties working with your group?

5. I'd like to hear about your experiences working in groups online.
 - a. How did you decide how to proceed with the activity?
 - b. What were your impressions of working with groups online
 - c. Overall, how did this experience differ from working with groups online?
 - d. Part of our research is hoping to understand how students experienced the site aesthetically.
 - e. Could you describe how you navigated through the site?
 - f. Were there any functions that you hadn't used before?
 - g. If so, how did you learn to use them?
 - h. What tools did you use most often?
 - i. Which tools did the group use most often?
 - j. What features made an impression on you?

Appendix B

Teacher Interview Protocols

Teaching history

1. I'm interested to hear about your teaching history, and in particular your experience working with undergraduates.
2. How did you come to Berkeley?
3. Can you tell me a bit about your teaching history? Have you taught/GSIs for this class previously?
4. Have you taught in K-12 classes previously?
5. What's your approach to working with undergraduate students?
6. Can you talk me through your section? How do you prepare for class?

Teacher stances on writing

1. What do you consider "good writing"? How do you evaluate it?
2. (Look over the piece of student writing)
3. What's the value of being write well in an academic setting?
4. What's the value of writing in school and work?
5. How do you help your students in their own writing?

New tools

1. Part of the research we're looking at is how teachers use and incorporate new tools in the classroom.
2. What's been your experience working with new and/or digital tools in the classroom?
3. In what way do you see new tools shaping university classrooms in the future?
4. Do you use new tools for writing outside of the classroom (blogs, collaborative writing, etc)?
5. What do you see as the value of new collaborative tools being made available to undergraduate students?

Perceptions of Teaching

I am curious to know how the course changed (or didn't) to suit this platform.

1. Could you describe any adjustments you made to accommodate the online platform?
2. Were there any restrictions on course design in using the platform?
3. If so, could you describe any adjustments you'd make for future classes?
4. Did you feel the activities suited both online and offline learning equally?
5. If not, what adjustments would you recommend?
6. Would you say that you felt adequately prepared to use the online platform?
7. If not, what recommendations would you make for support?
8. What other training measures would you recommend?

Institutional Constraints

1. Did you find yourself making any adjustments, in terms of teaching styles to accommodate the online learning environment?
2. Can you describe how you facilitated group discussions online?
3. Could you describe what you felt your role was in this process?
4. In what way does teaching online alter your pedagogical assumptions?